Fukushima-is-still-news

- vol. 15 –

Nuclear Future Start Again New Techniques - Alternatives & Renewables Olympics

Odile Girard

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INTRODUCTION

J'ai « découvert » l'écologie au début des années 70, croisant dans le même temps la pollution, les luttes paysannes et la malbouffe, la médecine qui avait (déjà) perdu son âme, les mouvements sociaux et bien sûr le nucléaire qui a occupé une grande partie de ma vie.

Après la catastrophe de mars 2011 au Japon, j'ai suivi chaque jour une partie des grands journaux japonais anglophones pour essayer de sauvegarder un maximum d'articles ayant trait à Fukushima. L'idée était de conserver une sorte d'archive accessible à tous, qu'ils soient écrivains, journalistes ou tout simplement intéressés.

Le blog « Fukushima-is-still-news » a été poursuivi jusqu'en 2019. Ci-dessous, la conclusion parue le jour où j'ai décidé d'arrêter mon blog.

End of March 2019: Time to stop this blog
29 Mars 2019
Rédigé par fukushima-is-still-news et publié depuis Overblog

I have been collecting and spreading information on the Fukushima disaster for more than 8 years.
More than ever I am convinced that the name of my blog « Fukushima-is-still-news » was aptly chosen. Or perhaps i should have called it « Fukushima should still be news ». What i'm getting at is that i know the disaster is going on and we cannot simply forget Fukushima and turn the page. But the mode of action I chose 8 years ago has its limits and it is time for me to stop this blog.
I don't want the contents to be lost, so I will try and publish the lot with the Éditions de Fukushima so that the information remains available online.
Good bye for now. I am not doing a disappearing act. I'm still there tracking what's going on in the world of nukes.

C'est maintenant chose faite. Le blog *fukushima-is-still-news* est désormais disponible aux Éditions de Fukushima. Une fois de plus merci à mon ami Pierre, qui m'a convaincue à l'époque de tenir ce blog et m'a aidée à le lancer.

Odile Girard

Avertissement

La mise en page de dizaines de milliers de pages étant trop fastidieuse, nous avons préféré dans un premier temps éditer les volumes 7 à 16 sans mise en page particulière plutôt que de risquer de ne jamais les éditer. Chacun de ces livres est donc, dans la version présente, constitué des articles du blog copiés de manière brute. Les articles sont disposés a priori chronologiquement. Nous nous excusons donc pour l'absence de table des matières. La recherche peut toutefois facilement être effectuée par mot clé avec la fonction CRTL + F

Le présent volume est le quinzième d'une collection de 16 ouvrages :

Vol. 1 : Daiichi Nuclear Plant (2012-2014)

Vol. 2 : Daiichi Nuclear Plant (2015-2019)

Vol. 3 : Radioactive Fallout And Waste,
No.4 Fuel Removal,
Nuclear Workers,
and UN Conference

Vol. 4 : Nuke Safety (2012-2015)

Vol. 5 : Nuke Safety (2016-2019)

Vol. 6 : Reprocessing,
Storage Nuclear Waste,
and Decommissioning

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2012-2014

Vol. 8 : Practical Problems For The Japanese Population
2015-2017

Vol. 9 : Practical Problems For The Japanese Population
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and Collateral Effects

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Vol. 14 : Nuclear Weapons

Vol. 15 : Nuclear Future,
Start Again,
New Techniques - Alternatives & Renewables
Olympics

Vol. 16 : Books & Films

SOMMAIRE

Nuclear Future

What to do with spent nuclear fuel

May 17, 2012

Editorial: Gov't must not fear policy change on spent nuclear fuel

http://mainichi.jp/english/english/perspectives/news/20120517p2a00m0na018000c.html

Well over 10,000 tons of spent nuclear fuel is stored at nuclear power plants across Japan. If the nation's nuclear reactors are restarted, then the amount will only increase.

Up until recently Japan had promoted a nuclear fuel cycle in which all spent fuel was to be reprocessed, with the plutonium extracted from this fuel being used again in nuclear power plants. However, the crisis at the Fukushima No. 1 Nuclear Power Plant has shaken this national policy. If the number of nuclear power plants is to be reduced and reliance on nuclear energy decreased, Japan must make major revisions to its nuclear fuel cycle strategy.

To prepare a base for discussion, a subcommittee of the Japan Atomic Energy Commission listed and assessed three options for dealing with spent fuel: the current approach of reprocessing all spent nuclear fuel; a "concurrent" approach of reprocessing some spent fuel and directly disposing of other spent fuel if some nuclear plants are kept in operation; or disposing of all spent nuclear fuel. The concurrent approach would keep the Rokkasho Reprocessing Plant in Aomori Prefecture in operation while preparing to directly dispose of some fuel.

Considering that the government had hitherto been completely devoted to reprocessing spent fuel, there is significance in its listing of direct disposal as an option. The government also can be congratulated for taking a zero nuclear power plant scenario into consideration. However, an overview of government discussions on the issue creates the impression that the government is half-hearted about changes to its policy.

To begin with, the Rokkasho Reprocessing Plant does not have the capacity to handle 100 percent of the spent fuel from Japan's nuclear reactors, and the policy of reprocessing all spent nuclear fuel is a pie in the sky. As such, choosing the "concurrent" options would effectively mean treading the same "reprocessing" path that Japan has been on.

In light of technical issues, safety and cost, we have urged the government to abandon reprocessing and draw the curtains on the nuclear fuel cycle. The subcommittee's findings also back up direct disposal of all spent nuclear fuel as the cheapest option.

In terms of nuclear nonproliferation, there is merit in direct disposal. The subcommittee predicted that plutonium extracted through reprocessing could be used up, but this seems unrealistic. And the practice of stockpiling plutonium, which can be used in nuclear weapons, without any plans to use it is questionable.

At the same time, if Japan were to decide to directly dispose of all spent fuel, then Aomori Prefecture, which had accepted spent fuel on the presumption that it would be reprocessed, could ask electric power companies to take the spent fuel home with them or otherwise refuse to accept it.

It is only natural for the local bodies concerned to raise objections. Surely then, the government should try to achieve a solution by taking responsibility and explaining the need for a policy change to local bodies and the public when it develops measures.

Up until now, the handling of spent nuclear fuel was deemed a private enterprise. The government should clarify its responsibility. The party benefiting from nuclear power needs to bear some of the responsibility for disposing of spent nuclear fuel.

The subcommittee's evaluation will be considered by the Japan Atomic Energy Commission and delivered to the government's Energy and Environment Council. We hope the government can decide on a policy without getting caught up in its past.

What options for nukes?

May 17, 2012

Panel compiles report on future N-fuel cycle

http://www.yomiuri.co.jp/dy/national/T120516004823.htm

Jiji Press

Following a meeting Wednesday, a subgroup of the Atomic Energy Commission issued a final report outlining options for the future of the country's nuclear fuel cycle.

The subgroup gave its evaluation of the options from seven perspectives, including economic efficiency and the impact of policy changes required for some options, but it stopped short of recommending which option to adopt.

"Any option would involve many tasks, and the government faces a tough choice," Tatsujiro Suzuki, who chairs the subgroup of the Cabinet Office commission, told a news conference after the meeting.

Suzuki said which option to take depends on the nation's future reliance on nuclear energy.

The commission will examine the paper and report the outcome to a panel on the environment and energy under the wing of the National Policy Unit. The paper is expected to influence the government's energy policy to be adopted as early as this summer.

The subgroup calculated costs for three scenarios--complete fuel recycling, partial reprocessing combined with disposal, and complete disposal--with assumed nuclear dependence rates between zero percent and 35 percent in 2030.

If Japan chooses complete recycling, which it currently hopes to realize, uranium consumption would be curbed and the amount of radioactive waste would be the least among the options, according to the report.

But this would be economically inefficient, the subgroup said, adding this option would be difficult unless the country begins full operation of its fuel reprocessing plant in Rokkasho, Aomori Prefecture, and develops a practical fast-breeder reactor.

Partial reprocessing would make it necessary for the government to gain support for storage and disposal facilities for spent nuclear fuel, according to the report.

But this option would allow the government flexibility and is considered the best solution if a decision on long-term nuclear energy use will not be reached anytime soon, the subgroup said.

Complete disposal, or burying all spent nuclear fuel underground, would be the best option if the country completely eliminates reliance on nuclear power. This option would be most economically efficient, although the nation would need to research safe fuel disposal technology, the subgroup said.

The organization also presented a possible option of maintaining the status quo until Japan finalizes its policy on nuclear fuel.

This option would give the government time to make preparations for a possible policy change, but would require additional expenses, the subgroup said.

Under this option, the government could choose between starting full operations of the Rokkasho reprocessing plant or dropping the program, according to the report.

Independent information and public trust

http://www.nucnet.org/all-the-news/2012/05/14/fukushima-information-was-challenging-for-regulators-conference-hears
14.05.2012_No93 / News in Brief

Fukushima Information Was 'Challenging' For Regulators, Conference Hears

Policies & Politics
14 May (NucNet): Most nuclear regulatory bodies and international organisations tried to communicate authenticated data during the crisis at the Fukushima-Daiichi nuclear plant, but it proved challenging because reliable information was not always available, a conference heard.

The two-day conference on crisis communication held last week in Madrid heard that public demand for information was "overwhelming" during the weeks following the March 2011 accident, inevitably triggering frustration linked primarily to "diverging national recommendations on health protection measures".

Luis Echávarri, director-general of the OECD's Nuclear Energy Agency (NEA), which organised the conference, said the accident at Fukushima-Daiichi further highlighted the need for clear plans in times of crisis, when independent, objective and fact-based information is critically needed.

The NEA said in a statement that while it was clear from the discussions that regulators should continue to improve their crisis communication plans, public trust is "highly dependent on credibility built over time, far before a crisis occurs".

This implies that regulators should "regularly demonstrate their competence and independence" which will help ensure that their messages will be listened to in a crisis situation," the NEA said.

Related reports in the NucNet database (available to subscribers):

- INES 'Did Not Play Its Part' In Fukushima-Daiichi Communications (News in Brief No.92, 10 May 2012)

NucNet Editor:

David Dalton Source:

Toward liberalisation

May 20, 2012

Panel seen urging liberalizing power

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120519003539.htm

A government advisory panel has agreed to recommend that retail sales of electricity to households be totally liberalized, sources said.

The Economy, Trade and Industry Ministry panel of experts on reforms of electrical power systems, chaired by Prof. Motoshige Itoh of the University of Tokyo, said Friday the electricity retail business, including supply to households, should be completely liberalized.

The panel also said the current method used by electric power companies to decide charges should be abolished to introduce competition to the industry. Currently, utility charges are calculated by totaling such costs as labor and fuel and adding a percentage as a profit margin.

The panel also is expected to call for accelerating other steps to liberalize the electricity business, such as separating power generation and distribution of electricity by regional electric power companies, to prevent utilities from having monopolies in their service areas and keeping electricity rates at high levels even after liberalization.

If the reforms are realized, households will have more choices in selecting electricity suppliers, which is expected to result in lower electricity bills.

The liberalization plan for household-use electricity will be included in a new basic energy plan the government plans to compile this summer.

As the electric power industry is expected to accept the plan, the government plans to submit a bill to revise the Electricity Business Law as early as spring next year.

After a period during which the public will be notified of the changes, the new scheme will go into effect as early as around 2015, the sources said.

If the electricity retail business is totally liberalized, consumers will be able to freely choose suppliers from among not only current regional electric power companies but also power producer and supplier firms, which may provide electricity at lower prices, and retail firms specializing in renewable energy resources.

If the current pricing method is abolished, the system that requires the ministry to approve power companies' applications before raising electricity charges will also be scrapped. As a result, power producers and suppliers will be able to freely set power rates.

The ministry on Friday presented to the panel a reform plan for the electricity industry, proposing the creation of a wide-area power distribution network that will enable utilities to supply electricity to each other, and establishment of a new nationwide organization to manage the network.

The ministry has begun negotiations with the electric power industry and other parties concerned to realize the plans.
The industry had opposed such liberalization for many years, but it apparently changed its policy due to the government's hard-line stance.

This spring, the government reviewed the utilities' current billing methods and decided to set upper limits on labor costs that can be reflected in electricity charges.

Electric power companies apparently concluded it would be to their advantage to accept the billing limits because they will make them more competitive when newcomers enter the market under liberalization, according to observers.

The ministry will separately consider measures to ensure electricity supply to remote islands and rural areas where depopulation is under way.

Liberalization of electricity retail businesses has been gradually implemented since 2000.

But even today, households and small stores, whose power consumption accounts for about 40 percent of total electricity use, can buy power only from regional electric power companies in their respective areas.

Earlier this year, Tokyo Electric Power Co. decided to drastically raise electricity rates.

Because ordinary households have no choice but to buy electricity from TEPCO despite the hike, there has been mounting criticism among the public toward the current system, rapidly boosting public support for liberalization.

Call on the US military in case of disaster?

May 19, 2012

Shizuoka governor says he would directly contact U.S. in event of nuke disaster

http://mainichi.jp/english/english/newsselect/news/20120519p2a00m0na010000c.html

SHIMODA, Shizuoka -- Shizuoka Gov. Heita Kawakatsu told U.S. government officials May 18 that he would directly seek U.S. military aid if a crisis hit the prefecture's Hamaoka Nuclear Power Plant.

Kawakatsu made the comment in a closed meeting attended by U.S. Ambassador to Japan John Roos. Later, at a news conference, Kawakatsu said, "After the Fukushima No. 1 Nuclear Power Plant disaster, President (Barack) Obama gave full rights to Ambassador Roos and prepared a team of well over 100 nuclear workers. I said that if there were a similar situation (at the Hamaoka Nuclear Power Plant), I would directly phone the ambassador. The ambassador responded, 'Of course.'"

The Shizuoka Prefectural Government says that the U.S. military in Japan operates under the security treaty with Japan and there are no legal grounds for a governor to call on the U.S. military.

Hideo Ogawa of the prefecture's disaster management department said the governor's comment represented his own thoughts.

Get ready for a no-nuke society

Editorial: Summer electricity savings a step toward a society without nuclear power

http://mainichi.jp/english/english/perspectives/news/20120519p2a00m0na013000c.html

A manufacturer work on fans called "Marugame Uchiwa" in Marugame, Kagawa Prefecture, on May 10. Traditional Japanese paper fans are gaining attention as the country strives to save energy ahead of the summer. (Mainichi)
拡大写真

The government has drawn up measures for summer electricity supply and demand on the assumption that none of Japan's 50 nuclear reactors will be reactivated, calling for energy-saving efforts across the country except in Okinawa Prefecture.

Electricity shortages this summer would restrict people's lives and economic activities. The government bears heavy responsibility for failing to quickly take effective measures while insisting on reactivating nuclear power plants. Electric companies, which have benefited from regional monopolies, should also reflect on their failure to fulfill their responsibility as power suppliers.

That said, energy conservation and power-saving are indispensable if Japan is to break away from nuclear power generation. Both the public and private sectors should ride out the summer with their eyes on a society free of nuclear power.

The government has set energy-saving targets for the service areas of seven utilities, excluding Tokyo and the Tohoku region, where utilities' surplus supply capacity is relatively high. It is considering rolling blackouts in the Kansai, Kyushu, Hokkaido and Shikoku regions to ease possible power shortages.

Fourteen months have passed since the outbreak of the nuclear disaster at the Fukushima No. 1 Nuclear Power Plant. It was earlier predicted that all nuclear power plants in the country would be suspended, triggering a power crunch.

However, the government failed to produce figures on electricity supply and demand until recently, pressuring people's lives as a result.

Utilities have also failed to promote energy conservation. **Instead, they insist on reactivating nuclear power plants, and have continued to promote all-electric homes** even in the aftermath of the nuclear disaster.

While this summer's power shortfall can be described as the price of negligence by the government and utilities, it can also be taken positively as the starting point for efforts toward ridding Japan of nuclear power.

Considering that the rolling blackouts in the service area of Tokyo Electric Power Co. last summer brought chaos to households and businesses, efforts should be made to avoid any power outages this summer.

The possibility of blackouts rises as electricity usage peaks. The government has called on utilities to introduce rates promoting energy-saving during peak hours, as well as "negawatt trading," in which utilities pay for the amount of energy saved.

Curbing peak demand is also expected to restrain excessive investment in power generation facilities and reduce power costs. To that effect, smart meters are indispensable for users to constantly measure power usage and fees, and we urge utilities to promote their use.

The government's latest plans envisage a trading market for small-scale power retailing and more power swapping among utilities. If surplus power is effectively interchanged between utilities, it will not only help overcome electricity shortages, but will also reduce waste at power generation facilities. Furthermore, such efforts could also overthrow the regional monopolies that major utilities have long held.

To depart from dependence on nuclear power generation, measures to curb peak demand and reduce power generation costs are crucial. The government and utilities must speed up their efforts without engaging in blame games.

Seems all's set for liberalisation

May 20, 2012

Panel seen urging liberalizing power

The Yomiuri Shimbun
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View from Europe

Monday, May 21, 2012

For better or worse, Japan might remain nuclear-free forever

By JOCHEN LEGEWIE
Special to The Japan Times
http://www.japantimes.co.jp/text/nb20120521ve.html

On May 5, Japan's last operating nuclear reactor was shut down, turning it into a nuclear energy-free country. The government is working desperately to restart two reactors in the town of Oi in Fukui Prefecture, but the outcome is difficult to predict.

In fact, some think Japan's nuclear-free status might not only survive the summer of 2012, but become a fact of life forever.

Until a few weeks ago such a scenario seemed unthinkable. The list of arguments for keeping atomic energy is long.

1) Nuclear dependency: Kansai, which is especially dependent on nuclear energy, is facing a shortage of up to 15 percent this summer even with energy-saving measures. Japan overall got 30 percent of its electricity from nuclear power before Fukushima.

2) Industrial resistance: Japan's business sector, especially the influential Keidanren, is lobbying hard for a quick return to nuclear energy. Manufacturers need secure and affordable energy. Many industries simply cannot afford temporary interruptions and might be forced to move overseas. Most businesses are showing signs of energy-conservation fatigue. Japan Automobile Manufacturers Association Chairman Toshiyuki Shiga has already hinted that the auto industry won't be amenable to another shift in business hours to weekends to save energy as it did in 2011.

3) Energy prices: Abandoning nuclear power will force utilities to import more fossil fuel. The total fuel costs of the nine big utilities will rise from ¥3.6 trillion to ¥6.3 trillion, which will translate into a jump in electricity prices of up to 30 percent or higher. LNG sellers in Qatar and Algeria are already starting to exploit Japan's desperate situation by demanding much more than they charge their European peers.

4) Carbon dioxide increase: A major shift to fossil fuels will mean a major increase in carbon dioxide emissions. Japan would spectacularly fail in its public commitments to pare greenhouse gas emissions.

5) Overseas resistance: Despite the shock waves created by the Fukushima disaster, no foreign government has asked Japan to abandon nuclear energy. Last month, the World Economic Forum even warned Japan about making a rapid break with nuclear as it "would jeopardize Japan's energy security."

Yes, the list of arguments is long. But so is the list of hurdles, with the most important being the reactivation of the first reactor. This is where all of Japan's troubles start and may never end. The government will need local support from the region hosting it.

Back in 2011, the government thought this region might be Kyushu, which traditionally had a positive stance on nuclear energy. But then came the scandal in July 2011 in which Kyushu Electric Power Co. workers were urged to pose as citizens lobbying to restart a local nuclear plant. The utility's credibility took a big hit and hasn't recovered since.

Likewise, the chances are low that Niigata will be this region. High hopes had been put on the massive Kashiwazaki-Kariwa power plant. It was the world's largest when it opened in 1997, and the people of Niigata used to take pride in it. But a long series of blunders by Tokyo Electric Power Co. have left the public betrayed, and Niigata Gov. Hirohiko Izumida is unwilling to play ball.

The national government has more to be blamed for than the utilities. It has spectacularly failed in two areas: It hasn't come up with a grand vision for energy policy and hasn't won back the trust of the people.

As of today, there is no independent nuclear watchdog deemed free of political interference. The Nuclear and Industrial Safety Agency is trusted only by 12 percent of the public, according to poll NISA itself conducted in March.

Hence it comes as no surprise the restart of the Oi reactors is opposed not only by the people of Fukui, but also by the governors of neighboring Shiga and Kyoto prefectures.

Add to this the opposition of Osaka Mayor Toru Hashimoto, who recently called for making the consent of every local government within 100 km of a nuclear facility a requirement for activation. According to a Yomiuri Shimbun survey, only six of the 34 governors and municipal heads are willing to consider restarts in their areas. And even then they demand clear safety standards.

The government needs to move quickly and decisively. It needs a neutral oversight body that can be trusted even by nuclear naysayers. Another group of faceless bureaucrats is no longer sufficient. It must include well-known individuals who can lend credibility to the new entity and its decisions.

Japan might take a page from the German government's playbook. Right after the Fukushima accident, the German government established the Ethics Commission, which discussed and subsequently made recommendations on the future of the nation's nuclear policy. It was made up of famous and highly respected individuals including businesspeople, academics and even a cardinal. While the German Ethics Commission paved the way for the country's exit from nuclear power, a similar approach might help Japan actually achieve the opposite — a restart, however temporary, of the nuclear power business.

At this very moment, the chances that a nuclear reactor in Japan will be reactivated appear to be fifty-fifty. It will all depend on the ability of the government to come up with a clear energy policy, change its disastrous information and communication policies, and address the issue sincerely with the public's interest in mind. Even last week's decision by the Oi Municipal Assembly to back the restarting of Kansai Electric's reactors is no guarantee this will happen.

Just imagine another trust-obliterating scandal or nuclear accident taking place after the next quake. The public reaction will be clear and turn May 5 into the day Japan followed Italy by shutting down its last nuclear reactor — forever.

Jochen Legewie is president of German communications consultancy CNC Japan K.K. (See his blog at www.cncblogs.jp)

What energy mix for 2030?

May 22, 2012

Gov't panel eyes 4 energy mix scenarios for 2030 with focus on future of nuclear power

http://mainichi.jp/english/english/newsselect/news/20120522p2a00m0na018000c.html

A Ministry of Economy, Trade and Industry (METI) panel is in final stages of discussions to compile and present four possible energy mix scenarios for 2030, ranging from zero reliance on nuclear power to no numerical targets for the country's dependence on atomic energy.

Because of conflicting views among panel members on the future role of nuclear power for the country, the Fundamental Issues Subcommittee under METI's Advisory Committee for Natural Resources and Energy has found it difficult to single out a best possible energy mix for 2030.

Therefore, the panel is set to present four possible energy mix scenarios: 1) the ratio of nuclear power in relation to the nation's total power generation in 2030 should be reduced to zero at an early date from 26 percent in fiscal 2010; 2) the ratio should gradually be reduced to 15 percent; 3) the ratio should remain at certain levels between 20 and 25 percent; and 4) no numerical targets should be set. The panel is to compile a set of final proposals and present it to the government's Energy and Environment Council by the end of May so that it would be reflected in the country's basic energy plan due to be drafted before the upcoming summer.

The Fundamental Issues Subcommittee was set up last October to thoroughly review the country's basic energy plan, as public confidence in nuclear power was dented in the wake of the outbreak of the crisis at the Fukushima No. 1 Nuclear Power Plant. The 25-member panel, which is comprised of experts and other figures from environmental nonprofit organizations (NPOs) and consumer groups, has since been mainly discussing the future vision of the energy mix, including the role of nuclear power.

The panel is headed by Akio Mimura, chairman of Nippon Steel Corp. It has been discussing the best possible energy mix of nuclear power, renewable energy and thermal power as of 2030. The panel has tried to single out a best possible energy mix from six proposals: the ratio of nuclear power to total power generation would be set at zero percent, 15 percent, 20 percent, 25 percent, 35 percent, and no numerical targets.

Proposed revisions to the country's Nuclear Reactor Regulation Law set a "40 year rule," which in principle requires a nuclear reactor to be decommissioned 40 years after its initial operation. The "15 percent" plan -- the ratio of nuclear power to the total power generation -- was not initially on the list of options. But the Resources and Energy Agency estimated in late April that if the "40 year reactor decommissioning rule" was applied, nuclear power would account for 13 to 17 percent of total power generation depending on the number and capacity of newly built nuclear reactors and their operational efficiency.

Therefore, the proposal for a "15 percent" ratio of nuclear power was added to the list. The "zero percent" proposal is aimed at reducing nuclear power dependence to zero earlier than what can be achieved under the "40 year rule."

Under the "20 percent" and "25 percent" proposals, certain levels of nuclear power will be maintained with the construction of new nuclear reactors. The panel is now discussing unifying the two proposals because the ratio of nuclear power to total power generation is to change depending on the degree of renewable energy being introduced.

Because many members of the panel believe that the "35 percent" proposal, which is to increase the ratio of nuclear power to more than 26 percent registered in fiscal 2010 prior to the Fukushima nuclear accident, will not be able to secure "public understanding," it is likely to be dropped from the list of options. On the proposal not to set numerical targets for nuclear power dependence, many panel

members say something to the effect that, "It is the panel's responsibility to show the public what the government will do, and therefore it is difficult for the public to understand without numerical targets."

However, economists turned their back on the proposal to set numerical targets, with some saying, "If the government obliges (nuclear plant operators) to buy insurance against nuclear accidents, the higher the risks, the higher the insurance premiums will be. Unprofitable nuclear reactors will naturally be shut down." They argue that the ratio of nuclear power could change depending on the future energy policy. Because there are persistent calls for leaving it to market mechanisms, the proposal to set numerical targets is expected to remain on the list of options.

Difficult to cut green house gas emissions

May 24, 2012

Even with N-power, reducing emissions is hard

http://www.yomiuri.co.jp/dy/national/T120523005517.htm

The Yomiuri Shimbun

Estimated cuts in greenhouse gas emissions in 2020

(assuming steady progress toward projected ratios of nuclear power generation in 2030; cuts compared to 1990 levels)

			Assumed ratios of nuclear power generation in 2030				
			35%	25%	20%	15%	0%
Assumed annual economic growth of 1.8%	Energy-saving measures	Assuming energy-saving measures well executed	16%	14%	13%	12%	9%
		Current level of energy-saving measures	6%	3%	2%	1%	+1%
Assumed annual economic growth of 1.1%		Assuming energy-saving measures well executed	19%	17%	16%	15%	11%
		Current level of energy-saving measures	9%	6%	5%	4%	2%

Japan may be able to cut greenhouse gas emissions only by up to 19 percent in 2020 from 1990 levels under a scenario that would see the ratio of nuclear power generation reach 35 percent by 2030, according to estimates released Wednesday by an Environment Ministry council.

The Central Environmental Council's estimates suggest it will be difficult for Japan to achieve the Democratic Party of Japan-led government's target of a 25 percent reduction in greenhouse gas emissions by 2020--even if it purchases emissions quotas from overseas.

The council compiled the estimates in the wake of the crisis at the Fukushima No. 1 nuclear power plant following the earthquake and tsunami on March 11, 2011.

It first assumed five different government-set nuclear power generation ratios for 2030--35 percent, 25 percent, 20 percent, 15 percent and 0 percent. Nuclear power accounted for 26 percent of the nation's power supply before the disaster.

The council also took into consideration renewable energy, and assumed three different levels of energy-saving measures. It also considered two different economic growth rates. Based on these factors, the council calculated how much Japan would be able to reduce emissions for 30 different scenarios.

According to the estimates, greenhouse gas emissions could be cut 6 percent to 19 percent if nuclear power generation accounted for 35 percent of total electricity production in 2030.

If the ratio is reduced to 15 percent--an assumption based on a government policy to restrict nuclear reactor operations to 40 years--emissions could be reduced by 1 percent to 15 percent.

The estimates also showed that reduction rates would only reach 11 percent at most if nuclear power generation reached 0 percent. In this scenario, greenhouse gas emissions would increase by 1 percent if Japan achieved a growth rate of 1.8 percent.

The largest reduction in greenhouse gas emissions can be achieved if Japan sets its nuclear power generation ratio to 35 percent. This, however, is considered unlikely by the Central Environmental Council, as well as an Economy, Trade and Industry Ministry committee dedicated to researching power generation ratios for 2030.

The 25 percent reduction target submitted to the United Nations also includes overseas emissions quota purchases and carbon sinks, in which natural reservoirs such as forests absorb carbon dioxide, but it does not specify how these methods can contribute to a reduction in greenhouse gas emissions.

Under the Kyoto Protocol, a framework for greenhouse gas reductions from 2008 to 2012, Japan calculates that overseas emissions quota purchases can cut emissions by 1.6 percent and carbon sinks by 3.8 percent.

Reducing nuclear power to 15% of total power supply

May 25, 2012

Hosono in favor of atomic power comprising 15% of Japan's energy

http://mainichi.jp/english/english/newsselect/news/20120525p2g00m0dm103000c.html

TOKYO (Kyodo) -- Environment Minister Goshi Hosono said Friday he believes Japan's new energy policy, to be released this summer, can be based on the idea of reducing nuclear power to 15 percent of the nation's total electricity supply.

Hosono said "15 percent can be one base," while noting that limiting the operation of nuclear reactors to 40 years is the government's policy and the 15 percent idea is in line with the policy.

But Hosono also said, "A number of options were presented. They are being discussed by experts, and I do not rule out any options."

His comments came a day after an advisory panel to the Ministry of Economy, Trade and Industry explored five options for the future composition of Japan's energy sources.

The five options presented by the panel calls on the government to seek a society where nuclear power represents either zero percent, 15 percent, 20-25 percent or 35 percent in 2030, compared with 26 percent that nuclear energy accounted for in fiscal 2010. The other option calls on the government not to set numerical targets for future energy composition, letting it instead be determined by the market.

Nippon Steel Corp. Chairman Akio Mimura, who heads the panel, said Thursday after the panel's 24th meeting that he aims to finalize the panel's proposals at its next meeting next week. The expert panel's proposals are then to be submitted to the Energy and Environment Council as inputs of the nation's new energy policy to be put together this summer.

Under the conventional energy policy compiled before the Fukushima Daiichi nuclear power plant disaster, the government used to seek an increase in the nation's reliance on nuclear energy to 45 percent of total power supply by 2030 through the construction of new reactors on the basis of figures comparable to the panel's proposed options.

Since former Prime Minister Naoto Kan decided to reconsider Japan's energy policy from scratch in the wake of the nuclear crisis, triggered by the massive March 2011 earthquake and tsunami, the panel has been mulling policy options for the nation's future energy mix composition.

About the 40 year "limit"

June 14, 2012

New nuclear regulatory body to review 40-yr operation limit: parties
http://mainichi.jp/english/english/newsselect/news/20120614p2g00m0dm029000c.html

TOKYO (Kyodo) -- The ruling and opposition parties agreed Wednesday to include a 40-year limit on the operation of nuclear reactors in an envisioned bill to set Japan's new nuclear regulations, but decided to leave the possibility to review the controversial limit.

"The bill is expected to become one that seeks the new nuclear regulatory commission, after its launch, to swiftly judge (whether the 40-year limit is appropriate)," one of the lawmakers who provided a briefing about the talks between the parties said.

The ruling Democratic Party of Japan, the main opposition Liberal Democratic Party and its ally New Komeito party have also reached an agreement on other key issues, making it likely the envisioned bill will pass the Diet during the ongoing session.

The bill will feature the launch of a highly independent "nuclear regulatory commission" tasked to serve as a key organization to restore public confidence in nuclear regulations that has been shattered in the wake of last year's Fukushima Daiichi nuclear power plant disaster. The commission is likely to be created by September.

The commission would have a legally guaranteed independence unlike the existing Nuclear and Industrial Safety Agency, which has drawn criticism for being under the Economy, Trade and Industry Ministry, a promoter of nuclear power.

The appointment of the commission members will require the approval of the Diet, and all government officials who would serve as the commission's secretariat would basically not be able to return to the offices they originally came from.

Another point of argument has been on whether to retain the prime minister's right to give instructions to related entities at times of emergency, given that former Prime Minister Naoto Kan faced criticism for what some call his "excessive" involvement in trying to contain the nuclear crisis at the Fukushima plant.

During the negotiations, the parties agreed that the right would remain in place but would be "limited" to such cases as urging the regulatory commission to swiftly make a judgment on technical matters.

"The prime minister's right to issue instructions would not affect judgments (reached by the regulatory commission) based on technical knowledge," another lawmaker said.
To enhance the regulatory body's transparency, the commission would be required to report to the Diet how it is handling its work. Donations and aid for research funds to commission members are also expected to be disclosed.

The envisioned bill is likely to stipulate that the commission should act on the assumption that a nuclear accident can happen, given criticism that "a safety myth" of nuclear energy was prevalent among government and utility officials in Japan before the Fukushima accident.

The outcome of the negotiations suggests that the government and the DPJ ended up largely compromising in shaping the country's new nuclear regulation setup.

The government had initially sought to create what it calls a "nuclear regulatory agency" and was skeptical that the opposition parties-proposed five-member commission system could swiftly function in times of emergency.

The plan to place in principle a 40-year operational limit for reactors has also been a key element of the new nuclear regulation the government has been considering, but the latest agreement reached by the parties suggests the provision could eventually be watered down.
Some LDP lawmakers have argued there is no clear scientific basis for setting such a limit in a single uniform way.

Stop relying on nuclear power

June 13, 2012
Editorial: Japan must stick to greenhouse gas reduction bill without relying on nuclear plants

http://mainichi.jp/english/english/perspectives/news/20120613p2a00m0na011000c.html

As the Energy and Environment Council prepares to map out an innovative energy and environmental protection strategy this summer, Japan must stick to its long-term goal of reducing its greenhouse gas emissions by 80 percent by 2050 -- without relying on nuclear power.

The Central Environment Council, an advisory panel to the Environment Ministry, has worked out multiple scenarios that would re-evaluate Tokyo's pledge to the international community to reduce its emissions of carbon dioxide (CO_2) and other greenhouse gases by 25 percent from 1990 levels by 2020.

If Japan were to completely get rid of its nuclear plants by 2030, it could reduce greenhouse gas emissions by only 11 percent at most by 2020, even if renewable energy were introduced on the greatest possible scale. In comparison, if all reactors were decommissioned 40 years after the start of their operational life in strict accordance with government policy, the emission of gases responsible for global warming could be slashed by no more than 15 percent.

Japan cannot sidestep a review of its short-term target for reducing greenhouse gas emissions, as the country is trying to rely less on atomic power in the wake of the accident at the tsunami-hit Fukushima No. 1 Nuclear Power Plant. Still, the importance of preventing global warming remains unchanged. Japan is required to fulfill its responsibility as a developed country to achieve its long-term goal of an 80 percent cut by 2050.

Needless to say, it is not easy to achieve this long-term goal. But with technological innovation, Japan can promote renewable energy and develop energy-saving technology if it works out a strategic and ambitious vision for future energy to overcome restrictions caused by the slash in its reliance on nuclear plants.

Following the outbreak of the Fukushima nuclear crisis, Germany, which is particularly enthusiastic about promoting renewable energy, shut down seven aging nuclear reactors and decided to suspend operations at all of its nuclear plants by 2022. Nevertheless, it has not changed its goal of reducing greenhouse gas emissions by 40 percent from 1990 levels by 2020.

Japan's fiscal 2012 white paper on the environment calls for the introduction of renewable energy, such as wind and solar power, to regions devastated by the March 2011 Great East Japan Earthquake and tsunami to help rebuild these areas. The report estimates that introducing a mere 1 percent of the renewable energy that Iwate, Miyagi and Fukushima prefectures are capable of introducing would benefit these regions economically to the tune of over 8 billion yen.

In July, the government is due to introduce a system under which electric power companies would buy electric power generated by households at fixed prices. The anti-global warming tax, which will be imposed on fossil fuel depending on the amount of CO2 emissions, is set to be introduced in October. The government must ensure that these measures help promote the introduction of renewable energy and environment-friendly devices.

It was agreed at the 17th Conference of the Parties to the U.N. Framework Convention on Climate Change in South Africa at the end of last year to introduce a new framework to replace the Kyoto Protocol in 2020. Negotiations have begun on a framework in which all countries, including the United States and China, can participate.

As part of the new framework, Japan has proposed to introduce a bilateral offset credit mechanism, in which the amount of greenhouse gas emissions reduced through its exports of energy-saving devices and technology would be recognized as part of its own reductions. Such a proposal can win support from the international community only if Japan shows to the world that it is seriously working to prevent global warming, even after the major earthquake disaster.

The draft of a global warming countermeasures basic law, which will provide the legal basis for Japan's numerical target of reducing greenhouse gas emissions, was approved at a Cabinet meeting two years ago. Still, deliberations on the bill have been stalled because of the so-called "twisted" Diet, in which opposition parties control the House of Councillors while the ruling coalition has an overwhelming majority in the more powerful House of Representatives. The legislative branch is strongly urged to thoroughly discuss the bill with the details of the innovative energy and environmental protection strategy fully in mind.

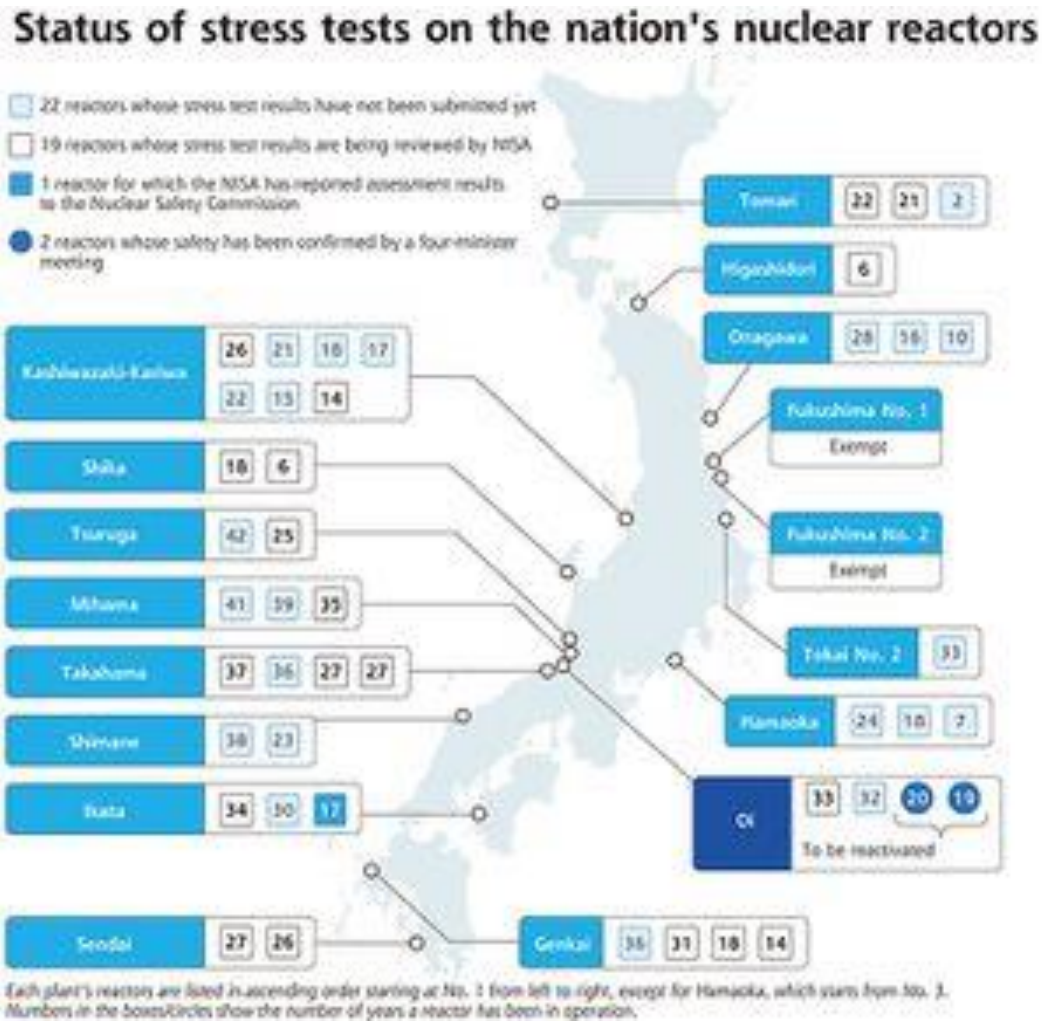
A lot of uncertainty

June 18, 2012

Uncertain prospects loom for post-Oi reactors

http://www.yomiuri.co.jp/dy/national/T120617002371.htm

Masayuki Takata / Yomiuri Shimbun Staff Writer



Now that the government has decided to reactivate the Nos. 3 and 4 reactors at the Oi nuclear power plant in Fukui Prefecture, attention has turned to which will be next among the nation's other 48 idle reactors.

Prime Minister Yoshihiko Noda and three Cabinet ministers in charge of nuclear energy policies gave the green light Saturday to resume operations of the two reactors at the plant run by Kansai Electric Power Co.

Which reactor will be reactivated next is expected to be left up to a new nuclear regulatory commission to be established in August at the earliest. However, there are no clear prospects for restarting more reactors because it has not been decided how the new organization will confirm their safety.

At a press conference held Saturday after the four-minister meeting, Economy, Trade and Industry Minister Yukio Edano said the Cabinet would not decide on reactivating the 48 reactors.

"The new regulatory organization will make its own decisions [regarding the safety of the reactors] independently" from the government, Edano said.

It is unclear, however, to what extent the nuclear regulatory commission will take the current safety standards into consideration when making its assessments.

The current standards, compiled at the request of Fukui Gov. Issei Nishikawa, consist of three main pillars:
-- Whether an operator has implemented measures to prevent a severe accident, such as a meltdown, even if a reactor loses all power.

-- Whether the government has confirmed first-stage stress test results for the reactor regarding whether it can avoid a severe accident even if hit by a disaster as powerful as the Great East Japan Earthquake and the ensuing tsunami.
-- Whether the operator has submitted medium- and long-term safety enhancements.

All the nuclear power plants that operate the 48 reactors have met the first criteria, while stress tests have been conducted for 20 reactors, in addition to the two at Oi.

The industry ministry's Nuclear and Industrial Safety Agency (NISA) and the Cabinet Office's Nuclear Safety Commission (NSC) are supposed to double-check stress test results. However, NISA has approved only the results for the No. 3 reactor at Shikoku Electric Power Co.'s Ikata nuclear power plant in Ehime Prefecture, which is expected to be reactivated following the Oi reactors.

The NSC, on the other hand, has been reluctant to review the stress test results for Ikata's No. 3 reactor, saying it is difficult for the organization to predict its future work because Diet deliberations have been delayed regarding a bill to create the nuclear regulatory commission.

At Saturday's press conference, Edano admitted the current nuclear regulatory system has not been working. "It's difficult to seek cooperation from the NSC," he said.

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Have to wait till next summer?

The government plans to leave designing a new system to oversee nuclear reactors up to the new regulatory commission, which will be created as an "Article 3 commission" that is independent in terms of budgets and personnel, based on Article 3 of the National Government Organization Law.

A bill for launching the commission, which cleared the House of Representatives on Friday, requires the operational period of reactors to be limited to 40 years. It also introduces a so-called "backfit" rule requiring the utilization of the latest findings and technology for supervising reactors.

It will take about 10 months for the new commission to design concrete standards regarding new regulations stipulated by the bill. It is likely, therefore, that other reactors will not be restarted until next summer if these regulations are taken into consideration in deciding whether idle reactors can be reactivated.

The industry ministry is concerned over possible power supply shortages for this winter, mainly in Hokkaido Electric Power Co.'s service area, if the reactivation of other idle reactors is delayed. Therefore, it hopes operations will be resumed as soon as possible for the Nos. 1 and 2 reactors at the Tomari nuclear power plant in Hokkaido and the Nos. 1 and 2 reactors at Kyushu Electric Power Co.'s Sendai nuclear power plant in Kagoshima Prefecture.
NISA is reviewing the stress test results for these reactors.

"The government could work with current stress tests and other provisional standards until the new regulations [stipulated by the bill on establishing the new regulatory commission] are implemented," an industry ministry official said.

A government official in charge of establishing the new commission, however, was skeptical.

"If we hasten procedures [on reactor restarts], the public's confidence in the new regulatory commission will be lost, just like it has been with NISA," he said.

In fact, some local governments around the Oi plant have criticized the current safety standards.

A wide variety of expertise for the new nuke regulatory panel

New nuclear power regulatory body to be headed by nuclear reactor expert

http://mainichi.jp/english/english/newsselect/news/20120619p2a00m0na014000c.html

A new nuclear power regulatory commission to be founded by reorganizing the government's nuclear power regulatory bodies will be headed by a nuclear reactor expert, nuclear disaster minister Goshi Hosono said.

Hosono told a House of Councillors Environment Committee session on June 18 that an expert in nuclear reactors should be appointed as chairman of the new regulatory body because its head will be authorized to decide on responses to emergency situations at nuclear plants solely at their own discretion.

The government is required to submit a plan to appoint five members of the commission to the Diet and gain endorsement.

Hosono told the Diet committee that he intends to name experts on nuclear reactors, earthquakes and prevention of exposure to radiation as members of the panel. "It's necessary to utilize a wide diversity of expertise. At least experts in three fields -- nuclear reactors, earthquakes and protection of people from being exposed to radiation -- should join the commission."

The upper house's Environment Committee began deliberations on a bill to set up the nuclear power regulatory commission on June 18.

Yukio Ubukata, a ruling Democratic Party of Japan (DPJ) member of the House of Representatives and one of the sponsors of the bill, told the upper house panel that candidates for regulatory commission members should disclose any donations they have received from nuclear plant operators.

"They should disclose their receipt of such donations before the Diet approves their appointments," he said, adding that those who deliberately cover up such donations could be dismissed.

Ubukata also said guidelines for selecting regulatory commission members will be mapped out before appointing its first members.

Whale and plutonium

June 20, 2012

Japan's tale of two stockpiles

http://www.japantimes.co.jp/text/eo20120620a3.html#.T-G-BlJIwpW

By PETER WYNN KIRBY
Special to The Japan Times

OXFORD, England — Mount Fuji stands as a powerful eco-symbol in Japan, invoked frequently to describe elements of Japanese nature and culture. According to Japanese writers and others, Mount Fuji's towering summit-cone and elegantly balanced slopes convey the remote majesty of nature, the essence of purity, a trove of immutable values, a model of aesthetic perfection, and a store of Japanese reserve, to name but a few.

Yet in illustrating how contemporary Japanese society actually works, the sacred peak faces competition from two other mountainlike entities. Lurking out of the public eye are two problematic stockpiles — of plutonium and whale meat — whose mountainous bulk not only looms over Japanese environmental policy and international relations but speaks to the problems that led to the 3/11 disasters.

Plutonium 239 — perhaps the planet's most dangerous substance — constitutes an environmental nightmare, but still hovers as an unrequited dream to some Japanese policymakers who hold out hope that the substance can provide limitless energy production and energy independence in a time of finite uranium stocks and expensive fossil fuel imports.

To this end, resource-poor Japan has amassed a huge stockpile of weapons-usable plutonium: more than 45 tons, or enough for roughly 5,000 nuclear warheads.

Though not lacking in enthusiasm, Japan's attempts over decades to create a plutonium cycle have proven expensive, misguided, poorly managed and even fatal. Faced with urgent reconstruction obligations in Tohoku, a cash-strapped Japanese government still continues to subsidize a flawed plutonium-energy infrastructure and the storing of this immensely toxic and dangerous substance. With a half-life of over 24,000 years, this budget item could bleed on for a very, very long time, as plutonium is so difficult to utilize safely.

Also troubling is the eerie stockpile of frozen whale meat in Japan, held in a peculiar limbo by skewed policy and declining appetite for whale. Vested Japanese interests defend whaling as a core element of Japanese tradition and the nation's controversial annual "scientific" whale hunt brings back whale meat that can be sold commercially. But in a case of costly political overreach, the gap between high-flown rhetoric and concrete demand for whale meat has led to an expensive storage problem: about 5,000 tons

of frozen whale products that must be kept below minus 18 degrees Celsius for long periods in industrial warehouses.

The costs aren't only financial. Japan's extreme stance on whaling, an example of almost Gallic cultural exceptionalism, means that the Japanese government often finds itself on the back foot when discussing environmental problems with international partners, not to mention cultivating a reputation for treaty-manipulation and doublespeak.

Not only is the whale stockpile the bitter fruit of failed policy decisions, like plutonium, but it is also toxic. Whale and dolphin meat is often high in methylmercury, notorious scourge of Minamata. Though mercury is particularly dangerous for children, whaling interests have tried to offload whale meat at a heavy discount for school lunches to reduce the stockpile and attempt to inculcate demand among young people. For example, a broad survey found that 18 percent of Japanese elementary and junior high schools had served whale during fiscal 2009-10, bought at one-third the price.

Such ideologically blindered disregard for citizen welfare is highly reminiscent of Japan's nuclear industry, of course. Well before the Fukushima nuclear crisis exposed the arrogance, incompetence and venality of Japan's nuclear clique, the nation's plutonium program gave pause.

In theory, a technologically adept and determined nation like Japan could create so-called fast-breeder reactors to produce energy, always yielding more plutonium to fuel power plants in the future. Yet Japan's prototype fast-breeder reactor, dubbed Monju after the bodhisattva representing transcendent wisdom, has performed in a rather more mundane and error-prone fashion. Completed in 1994, the plant tumbled offline in 1995 after a serious sodium leak ignited a major fire and caused extensive damage. A semigovernmental agency's bungled coverup brought infamy upon the plant, its operators and regulators, and the nuclear industry generally.

Fitful attempts to make Monju truly operational in recent years have largely failed. Yet along with sporadic reprocessing efforts elsewhere, the total spending on Japan's ill-conceived plutonium program has reached trillions of yen that could have helped foment a green revolution if instead invested wisely in renewable energy development, for example.

Despite all this, the plutonium juggernaut still lurches on. Just this April — only 13 months after the record Tohoku earthquake triggered Japan's Chernobyl — Japan Nuclear Fuel Ltd. restarted construction on a plant that will produce mixed-oxide fuel (a mix of plutonium and uranium, known as MOX) commercially. While MOX fuel provides a means of (very slowly) using up nuclear waste in existing reactors, it involves great risk. For example, it was the presence of plutonium in MOX-rods in spent-fuel pools at the crippled Fukushima No. 1 nuclear power plant that greatly increased the danger of the crisis.

Such a slow-motion shipwreck of an energy policy quietly plays out against the more widely publicized nuclear difficulties in Japan. Indeed, the awkward plutonium store is a telling result of the policy ineptitude that helped create the post-tsunami nuclear catastrophe.

After more than a year of revelations regarding the cozy, back-scratching ties between members of Japan's so-called "nuclear village," the parallels between Japan's nuclear program and its pro-whaling apparatus are striking. As Jun Morikawa explains in his book "Whaling in Japan: Power, Politics, and Diplomacy," Japan's whaling lobby seems as much to do with protecting ministry budgetary outlays and creating *amakudari* post-retirement sinecures as with the safeguarding of Japanese identity against Western cultural imperialism. Furthermore, stealth efforts to cultivate demand for whale in recent years bear an uncanny resemblance to the aggressive and cynical propaganda campaigns of Japan's nuclear proponents.

At root, both stockpiles are about resources, a long-standing policy fixation of Japanese leaders. While Japan's plutonium glut is at least partly about energy self-sufficiency (and deterrence), the nation's whale meat store remains entangled in domestic concerns over food self-sufficiency and fishing rights. For example, some scientists ("Science," April 26, 2007, page 534) suggest that Japan's "scientific" whaling research findings are actually intended to guide future large-scale whale harvest. Moreover, some Japanese fear that concessions on whaling might bring restrictions on Japan's far more important global fisheries trade.

In a larger sense, though, these two suggestive stockpiles bring up the important question of whether Japan can enact bureaucratic and cultural change to turn the country around at a critical juncture.

Dr. Peter Wynn Kirby is an anthropologist at the University of Oxford and a specialist in nuclear and environmental risk in Japan. His latest book is "Troubled Natures: Waste, Environment, Japan" (2011). (www.uhpress.hawaii.edu/p-9780824834289.aspx)

The Japan Times: Wednesday, June 20, 2012

Simply not ready

June 21, 2012

Crisis plans lag even as Japan's reactors restart

June 21, 2012
http://ajw.asahi.com/article/0311disaster/fukushima/AJ201206210096

THE ASSOCIATED PRESS
If the Oi nuclear reactors plunged into a Fukushima-style meltdown, the only route for escaping or for sending help would be a winding, cliff-hugging road often closed by snow in winter or clogged by beachgoers in summer.

Radioactivity from such an accident at the plant in western Japan could contaminate the country's biggest freshwater source, Lake Biwa, which serves more than 14 million people.

Still, Japan's government has chosen to lift its post-Fukushima nuclear freeze and restart two reactors at Oi, even though construction of an alternative route to the facility is barely on the drawing board and despite the lack of any firm contingency plans for the water source.

The government is pushing hard to get some reactors back online before energy-hungry summer months, despite much public opposition. It says the nuclear industry has done more than enough during the shutdown to guard against meltdown risks -- even in the case of quakes and tsunamis like the ones that struck Fukushima -- and that crisis contingency plans are being revamped nationwide.

But some of the communities around the Oi plant don't feel ready for the startup -- especially given the government's own new guidelines to expand evacuation zones around reactors from the current 10-kilometer (6-mile) radius to 30 kilometers (18 miles).
And they're not the only ones.

Most of the communities around the country's 48 other reactors would not yet comply with new zone, according to local and central government officials and nuclear regulators interviewed by The Associated Press.

"If another crisis hits now, we can't do anything but flee," said Kaoru Tsuchiya, a crisis management official in Shiga province in western Japan, parts of which fall within the new evacuation zone around the Oi plants. "We feel so insecure."

The new guidelines raise Japan's nuclear emergency plans to international standards. But more than a year after the Fukushima crisis, many of the towns still lack safe evacuation routes, radiation monitoring equipment or medicine in case of exposure, leaving millions of residents without adequate protection.

The new criteria, released by nuclear officials in March as a benchmark for coming revisions to national and local master plans, would involve 135 towns in 21 prefectures around the country, affecting nearly 5 million people, according to the Nuclear and Industrial Safety Agency, or NISA.

Currently, 45 of those towns comply with the old contingency plan guidelines. Few, if any, comply with the new ones.
NISA disaster management official Hisatoshi Nakazaki said most of the towns are lagging because they are waiting to see a national disaster plan due later this summer. Local communities must compile their own plans within six months after that.

But in the meantime, they must **make do with whatever preparations they already have made.**

"In an emergency, they have to use the old evacuation plans, think quickly and use discretion," Nakazaki said.
The government decided last weekend to restart the Oi reactors. It said they have passed safety checks and noted they are especially important because they generate electricity for a region that has traditionally been heavily reliant on nuclear power.

The Oi reactors are being prepared now for restarting in July. Reactors at Ikata in southwestern Japan and Tomari on the northern island of Hokkaido are seen as next in line for resumption.

Public opposition to resuming operations remains high, however, because of the March 2011 crisis at Fukushima No. 1 nuclear power plant that turned into the world's worst atomic disaster since Chernobyl and because of lingering distrust of an industry widely seen as opaque.

Critics note that, in addition to the required safety checks, Japan should also mandate full reviews of crisis contingency plans before allowing any plants to operate, which would bring it more in line with rules in Europe and the United States.

The two Oi reactors sit on Wakasa Bay, a region known as Japan's "nuclear alley" and home to a total of 13 commercial reactors. Some of the crucial measures designed to protect residents in case of crisis at Oi won't be ready immediately -- a raised seawall next year and an onsite command center by March 2016.

Filtered vents, which could reduce radiation leaks to the environment, won't be ready for three more years.

The Fukui provincial government started land surveys only this month for the multibillion-dollar project to repair the sole route to the Oi nuclear plant, which sits at the tip of a peninsula, and to add a new alternate evacuation road. Heavy snowfalls and summer beach traffic often clog the existing, 740-meter (810-yard) access road.

Gov. Yukuko Kada of neighboring Shiga province accuses Prime Minister Yoshihiko Noda of emphasizing plant site safety to the exclusion of any discussion of safety procedures in the communities surrounding the plants.
"They still ignore the residents, and that's what angers me most," said Kada, an environmental scientist and independent politician.

Kada said Noda's government has refused to provide radiation simulation data that she has requested to compile an evacuation map and study the impact of radiation on Lake Biwa, where monitoring stations still need to be installed.
"I'm horrified by a thought that another Fukushima-class crisis could instantly make the lake water undrinkable," she said.

The neighboring city ofKyoto -- Japan's biggest tourist destination -- has only a tentative crisis plan, and its first-ever drill is still three months away, city disaster manager Fujio Yoshida said. Its contingency plans need to take into account a large number of foreign visitors, he said.

"Until Fukushima, we never imagined radiation reaching our city, or the need for crisis plans," he said.

The central government has earmarked $105 million to do feasibility studies, upgrade crisis management centers and take other steps to adapt to the new 30-kilometer (18-mile) guidelines.

The idea of expanding the evacuation zones is not new to Japan. A 2006 effort to match the 30-kilometer (18-mile) zone recommended by the International Atomic Energy Agency, was blocked by NISA officials who said it would "trigger confusion and escalate public fear over nuclear safety."

If it had been in place, it could have helped at least some of the 87,000 residents inside a restricted area around the Fukushima plant to evacuate more quickly and safely, officials have said. Within days of the disaster, residents within 20 kilometers (12 miles) of the plant had to be evacuated. Those living outside 10 kilometers (6 miles) had received no training.

In Ehime Prefecture, home to three reactors at the Ikata nuclear plant in southwestern Japan, officials are tackling their update of evacuation plans.

"We need a manual. We have to consider a much larger area than before," said prefectural crisis planning official Noriyuki Onishi. "We have to get started. We can't just wait and worry."

What does "security" mean?

June 22, 2012

Revised nuclear law stipulates aim to ensure Japanese national security

http://mainichi.jp/english/english/newsselect/news/20120622p2a00m0na015000c.html

Legislation enacted by the Diet on June 20 to establish a new nuclear regulatory panel in the wake of the Fukushima nuclear meltdowns contains an appendix revising the Atomic Energy Basic Law to read that the new entity will aim to contribute to Japan's national security.

The revised law is raising concerns that adding a security guarantee runs counter to the principle of limiting the use of nuclear energy to peaceful purposes.

Chief Cabinet Secretary Osamu Fujimura said at a news conference on June 21 that Japan remains committed to using nuclear power only for peaceful purposes and, abiding by the three non-nuclear principles, has no intention whatsoever to convert atomic power to military use.

The Atomic Energy Basic Law stipulates in Article 2 that research into and use of atomic power are restricted to peaceful purposes, championing democratic, independent and public disclosure principles. The appendix in question, however, alters Article 2 of the basic law, adding a sentence requiring the new regulatory body aim to contribute to national security. A similar revision has been made to the Nuclear Reactor Regulation Law.

Although the national security provision was not in the government's original draft bill, amendments submitted in April by the largest opposition Liberal Democratic Party (LDP) and New Komeito mentioned the security issue. Inclusion of the expression in the enacted bill reflects the view of the bill's backers that Japan's high-level nuclear technology is a potential deterrent and should be part of national security policy.

Some members of the House of Councillors Environment Committee on June 20 questioned if Japan plans to declare its intention to build nuclear arms.

In response, nuclear accident minister Goshi Hosono emphasized the government's commitment to honoring the basic law. Masayoshi Yoshino, the House of Representatives member of the LDP who submitted the new regulatory body bill, cited three areas -- security measures by the International Atomic Energy Agency to prevent the military use of nuclear materials, safety of nuclear power and nuclear security to prevent terrorism. Adding "security" to Article 2 means that these issues will be handled by the new regulatory panel, he said.

During the 2008 Lake Toya G8 Summit, Japan proposed an international initiative to address these three fields and consolidate the use of nuclear power only for peaceful purposes.

Initially enacted in 1955, the Atomic Energy Basic Law has been defined as the basic philosophy underpinning Japan's policy of using nuclear technology for peaceful purposes.

It took only four days, however, for the bill establishing the new regulatory entity to win parliamentary passage after it was submitted to the Diet on June 15. There was no full debate on the new panel's "security aim."

Revision of the Atomic Energy Basic Law (Part 2)

June 23, 2012

Editorial: National security clause must be deleted from law on atomic energy

http://mainichi.jp/english/english/perspectives/news/20120623p2a00m0na009000c.html

An addition to the Atomic Energy Basic Law stating that Japan's nuclear energy should contribute to national security has stirred controversy.

The amendment has fueled speculations about its true aim. Some wonder whether the interpretation of the clause could be stretched to open the way for nuclear weapons development. Others question whether the clause is aimed at underscoring the effectiveness of the development and use of atomic power for nuclear power plants and other purposes.

Japan's three non-nuclear principles of not producing, not possessing and not introducing nuclear weapons form the core of its national policy, and the nation's successive administrations have ruled out the possibility of the country developing such weapons of mass destruction.

The basic law limits research, development and use of atomic energy strictly to peaceful purposes, championing democratic, independent and public disclosure principles. As such, one cannot help but wonder whether the national security clause is aimed at changing Japan's basic policy on nuclear energy.

Chief Cabinet Secretary Osamu Fujimura emphasized that "the principle of using atomic energy for peaceful purposes remains unchanged and the government has no intention of diverting such energy to military use." This goes without saying. And if it is indeed true, then misleading expressions should be avoided. We demand that the national security clause be deleted from the law.

The Atomic Energy Basic Law was amended by incorporating the clause into the appendix in the law on the establishment of a nuclear regulatory panel, which was passed into law on June 20.

The clause was not in the original government-sponsored bill. However, the ruling Democratic Party of Japan (DPJ), the largest opposition Liberal Democratic Party (LDP) and New Komeito subsequently agreed to modify the bill and enact it as lawmaker-initiated legislation. At the time, the clause in question was incorporated into the appendix at the request of the LDP.

The Diet spent only four days deliberating the bill after it was submitted, and failed to thoroughly discuss whether Japan's atomic energy policy should contribute to the country's national security. Questions also remain as to whether it is justifiable to revise the basic law through the appendix of a separate law on the establishment of a new nuclear regulatory commission.

National security has been traditionally interpreted as "national defense mainly through military force." There are fears that the development of atomic energy could lead to the development and production of nuclear arms. Therefore, it is of great significance to declare that Japan's use of nuclear energy must be limited strictly to peaceful purposes and draw a clear line between such energy and national defense.

During Diet deliberations, an LDP legislator, who is one of the sponsors of the bill, said security in the law refers mainly to safeguards implemented by the International Atomic Energy Agency (IAEA). However, the meanings of "security" and "safeguards" are different. If the clause incorporated into the basic law is aimed at contributing to IAEA safeguards, it should clearly state that.

Some LDP legislators insist that Japan should maintain its high-level nuclear technology and demonstrate to the world its capability to develop nuclear weapons as a potential deterrent, linking atomic energy to national security.

South Korea responded to the inclusion of the clause in the basic law by saying, "We will watch the true intention behind the amendment and its future impact," against the backdrop of such a persisting idea in Japan.

The phrase, "contribute to Japan's national security," was also incorporated in the Aerospace Basic Act that was enacted in 2008. Moreover, a phrase stating Japan's space development must be limited to peaceful purposes was deleted from the Law Concerning the Japan Aerospace Exploration Agency in its amendments on June 20.

The fact that legislation relating to national security has been passed into law without sufficient discussions amid political confusion over the consumption tax hike has raised grave concerns.

It is high time to address unsolved nuclear issues

June 26, 2012

Editorial: Japan must earnestly take up issue of spent nuclear fuel disposal

http://mainichi.jp/english/english/perspectives/news/20120626p2a00m0na012000c.html

For half a century, Japan has stuck to a "nuclear fuel cycle" policy under which all spent nuclear fuel from the nation's nuclear power plants was to be reprocessed and used again in nuclear reactors. However, no efforts have been made to bring the policy in line with reality. Having experienced the disaster at the Fukushima No. 1 Nuclear Power Plant, the government must now make bold policy changes.

The Japan Atomic Energy Commission last week compiled four options pertaining to the future of the nuclear fuel cycle to correspond with the future of nuclear power generation in Japan.

According to the various scenarios, if Japan were to get rid of all of its nuclear reactors in 30 years, then all spent nuclear fuel should be disposed of directly. If nuclear power covered 15 percent of Japan's power generation by that time, a "concurrent" approach of reprocessing some spent fuel and directly disposing

of other spent fuel would be appropriate, and if the ratio of nuclear reactors stood at between 20 and 25 either a concurrent approach or full reprocessing of spent fuel would be appropriate. Under the zero nuclear plant scenario, operations of the fast breeder reactor Monju would also be halted.

Due to the costs involved, technical issues and safety concerns, we have called for the government to halt reprocessing of spent nuclear fuel and to draw the curtains on Japan's nuclear fuel cycle. The Atomic Energy Commission's options have opened the way for the government to alter its policy on the fuel cycle. It is strange that the government is adhering to a policy of reprocessing.

The nuclear fuel reprocessing plant being constructed by Japan Nuclear Fuel Ltd. in Rokkasho, Aomori Prefecture, doesn't have the capacity to reprocess all of the spent fuel produced by Japan's nuclear power plants. The idea of reprocessing all spent nuclear fuel in Japan was unrealistic from the outset. Since the government is trumpeting a policy of reducing dependence on nuclear power, any adoption of a "concurrent" approach in handling spent nuclear fuel raises serious doubts.

It is not only the cost that is of concern: **From the perspective of nuclear nonproliferation, it is problematic to keep on reprocessing spent nuclear fuel when there are no prospects of using the plutonium that the process would produce as fuel.**

In the Atomic Energy Commission's report on the various scenarios, it should be noted that there are outstanding issues to be addressed no matter which option is adopted. Development of technology and consideration of a system to directly dispose of spent nuclear fuel were left by the wayside under past government policy. The government must quickly take action and seriously consider dry storage of spent nuclear fuel. This is important not only from the perspective of lessening the risks associated with storing spent fuel in pools, but also in terms of securing an interim storage facility for the direct disposal of spent nuclear fuel.

Concerns have been raised that a government switch to a policy of direct disposal of spent nuclear fuel would adversely affect Japan Nuclear Fuel Ltd. and local bodies. It is the government's responsibility to address these concerns. One option could be for Japan Nuclear Fuel Ltd. to engage in other activities such as nuclear plant decommissioning work. Those benefitting from the work associated with such a change could perhaps also be made to bear part of the responsibility for storing the spent fuel. We call on the government to consider these issues.

The final disposal of high-level nuclear waste is an important topic no matter which option Japan selects, and the nation must take up the issue in earnest. Aimlessly continuing to operate nuclear power plants amounts to shifting the burden of spent nuclear fuel disposal onto the shoulders of our descendants.

A probe has been launched into secret meetings held by a subcommittee of the Atomic Energy Commission on the nuclear fuel cycle, which were attended by interested parties. Needless to say, depending on the results of the probe, the commission report on the fate of spent nuclear fuel will have to be reviewed.

TEPCO's nationalization approved

June 27, 2012
TEPCO shareholders approve public bailout plan
http://www3.nhk.or.jp/daily/english/20120627_34.html

Shareholders of the Tokyo Electric Power Company have accepted the utility's proposal to receive billions of dollars of public funds to help rebuild its finances.

The decision, made at TEPCO's annual shareholders meeting on Wednesday, formalizes a plan to effectively put the utility under government control.

The plan calls for the central government to acquire a stake of up to 75 percent in the utility in exchange for an injection of about 12 billion dollars in public funds.

The bailout is seen as a key step in proceeding with compensation for local residents affected by the crisis at the Fukushima Daiichi nuclear power plant.

TEPCO also decided to reshuffle its top executives, with Chairman Tsunehisa Katsumata and President Toshio Nishizawa resigning to take responsibility on the part of management. A majority of the new directors are being appointed from outside the company.

The shareholders rejected a proposal from the Tokyo Metropolitan Government, a major TEPCO shareholder, to allow a third party to examine the grounds for raising electricity rates.

With all its proposals endorsed by shareholders, the utility will begin compiling specific restructuring plans. As the top shareholder, the government will now have a major influence in how the company rebuilds itself and compensates people affected by the accident

Problems with nuclear laws

June 26, 2012

Nuclear laws have serious flaws

http://www.japantimes.co.jp/text/ed20120626a1.html#.T-sqsJFIwpU

The Diet on June 20 enacted a law to establish a nuclear regulatory commission. If the new body is established, it will end the current system, in which the authorities promoting nuclear power generation and the authorities regulating it are virtually integrated in the form of the trade and industry's Nuclear and Industrial Safety Agency. The Nuclear Safety Commission of the Cabinet Office, which proved to be almost useless in advising the government during the darkest days of the Fukushima nuclear crisis, will also be abolished. But the law contains problematic clauses that could overshadow efforts to ensure the safety of reactors and uphold Japan's principle of limiting the use of nuclear power to non-military purposes.

The original bill included a clause that the life span of a reactor will be limited to 40 years in principle, and that in exceptional cases it may be extended once for a total of 60 years. But in consultations among the Democratic Party of Japan, the Liberal Democratic Party and Komeito, it was agreed that a new five-member regulatory commission will be empowered to review the 40-year principle. If the commission members have close ties to the nuclear power establishment, they could emasculate the 40-year principle, thus hampering efforts to end Japan's reliance on nuclear power. It must be remembered that the No. 1 reactor of the stricken Fukushima No. 1 nuclear power plant was more than 40 years old, and in fact had been scheduled to be shuttered, but an extension was granted in the weeks before the earthquake and tsunami struck.

The Diet must approve the appointments of the commission members. It is vital that the government appoints members who have no ties with the nuclear establishment. Any efforts by the establishment to influence the appointments must be stopped.

Another problem with the law is the presence of a clause stating that the safety of nuclear power must also be ensured for the sake of the "security" of the nation. A similar clause was inserted into the Atomic Energy Basic Act, which takes precedence over the newly enacted law. In the Diet, it was explained that the clause was inserted because the new commission will do the work related to the International Atomic Energy Agency's safeguard measures. But the use of the word "security" leaves room for stretching the meaning of the clause, thus theoretically leaving the possibility of allowing Japan to use nuclear power for military purposes. The insertion of the clause was carried out in near-secrecy. The law should be revised to rule out any possibility of using nuclear power for military purposes.

Call for transparency - Give up nuclear power, say shareholders

June 28, 2012

Utility shareholders meet / Nuclear power decried; TEPCO's de facto nationalization OK'd

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120627005756.htm

De facto nationalization of Tokyo Electric Power Co., which will receive a capital injection of 1 trillion yen in public funds, was approved at its regular general shareholders meeting Wednesday in Tokyo.

TEPCO and eight other power utilities that own nuclear power plants held their annual shareholders meetings across the nation on the day, with shareholders demanding the companies ensure management transparency and give up nuclear power.

At the Yoyogi No. 1 Gym in Shibuya Ward, Tokyo, TEPCO's shareholders meeting began at 10 a.m. According to the company, 4,390 stockholders were at the meeting as of 1 p.m., while more and more shareholders continued arriving at the venue even after the meeting was convened.

The management submitted at the meeting proposals related to amendments to its articles of incorporation, which are necessary to receive the 1 trillion yen capital injection from the government.

Any change to the articles stipulating the company's basic rules must be approved, in principle, by more than two-thirds of shareholders in an extraordinary resolution at a shareholders meeting.

The proposals were passed in the afternoon, formally approving the virtual nationalization of the utility.

At the beginning of the meeting, Chairman Tsunehisa Katsumata once again apologized for the crisis at the utility's Fukushima No. 1 nuclear power plant.

"From all the members of the board, we offer sincerest apologies for the incident. Determined to make a fresh start, we'd like to thoroughly streamline the company, make compensation payments over the damage due to the crisis [following the March 11 earthquake and tsunami] and maintain a stable electricity supply for consumers to recover the public's trust," the chairman said.

The power company explained its decision to receive the capital injection of 1 trillion yen from the government's Nuclear Damage Liability Facilitation Fund as part of its comprehensive business rehabilitation program.

At the meeting, a TEPCO official explained the decision, saying, "To complete compensation, decommission damaged reactors and maintain a stable supply of electricity, while avoiding a situation of liabilities exceeding assets, it is absolutely necessary for the company to drastically improve its financial structure."

The company also submitted at the meeting the lineup of 11 new board members, including incoming Chairman Kazuhiko Shimokobe, who formerly headed the fund's management committee, and incoming President Naomi Hirose, who is currently managing director.

Tokyo Vice Gov. Naoki Inose attended the meeting to represent the Tokyo metropolitan government, now TEPCO's largest shareholder.

Inose submitted four proposals, including one in which the metropolitan government calls for the power company to ensure management transparency.

In explaining the proposals, Inose said, "TEPCO should disclose information related to the process of raising electricity rates and secure management transparency," and demanded the company thoroughly cut costs.

In addition to the proposals, Inose expressed opposition to the idea that Katsumata, who was slated to resign as chairman Wednesday after the shareholders meeting, become a "shayu" (corporate friend).

He also demanded the sale of Tokyo Denryoku Byoin, a hospital in Shinjuku Ward, Tokyo, that TEPCO workers use.

With a general shareholder submitting an emergency motion to replace Katsumata with Inose as the meeting's chairman, the atmosphere at the meeting was tense from the start, with some participants raising their voices angrily at the utility's management.

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Hashimoto: Give up N-plants

Meanwhile, at Osaka's Umeda Arts Theater, a record 3,825 investors had already crowded into Kansai Electric Power Co.'s shareholders meeting as of 1 p.m.

Mayor Toru Hashimoto of the Osaka city government, which is the largest shareholder in KEPCO, said at the meeting: "If the current situation continues, KEPCO will collapse. The company hasn't explained enough about the risk to its future management."

Raising questions about management risks for nuclear power plants, among other issues, Hashimoto demanded KEPCO permanently shut down the nuclear power plants it owns as soon as possible. Similar questions were asked also by individual shareholders.

This is the first time in a decade for the nine power companies that own nuclear power plants to hold shareholders meetings on the same day.

More about Wednesday utilities meetings

June 28, 2012

Local governments turn their backs on utilities

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201206280080

THE ASAHI SHIMBUN

As key shareholders in electric power companies, local governments could not afford to ignore calls to move away from nuclear power.

The nation's nine regional utilities that operate nuclear power plants held annual shareholders' meetings on June 27.

What made the meetings different this year was the nuclear disaster in Fukushima Prefecture and growing public wariness about nuclear power generation amid conflicting signals from the government about energy policy.

A good number of local governments reversed long-standing positions to side with Tohoku Electric Power Co. at the company's meeting.

At issue in this case was the planned construction of the Namie-Odaka nuclear power plant, straddling the municipalities of Namie and Minami-Soma in Fukushima Prefecture, both of which were hard hit by severe radiation fallout last year.

The facility is to be built in the vicinity of the stricken Fukushima No. 1 nuclear power plant, operated by Tokyo Electric Power Co.

Construction work was set to begin in fiscal 2016, according to a Tohoku Electric blueprint drawn up before the Great East Japan Earthquake of March 11, 2011.

When a citizen group shareholder proposed canceling the project, seven local governments, including the Fukushima prefectural government and the host municipalities of Namie and Minami-Soma, gave their unqualified support. This represented a major turnaround in their positions.

"We have been calling for the abolition of all nuclear plants in the prefecture since we announced our program for reconstruction that included a shift from nuclear power generation last year," explained a prefectural official.

The Namie town assembly late last year decided to withdraw its 1967 resolution to co-host the facility. The Minami-Soma municipal assembly has also called for construction to be canceled.

But the prefectural government of Miyagi, which neighbors Fukushima Prefecture, the municipal government of Sendai, capital of Miyagi Prefecture, and some other local governments were opposed to the proposal. They are located further away from the planned site. In any event, the proposal was rejected.

A Miyagi prefectural official explained that the utility did not need to heed calls to include scrapping of the project in its articles of incorporation on grounds it is a one-off project.

Tohoku Electric serves northeastern Japan, the region devastated by last year's magnitude-9.0 earthquake that spawned giant tsunami and triggered the nuclear disaster.

Some shareholders wanted to know if the utility is ignoring the opinion of residents in Fukushima Prefecture, given that anything nuclear these days gives shudders to the local population.

"We would like to show a direction based on the central government's discussion of new energy policies," said Noriaki Abe, vice president of the utility. "Of course, we will take the views of local people into consideration."

At that point, the venue went into an uproar and a moderator had to ask the participants to be quiet.

In total, 67 anti-nuclear power and other shareholder proposals were submitted at the shareholders' meetings of seven utilities. Only Hokkaido Electric Power Co. and Hokuriku Electric Power Co. did not have to deal with such proposals.

Two-thirds support from shareholders with voting rights would have been required for the proposals to be adopted.
All the proposals were killed.

Most shareholders are financial institutions and businesses that have a large stake in the utilities.

The utilities had obtained proxy votes from leading shareholders beforehand, ensuring that the proposals would not get off the ground.

Twenty-eight proposals were submitted to Kansai Electric Power Co., the largest number among the nine regional utilities that held shareholders' meetings that day. It was attended by Mayor Toru Hashimoto of Osaka, the largest shareholder with a 9-percent stake.

Hashimoto presented 10 proposals, which included abolishing all the utility's nuclear plants as soon as possible.
"How will Kansai Electric respond if society is moving toward zero reliance on nuclear power?" Hashimoto asked.
Kansai Electric is more dependent on nuclear power generation than the other utilities.

The cities of Kobe and Kyoto, also shareholders of the utility, jointly called on the company to build a power supply system as soon as possible that is safe and sustainable and does not require nuclear energy.

The joint proposal received backing from 22 percent of shareholders.

At the meeting of Chubu Electric Power Co., a proposal to abandon nuclear power generation was also killed.

But Makinohara, a city within 10 kilometers of Chubu Electric's Hamaoka plant in Shizuoka Prefecture, took a clear stand this year to vote in favor. This was in sharp contrast to the blank vote last year. Shizuoka cast a blank vote this year.

The Tokyo metropolitan government urged TEPCO to improve its customer service and be more transparent about the process of raising electricity rates.

While 21 percent agreed to the metropolitan government's call for better service, only about 10 percent endorsed a proposal by other shareholders to give up nuclear power.

The metropolitan government has a 3-percent stake in TEPCO.

Naoki Inose, vice governor of Tokyo who attended the meeting, raised doubts about the soundness of having a regional utility.

"TEPCO tends to think lightly about its accountability to customers because it has long enjoyed the status of a regional monopoly," Inose said.

He accused TEPCO of not pushing nearly hard enough to restructure, referring to the company's decision to pass up paying bonuses only for this summer.

Inose compared the company's efforts with those of Resona Bank and Japan Airlines Co., which, like TEPCO, were bailed out with government funds and passed up paying bonuses three or four times in a row while they underwent rehabilitation.

He also called on TEPCO's management to disclose all data it used to decide on new electricity rates.

The utility raised the rate for business clients from April and plans to increase the rate for households this summer.
"We are making the proposals as the largest shareholder, a user that pays 50 billion yen ($632 million) a year and the administrator tasked to protect the lives of Tokyo residents," Inose said.

TEPCO continued to dismiss repeated calls to count the number of shareholders supporting the proposals after it moved on proceedings swiftly with approval for its own proposals from hundreds of pro-company shareholders in the front.

Tsunehisa Katsumata, the chairman of TEPCO who served as moderator, said, "We have an accurate grasp of the intention of leading shareholders."

Japan on mid- and long-term energy policy

June 30, 2012

Gov't energy council sets 3 options for energy and anti-global warming policy

http://mainichi.jp/english/english/newsselect/news/20120630p2a00m0na012000c.html

The government's Energy and Environment Council has worked out three scenarios for mid- and long-term energy and anti-global warming policy in 2030.

Scenario 1 calls for total abolition of nuclear power stations by 2030, while under scenarios 2 and 3 the ratio of atomic power to total power consumption in Japan would be lowered to 15 percent and 20-25 percent, respectively.

The panel's proposal states that under scenario 1, all the spent nuclear fuel would be buried. If Japan retains nuclear plants, spent nuclear fuel would be reprocessed or disposed of. In addition to reprocessing the total volume of such radioactive waste under the current policy, the proposal leaves the possibility of fully disposing of it or reprocessing some spent fuel while dumping the reminder.

However, the panel's proposal would not allow the public a direct say in how spent fuel would be dealt with if Japan maintains some nuclear power generation, leaving the decision to the government.

At the request of the panel, the Cabinet Office's Japan Atomic Energy Commission (JAEC) reviewed the nuclear fuel recycling project in light of the government's commitment to reduce dependence on nuclear power, made after the outbreak of the Fukushima nuclear crisis.

JAEC has recommended that some spend nuclear fuel be recycled and the remainder disposed of if scenario 2 is adopted.

However, the Energy and Environment Council neither incorporated this view in its latest proposal nor ruled out the possibility that all radioactive waste will be recycled.

State Minister for National Policy Motohisa Furukawa told a news conference, "The government will release its nuclear fuel recycling policy when it determines the ratio of atomic power" to be retained.

Regarding power sources, Japan would temporarily rely on nuclear stations to make up for a shortage of electric power in the short term, even if Japan rids itself of atomic power by 2030.

The ratio of renewable energy sources such as hydraulic power to the total power consumption would be increased from 10 percent in 2010 to 35 percent by 2030, and thermal power plants would make up for any shortage.

Under scenario 2, no nuclear plants would be set up and all reactors would be decommissioned after 40 years in operation. If scenario 3 is adopted, new nuclear power stations would have to be built or some existing reactors would be replaced.

By 2030, the amount of greenhouse gas emissions would decrease 23 percent from 1990 levels under scenarios 1 and 2, and 25 percent under scenario 3. By 2020, greenhouse gas emissions could be cut by 0 to 11 percent, forcing Japan to retract its pledge to the international community that it would slash such emissions by 25 percent by that year.

The panel estimated that Japan is required to invest 80 to 100 trillion yen in energy saving measures by 2030, increasing monthly household electricity bills by 2,000 to 11,000 yen by that time.

It's up to the people of Japan to decide

July 4, 2012

Editorial: Japan's energy future must be decided by its people

http://mainichi.jp/english/english/perspectives/news/20120704p2a00m0na012000c.html

The people of Japan must soon choose one option from among three mid- and long-term energy policy scenarios -- including levels of reliance on nuclear power ranging from zero to 25 percent -- announced recently by the government's Energy and Environment Council. The government is expected to adopt one of them by the end of August based on a national debate, and map out an "innovative energy and environment strategy" based on it.

It will be a crucial choice that will determine the future of Japan. It is necessary to hold calm discussions on the issue and draw a conclusion that will convince every member of the public. To that end, it is indispensable for the government to provide accurate information such that the Japanese people can judge each option on its merits, and to hold discussions that will reflect the popular will.

Under scenarios 1, 2 and 3, the ratio of atomic power to total power consumption in Japan would be lowered to 0 percent, 15 percent and 20-25 percent, respectively, by 2030. Depending on the degree of Japan's dependence on nuclear power, the council estimated how far greenhouse gas emissions could be reduced, how much electricity charges would need to be raised and how much the country's GDP would be impacted.

However, since each estimated figure has a wide range, the scenarios have not clearly shown how much effect a reduction in nuclear power would have on Japan's economy and the livelihoods of consumers, making it difficult for people to choose between the three options. We urge the council to provide more detailed and understandable information by explaining the basis for its calculations, the specific effects of a reduction in nuclear power on various fields, and other clarifications.

The government views Scenario 2 as the most realistic option because it calls for a mid-level reduction in atomic power and meshes with government policy to shut down reactors after 40 years of service. However, as the government is supposed to work out its new energy and environment policy based on national debate, it must not lead public opinion into supporting the scenario it favors.

As part of national debate on Japan's future energy and environment policy, the government will hold its first so-called deliberative poll, ask members of the general public to submit their opinions and hold information sessions on the issue across Japan. In deliberative polls, randomly selected members of the public are surveyed on specific issues and invited to participate in debate sessions. Afterwards, they are queried again to see how their opinions have changed. This method, which makes it possible to tap a wide range of views from those who would not usually voice their opinions, is reportedly effective in getting a detailed view of public sentiment.

In the past, many town meetings on specific policy issues and hearings on nuclear power policy have been criticized as unfair, as their organizers apparently attempted to lead public opinion with staged questions and stacked audiences. The management of the government's deliberative poll on energy and environment policy will be left to the discretion of a third-party panel to be set up shortly. The results of the survey will not win public trust unless the government ensures transparency through appointing appropriate experts to the panel and disclosing in full how the poll will operate.

Questions remain as to the three scenarios themselves. Even if Scenario 2, which calls for a reduction in Japan's reliance on atomic power to 15 percent, is adopted, the ratio could be further reduced if some nuclear plants must be decommissioned for safety reasons before they hit 40 years in operation. None of the scenarios posit an energy and environmental vision for beyond 2030.

Regarding how to deal with spent nuclear fuel, scenarios 2 and 3 leave all possible options open, including full recycling.

This is a good opportunity for members of the general public to proactively choose their nation's policy. They should ask the government to clarify what they do not fully understand, and **make a feasible choice that will guarantee Japan's energy security and protect the environment on a long-term basis.**

More details about the new regulatory N-agency

Criteria for N-agency personnel revealed

http://www.yomiuri.co.jp/dy/national/T120703004843.htm

The Yomiuri Shimbun

The government will adopt strict criteria on the selection of a chairman and members of a new regulatory commission for nuclear plant safety, which could be established as early as August, according to a government guideline.

According to the guideline, revealed Monday, those who have received more than 500,000 yen a year in remuneration for lectures, consultancy or other services from a single power firm in the three years prior to the commission being established, cannot be named to the commission.

The guideline also does not allow anyone who was an employee or an executive of a firm related to the nuclear industry, including power firms and equipment manufacturers, to be on the commission.

Members of the commission are required to disclose the amounts of donations that went toward their personal research or to a laboratory to which they belong from companies related to the nuclear industry for the three years previous to the commission being established.

Members of the commission must also disclose names of industry-related companies that hired students of their laboratories and the number hired in the previous three years.

A bill to create the commission, which passed the Diet in June, and its additional resolutions prohibit executives and employees of power firms and other nuclear industry-related companies from being named to the commission.
As commission members must have a high degree of autonomy, the government decided to use stricter selection requirements than the new law called for.

The government plans to nominate a chairman and commission members, with an eye on experts on nuclear reactors or radiation protection in line with the criteria, and submit a personnel proposal to the Diet this month.

Test run at Rokkasho plant

July 4, 2012

Tests to reprocess radioactive waste begin
http://www3.nhk.or.jp/daily/english/20120704_26.html

A nuclear fuel reprocessing plant in Japan has restarted tests to prepare radioactive waste.

On Wednesday, test operations mixing radioactive wastewater with glass to make nuclear waste resumed at a plant in Rokkasho Village, Aomori Prefecture.

The plant is a reprocessing facility that takes spent nuclear fuel and extracts plutonium for use in the nuclear process again.

A test run by the plant was suspended 3 and half years ago after repeated failures.

The trial run had had technical difficulty mixing radioactive wastewater and glass as planned, and this forced it to be postponed.

The plant operator, Japan Nuclear Fuel, resumed the test run last month.

The reprocessing plant plays a key role in promoting the government's nuclear policy of recycling spent nuclear fuel. But due to the Fukushima Daiichi nuclear disaster the government is reviewing the nuclear fuel-cycle policy.

The review is expected to reach a conclusion this summer.

Fukui gov't in favour of sticking to nuclear power

July 8, 2012

Fukui Pref. wants central gov't to keep nuclear plants

http://mainichi.jp/english/english/newsselect/news/20120708p2g00m0dm003000c.html

FUKUI (Kyodo) -- The Fukui prefectural government called on the central government Saturday to continue to treat nuclear power as an indispensable source of electricity when deciding on the nation's future energy policy in the wake of the Fukushima No. 1 Nuclear Power Plant disaster.

The western Japan prefecture on the Sea of Japan coast made the call in a package of recommendations to the state ahead of requests to be made by central government ministries and agencies in the summer for their budgets for fiscal 2013 starting next April 1.

''It is necessary for the state to be responsible in maintaining the vitality of areas hosting (nuclear power plants) that have contributed to the nation's energy policy and supported the Japanese economy,'' Fukui Gov. Issei Nishikawa wrote at the beginning of the recommendations.

Fukui also sought increased subsidies to the prefecture to help ease its burdens as a nuclear plant host and prop up the local economy. Fukui hosts 14 reactors, the most among the nation's 47 prefectures.

Victory of Kagoshima governor

July 9, 2012

Kagoshima governor wins 3rd term, beats antinuclear challenger

http://mainichi.jp/english/english/newsselect/news/20120709p2g00m0dm019000c.html

KAGOSHIMA, Japan (Kyodo) -- Kagoshima Gov. Yuichiro Ito won a third four-year term in Sunday's gubernatorial election, according to final returns, defeating an antinuclear challenger after campaigning on a platform of conditionally allowing the restart of idled reactors at a local nuclear plant.

Ito has urged the government to ensure the safe resumption of operations at the two-reactor Sendai plant in Satsumasendai, while pledging to freeze a plan to build a third reactor at the plant during his tenure, even though he had given it the green light in 2010, amid heightened public concern about nuclear safety in the wake of last year's Fukushima disaster.

The election was the first in a prefecture hosting a nuclear plant since the July 1 restart of a reactor at the Oi nuclear plant in Fukui Prefecture, the first reactivation since the last of Japan's 50 commercial reactors was suspended in early May in the aftermath of the March 2011 disaster at the Fukushima Daiichi nuclear plant.

"I would rather refrain from using the phrase that a policy for the reactivation (of a nuclear reactor at the Sendai plant) has been supported," Ito, 64, said after the election. "I'll draw a conclusion" by carefully taking necessary steps, he added.

During the campaigning in the southwestern prefecture, Ito also said he would eliminate nuclear energy in the future.

Challenger Yoshitaka Mukohara, the 55-year-old president of a publishing house and secretary general of an antinuclear civic group, had pledged to block the restart of the plant operated by Kyushu Electric Power Co. and seek the scrapping of the reactors as quickly as possible.

Ito was backed by the local chapters of major parties, including the ruling Democratic Party of Japan and the main opposition Liberal Democratic Party, while Mukohara was supported by antinuclear activists and the Japanese Communist Party.

New regulatory commission to start early September

July 11, 2012

New nuclear body 'to be launched in September'

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120710004041.htm

The government plans to launch a new regulatory commission for nuclear safety on Sept. 3, along with a nuclear regulatory agency that will act as the commission's secretariat, according to informed sources.

The government will submit to the Diet proposals on the five members of the commission, including a chairman, with the aim of obtaining approval within this month, the sources said.

While the envisaged commission will be an external organ of the Environment Ministry, it will be granted a high degree of independence from the government as defined in Article 3 of the National Government Organization Law.

The new commission will compile new safety standards for nuclear power plants, taking over this role from the Nuclear and Industrial Safety Agency of the Economy, Trade and Industry Ministry.

It will also oversee the reactivation of nuclear reactors other than the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Oi nuclear power plant in Fukui Prefecture. The No. 3 reactor resumed full operations earlier this week and the No. 4 reactor will resume operations later this month.

The government originally planned to inaugurate the new commission on April 1. However, there was a delay because laws relevant to the new commission only passed the Diet in June due to difficulties in negotiations between the ruling and opposition parties.

To secure a high degree of neutrality within the nuclear safety administration, the government has made conditions for the selection of its members. For example, executives or employees at utilities and other firms involved in the nuclear industry in the last three years before the commission's establishment cannot become a member.

The government is now selecting candidates for the commission. If the selection process or the passage of bills in the Diet run into problems, the commission's launch will likely face further delays.

Japan's energy future left to a deliberative poll?

July 11, 2012
Yoroku: Japan's energy future too important to be left to experimental polling method

拡大写真
http://mainichi.jp/english/english/perspectives/news/20120711p2a00m0na002000c.html

Once upon a time, in ancient Athens, state policy was decided not by elected representatives, but by a great assembly of all eligible citizens. Five hundred of these citizens were also chosen by lot for the Bouletai, or council, which spent time deliberating the issues facing Athens and drawing up bills for the assembly's consideration.

In the modern world, a small-scale version of this selection by lot and the group deliberation that was such an important part of Athenian democracy is being resurrected by U.S. academics in the form of deliberative polls.

In a deliberative poll, respondents are chosen at random to answer questions on relevant issues, just as in a regular opinion poll. Unlike a regular poll, however, the process doesn't stop there. Respondents are invited to a weekend event where they are given detailed information about the issues at hand, hold discussions with experts and politicians, and debate various points of view. At the end of the weekend, the respondents are asked the same survey questions again and, according to the Center for Deliberative Democracy at Stanford University, "The resulting changes in opinion represent the conclusions the public would reach, if people had (the) opportunity to become more informed and more engaged by the issues."

Deliberative polls have been conducted in the U.S., Britain, Australia and Denmark, and have recently been attracting attention in Japan as well. Specifically, deliberative polling is set to be used to help choose between one of three options presented by the government for Japan's energy future -- a weighty issue in the wake of last year's meltdowns at the Fukushima No. 1 nuclear plant.

Though the government is aiming to make a final decision by the end of August this year, this is no simple three-option choice. The issue is complicated, with questions such as what percentage of Japan's energy output should be nuclear intertwined with future electricity prices and carbon dioxide emissions. This must all be considered very carefully, and in this light, the turn to deliberative polling seems abrupt. The technique may have been tested by local governments and other organizations, but on this issue the stakes are far higher. We are talking about nothing less than putting the future of Japan in the hands of deliberative polling, a move akin to suddenly sending an experimental car on a cross-country trip thousands of kilometers long.

There are probably misgivings among researchers, too, over the use of deliberative polling. Last month, over 20 experts with experience in deliberative polling submitted a position paper to the government. In it, the experts pointed to a number of problems with the government's polling plans, including failure to present methods for choosing participants fairly and preventing their views from being steered in a particular direction, and an untenable schedule.

In the democracy at ancient Athens, only men were allowed to sit in the citizens' assembly or become members of the Bouletai council. Women, slaves and foreigners were all excluded. In other words, the Athenian system deviated from the democratic spirit from the very beginning.

By the same token, even if the idea behind deliberative polling is a just one, problems could arise in its implementation. If the deliberations are tainted with suspicions of exclusion and undue influence, they will only breed greater distrust. ("Yoroku," a front-page column in the Mainichi Shimbun)

Serious "brain drain" of nuclear engineers in Japan

July 16, 2012

SENTAKU MAGAZINE

Nuclear engineers ditching Japan for a bigger paycheck

http://www.japantimes.co.jp/text/eo20120716a2.html#.UARcHpFIwpV

Although Japan is reputed to be one of the most technologically advanced nations in nuclear power generation, it now faces a serious "brain drain" as some of its highly experienced nuclear engineers are lured to work in other countries for much better remuneration than they could hope to receive at home.

On June 21, Hitachi Ltd., a Japanese industrial giant, won a ¥400 billion contract to construct a nuclear power station in Lithuania, on the heels of a similar deal by a consortium of Hitachi, Toshiba Corp. and Mitsubishi Heavy Industries Ltd. to build two nuclear power stations in Vietnam.

In Japan, public opinion has been increasingly against nuclear power generation since the March 11, 2011, accidents at Tokyo Electric Co.'s Fukushima No. 1 nuclear power plant.

But Japan is one of the few countries that have accumulated the technology and knowledge needed for a wide range of things related to nuclear power plants, ranging from planning, designs, manufacturing and operation to maintenance and inspection of nuclear power plants. No corporations other than the Japanese trio of Hitachi, Mitsubishi and Toshiba have the expertise to do these things on their own.

One government official has lamented, however, that there has been a serious brain drain of nuclear engineers from Japan. Indeed, he says, huge sums of money are being offered to lure Tepco nuclear engineers to countries like South Korea and China, which are trying to compete with Japan as exporters of nuclear power equipment, and Abu Dhabi of the United Arab Emirates, which is intent on financing the introduction of nuclear power with the oil money it has accumulated.

"I have been told that annual remuneration being offered by those countries to Japanese engineers range between ¥50 million and ¥60 million a year per person," the official says.
Some major headhunting and consulting firms have reportedly organized special project teams to entice nuclear engineers of Tepco and other Japanese power companies to work outside of the country for higher wages.

According to one headhunting consultant, annual pay equivalent to ¥50 million a year is a "global standard" for engineers specializing in nuclear energy-related technology. In Australia, he says, specialists working at liquefied natural gas plants earn an average of ¥50 million or more a year. "I wonder why those sent there from Japanese companies work for about ¥10 million a year without complaining."

He also says, "With their esteem and wages likely to go down further in Japan, it would be only logical for Japanese nuclear engineers to move to (non-Japanese) employers who offer ¥60 million a year."

In the years that followed the 1979 Three Mile Island and 1986 Chernobyl disasters, which were dubbed the "winter era of nuclear power," Japan vigorously pushed the policy of constructing new nuclear power plants and accumulated valuable know-how for building nuclear power plants. This resulted in making

Japan the only country in the world equipped with the know-how to operate the two main types of nuclear power reactors — the pressurized water reactor (PWR) and the boiling water reactor (BWR).

Technologically less advanced countries acquire skills and knowledge from more advanced nations through "reverse engineering," in which they import state-of-the-art products through dummy companies then disassemble them to imitate their designs and structures. But this method does not work in the case of nuclear reactors.

Although the physical structure of a reactor may be imitated in this way, it is impossible to acquire the highly sophisticated know-how needed to operate and maintain a reactor. That's why some countries are anxious to lure well-qualified nuclear engineers with extensive experience at nuclear power stations in Japan.

Nuclear power generation is made possible by the combination of such components as a pressure vessel, precision piping, a generator, a heat-resistant turbine and a facility to dispose of radioactive materials — all requiring highly advanced precision engineering.

Japanese corporations have excelled in every one of these areas. Hitachi, Mitsubishi and Toshiba have built up broad experience as general contractors for nuclear power plant construction. Nobody comes close to Japan Steel Works Ltd. and IHI Corp. when it comes to designing and manufacturing pressure vessels, while Organo Corp., another Japanese firm, is a dominant force in building facilities for disposing of water from reactors.

And it has been the engineers of Tepco and other power companies in Japan who have accumulated the know-how to operate nuclear power plants using nuclear power plant components that incorporate the most advanced technology.
Vietnamese Prime Minister Nguyen Tan Dung is among the Asian leaders who have expressed the hope of benefiting from the experience of Japanese nuclear engineers, who must have learned a lot from the dreadful situations at Fukushima, such as the meltdowns of nuclear fuel cores from overheating, and melt-through, in which molten nuclear fuel pierced the bottom of a pressure vessel.

Even since the Fukushima nuclear accidents, there has been little change in the global trend of making nuclear power the primary source of energy.

As of 2011, there were 431 nuclear power plants in the world, with the combined capacity to generate 365.72 million kW of electricity, accounting for 5 percent of global primary energy sources, according to statistics released by BP.

On top of this, more than 200 new nuclear power plants are scheduled to be completed by 2030 and the market size of nuclear power generation is likely to exceed ¥120 trillion within the next 20 years.

Even in the United States, which leads the world with 104 nuclear power plants, President Barack Obama regards nuclear power as an essential means of ensuring energy security and preventing global warming.

China and India plan to build 80 and 70 new nuclear power stations, respectively, by 2020. If disposal of radioactive wastes is taken into consideration, the size of the market related to nuclear power generation will easily surpass ¥150 trillion.

Meanwhile, Japan from this year will face a difficult task decommissioning old reactors that are more than 40 years old

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To fulfill its responsibility to future generations of Japanese, Japan must secure a sufficient number of expert engineers who will carry out the decommissioning of old reactors.

As the decommissioning of the Fukushima reactors damaged by the Level 7 accident, the worst on the International Nuclear Event Scale, is unexplored territory, Japan cannot afford to allow a brain drain of its nuclear engineers.

Efforts to expose the responsibility of Tepco, which is trying to make a social comeback, must not slacken.

At the same time, the nation should squarely look at the serious energy security crisis bearing down on it.

This is an abridged translation of an article from the July issue of Sentaku, a monthly magazine covering Japanese political, social and economic scenes.

Opinion piece about future demand for nukes

Tuesday, July 17, 2012

ENERGY SYMPOSIUM

Global demand for nuclear power remains high

Emerging powers seek more energy; U.S. nuclear revival may hinge on natural gas prices

http://www.japantimes.co.jp/text/nb20120717d1.html#.UAVKSpFIwpU

By TAKASHI KITAZUME
Staff writer

Despite the Fukushima nuclear power plant disaster that hit Japan last year, the global appetite for nuclear energy remains largely unchanged as emerging economic powers are set to account for much of the growth in worldwide electricity demand in the coming decades, a **U.S. think tank** expert said at a recent seminar in Tokyo.

The United States also has not wavered from its recent moves to resume construction of nuclear power plants for the first time since the Three Mile Island accident in 1979. However, the future of the U.S. nuclear power industry will hinge on various other factors, including price competition with domestically produced natural gas, Jane Nakano said.

Nakano, a research fellow with the energy and national security program at the Center for Strategic and International Studies, was speaking at the seminar organized by the Keizai Koho Center on June 13 to discuss the global prospects for nuclear energy and U.S. energy policy.

Before the Fukushima accident in March 2011, about 30 countries around the world operated over 440 nuclear power reactors, which accounted for 14 percent of global electricity generation. The nuclear power industry has seen steady growth, with about 50 commercial reactors coming online over the past 15 years, Nakano said.

The real story behind the growth, she said, is China, Russia, India and some other fast-growing economies. "Today, about 65 reactors are under construction, and about 40 percent of them are being built in China alone," she said.
Nakano said the Fukushima plant meltdowns and the radiation fallout "did not cause major changes to the level of interest in nuclear energy" worldwide, except in Japan.

Several countries, including Germany, Italy and Switzerland, decided to phase out their nuclear power generation or adopt a no-nuclear policy after Japan's nuclear crisis.

Nakano pointed out, however, that the high-profile German case was a reversion to the country's decision made in 2000 to phase out nuclear power, which had been reversed just a few years ago by Chancellor Angela Merkel. Italy had no nuclear power facilities but planned to build ones, and the no nuclear vote was seen more as a public vote against the policies of then Prime Minister Silvio Berlusconi, Nakano said.

Among countries that have had sustained interest in nuclear energy, including nations that do not currently have their own reactors but have been in talks to build ones, the Fukushima incident did not seem to have a major impact on their demand for nuclear energy, Nakano said. That should not come as a surprise given that a major part of the demand comes from developing countries, where growth in energy needs is much stronger than in mature economies, she said.

Energy consumption by rich countries that belong to the Organization for Economic Cooperation and Development was surpassed by non-OECD economies for the first time in 2007, Nakano noted. Global energy consumption is forecast to rise by 50 percent by 2035, and 85 percent of the growth is estimated to come from developing countries experiencing rapid economic growth, "where the population is still rising and the interest is growing among the public for modern conveniences," she said. And these countries are interested in nuclear power because growing energy consumption usually comes with rising emissions of greenhouse gases, she added.

Along with such shifts in the global energy demand landscape come the changes on the suppliers' side of the market, where countries such as South Korea and China are having a growing presence, Nakano said.

South Korea's successful bid in 2009 to supply four reactors to the United Arab Emirates was made in a "Team Korea" approach that involved many domestic suppliers and full government support. Nakano also said it is "a matter of when, not if, China will become one of the established suppliers of nuclear reactors in the global scene."

"The rise of these new suppliers pose challenges to traditional suppliers because many of (the latter) are mature economies whose home markets do not have the same type of thirst for electricity compared with developing countries. So the competition is becoming more and more fierce in the third-party markets such as Vietnam, Jordan and Turkey," she said.

Meanwhile, the United States has not had any new nuclear reactors built since the Three Mile Island accident. "It has become too expensive as an investment to build one," and due to regulatory uncertainty given the updates to safety regulations, "many other fuels have become more favored," Nakano said.

In recent years, however, policies have been put in place to support the nuclear power industry, including introduction of a simplified process for issuing permits for construction and operation of new reactors, as well as federal government loan guarantees and tax credits, she noted.

In 2010, about a year prior to the Fukushima accident, roughly $8 billion in loan guarantees was awarded for two new reactors. Following the disaster in Japan, President Barack Obama and his administration quickly expressed their support for the U.S. nuclear industry, and in February this year construction and operation permits were issued for the two power stations in Georgia and South Carolina, she said.

Still, construction of new reactors in the U.S. faces an uphill battle, "but not because of Fukushima," Nakano observed.
"Given the current serious deficit issues the government has, it is unlikely that the federal loan guarantee would be sustained at a strong level in the next couple of administrations, whoever gets elected," she said.

The price of natural gas — a major competitor to nuclear power in the U.S. energy mix — has come down quite sharply in recent months, Nakano said. And current debate in Congress suggests that there is "very little chance for the U.S. to have either cap-and-trade or carbon tax" plans to cut carbon dioxide emissions for at least the coming decade, and without these mechanisms in place, "nuclear power will have a harder time economically vis-a-vis natural gas," she observed.

Out of the 104 nuclear reactors in operation in the U.S. today, the operational life of 50 has so far been extended to 60 years. But there are movements in some states to reconsider the life extension of reactors beyond 40 years, and if there are no additional life extensions, "about one-third of nuclear power generation capacity will disappear in the U.S. by 2035," she said, adding that that is a "possibility given the low price of natural gas."

In recent years the U.S. has experienced a sharp increase in domestic production of shale gas, aided by new exploration technology and economically attractive gas prices that encouraged investments, Nakano said.

Shale gas accounted for a mere 5 percent of natural gas production in the U.S. five years ago, but that has increased to 30 percent today and is estimated to rise further to 45-60 percent by 2035, she noted. The "shale revolution" could result in natural gas accounting for a much bigger part of power generation in the U.S. — and U.S. export of domestically produced natural gas, she said.

Meanwhile, Akihiro Sawa, an executive senior fellow with the 21st Century Public Policy Institute and a former trade ministry official, said at the same seminar that he sees contradictions in the ongoing discussions in Japan on the future of the energy mix in the country following the Fukushima disaster.

An advisory panel to the Ministry of Economy, Trade and Industry has proposed four options for Japan's future energy mix, and the government is set to compile a new energy policy this summer after soliciting public comments on the options.

The options presented by the panel in May call for the government to seek a society in which nuclear power represents zero percent, 15 percent, or 20 to 25 percent of the nation's electricity provision by 2030, compared with 26 percent in fiscal 2010. All of the panel's options call for increasing renewable energy use to between 25 and 35 percent by 2030.
The government's energy policy prior to the Fukushima disaster stated the government would seek to increase reliance on nuclear energy to 45 percent of total supply by 2030 through the construction of new reactors.

Sawa said that if the government is trying to reduce the reliance on nuclear energy, the focus should be on energy policy, whose objective is to secure steady supply of energy sources, both in volume and economic terms.

If Japan is to make up for the termination or reduction of nuclear power generation, renewable energy would not normally be the primary option because it's still expensive and supply volume is small, so the priority should be how much can be secured through increased thermal power generation and at what cost, he said.

Renewable energy would be a priority option if the objective is to reduce emissions of carbon dioxide from energy production, while thermal power would be the primary option if the objective is to secure a steady energy supply at low cost, he said. Still, all the scenarios being contemplated seems to focus on increasing renewable sources to make up for the cuts in nuclear energy, which appears to contradict the objective of what the government is trying to do, Sawa said.

Rengo on the dependence on nuclear energy

July 18, 2012

Japan's main labor group to pursue end to dependence on nuclear power

http://mainichi.jp/english/english/newsselect/news/20120718p2g00m0dm039000c.html

TOKYO (Kyodo) -- Japan's biggest labor organization has drafted an energy policy that pursues the eventual end to the nation's dependence on nuclear energy, sources close to the matter said Tuesday.

The Japanese Trade Union Conference, which is known as Rengo and has supported the ruling Democratic Party of Japan, has thus shifted from its acceptance of new nuclear plant construction plans in response to the March 2011 Fukushima nuclear disaster.

Rengo Chairman Nobuaki Koga has vowed to eventually push for a society free from dependence on nuclear energy.

The draft policy, made available to Kyodo News, tolerates the DPJ government's recent decision to restart some nuclear power plants despite fears about their safety.

The government should make such decisions in consideration of the impact on citizens' lives, industrial operations and employment, the draft says.

It cites relevant residents' consent, the general public's acceptance and the enhancement of safety as preconditions for restarting nuclear plants.

The draft policy points out that energy supply constraints and fears about electricity charge hikes have made it difficult for companies to maintain domestic employment.

Japan should effectively use existing power generation facilities and adopt realistic energy conservation measures to support employment, it says.

The draft also says the government should secure technologies and human resources for decommissioning nuclear reactors and cleaning up radioactive contamination in preparing for nuclear plant accidents.

Tanaka to head new regulatory authority?

July 20, 2012

Gov't to tap Shunichi Tanaka for new nuclear body chief

http://mainichi.jp/english/english/newsselect/news/20120720p2g00m0dm076000c.html

TOKYO (Kyodo) -- The government plans to appoint Shunichi Tanaka, an expert of radiation physics and a former member of the country's key panel involved in setting nuclear policies, as the head of the new nuclear regulation authority, sources close to the matter said Friday.

The plan needs to win the approval of the Diet for official nomination but the procedure hit a snag as opposition parties refused to hold a meeting scheduled on Friday morning, during which the government was expected to propose the appointment to the parliament, after the candidate's name was reported by media in advance.

Tanaka, 67, is originally from the city of Fukushima and has engaged in efforts to clean land in Fukushima Prefecture contaminated by massive quantities of radioactive substances leaked due to the Fukushima Daiichi nuclear power plant disaster last year.

Because he is the former vice chairman of the Japan Atomic Energy Commission and has served as the president of the Atomic Energy Society of Japan, an academic society, some may oppose the appointment from the viewpoint that he has been part of the "nuclear power village," a close-knit community of bureaucrats, utilities, and academics with vested interests in promoting atomic power.

The government is also planning to tap four others as members of the new regulatory body -- Kenzo Oshima, former ambassador to the United Nations, Kunihiko Shimazaki, the head of the Coordinating Committee for Earthquake Prediction, Kayoko Nakamura of the Japan Radioisotope Association, and Toyoshi Fuketa of the Japan Atomic Energy Agency.

The government aims to launch the new entity in early September, hoping that the organization will contribute to **restoring shattered public confidence in nuclear regulations** following the Fukushima nuclear crisis, which resulted in the meltdowns of three reactors at the plant.

To ensure the neutral position of the regulators, the government has set certain qualifications for becoming a member of the new body, such as not admitting people who have worked for nuclear power plant operators or related organizations as employees or executives over the past three years.

The government decided to revamp the current nuclear regulatory setup after the Nuclear and Industrial Safety Agency came under fire for lacking teeth, as it is under the umbrella of the Ministry of Economy, Trade and Industry, a promoter of nuclear power.

The new regulatory body will be placed under the Environment Ministry but its independence is supposed to be guaranteed legally.

LDP angered by media report of nominations

July 21, 2012

Leak delays N-regulator nominations / Govt shelves candidate list amid LDP ire

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120720006379.htm

The government postponed Friday its submission to the Diet of a list of nominees for a nuclear regulatory commission to be established in September.

The Liberal Democratic Party was angered that the five-person list, which includes a nomination for the commission's chairman, was reported in advance by the media.

The government hopes the nominees will be accepted and is planning to submit the list to the Diet next week or later.
It wants to appoint Shunichi Tanaka, 67, an advisor for the Research Organization for Information Science and Technology, to the post of the commission's chairman.

On Friday morning, the government planned to present the list at a meeting of lawmakers representing both houses of the Diet.

But some news organizations, including The Yomiuri Shimbun, Nihon Keizai Shimbun and NHK revealed all or some of the nominees.

The government postponed the list's submission due to LDP anger over the media reports.

A senior LDP member in the House of Councillors said: "We'll ask the government why the list was reported in advance by the media. We can't accept the government's actions in this situation."

Committees on the administration of the two houses have set a rule that if the media reports on appointments before they are approved by lawmakers, the personnel must be rejected by the Diet.

But the two houses' committees agreed that the nomination of the nuclear regulatory committee would be exempt from the rule.

The agreement was made to avoid delays in the establishment of the regulatory committee, which will be at the core of the nation's nuclear safety policy.

New Komeito Secretary General Yoshihisa Inoue said at a press conference, "Setting aside the news reports, our basic stance is that our party will make judgments on each of the nominees."

He indicated the party does not intend to ask the government to change the nominees it has selected.

The government plans to nominate Kayoko Nakamura, 62, head of a project team of Japan Radioisotope Association; Toyoshi Fuketa, 54, deputy head of the Nuclear Science and Engineering Directorate of the Japan Atomic Energy Agency; Kenzo Oshima, 69, a former Japanese ambassador to the United Nations; and Kunihiko Shimazaki, 66, head of the Coordination Committee for Earthquake Prediction.
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Unnecessary opposition

By Horoshi Yumoto / Yomiuri Shimbun Staff Writer

The nuclear regulatory commission will be in charge of important decisions such as whether to reactivate reactors in nuclear power plants.

If the LDP refuses to accept the nominee submission, it could result in the delay of the commission's launch, which would harm the nation's interests.

Members of the commission must have a high level of expertise.

But those who were board members or employees of electric power companies or other businesses related to nuclear energy, as well as people who earned 500,000 yen or more over a 12-month period from a single nuclear-related company in the past three years, are not allowed to be listed as candidates.

Despite the limited range of candidates, the government carefully selected nominees and obtained their consent.
While the LDP is entitled to question the qualification of the nominees, it has cited the media reports that named the government's selection as a possible reason to refuse the list.

The LDP may be placing too much emphasis on its pride by being unreasonably opposed to the government's nomination.

Media groups reported on the nomination in advance because the decision about the commission members is highly public.Therefore, media groups decided that the information should be made public as soon as possible.
Excessive criticism by a political party could lead to restrictions on news reports.

In 2007, both ruling and opposition parties set a rule that personnel decisions needing Diet approval would not be approved if the nomination was reported by the media in advance.

The Democratic Party of Japan and the LDP previously agreed that personnel decisions for the commission would be exempt from this rule.

The rule should be abolished as quickly as possible because it can lead to bias in deciding on personnel and may result in restrictions on news reporting.

More delays?

July 22, 2012

Opposition's refusal may delay N-plant restarts / Personnel proposal must pass Diet soon to avert possible power shortage in winter months

Yuichi Suzuki and Koichiro Ashikaga / Yomiuri Shimbun Staff Writers
http://www.yomiuri.co.jp/dy/national/T120721002522.htm

The formation of a new administrative body in charge of regulating nuclear power will likely be further delayed due to objections from opposition parties against media reports on the government's personnel proposals for the body.

On Friday, the government postponed submitting a list of nominees for the nuclear regulatory commission to the Diet after opposition parties, especially the Liberal Democratic Party, objected that the list has been reported in the media before submission.

The government plans to launch the commission on Sept. 3. If the postponement leads to a delay in launching the commission, it would inevitably slow the commission's evaluations on restarting nuclear power plants. In the worst-case scenario, power shortages may occur and adversely affect the public.

On Friday, Koriki Jojima, Diet Affairs Committee chairman of the ruling Democratic Party of Japan, met with his LDP counterpart, Fumio Kishida, to persuade the LDP not to oppose the personnel proposal being submitted to the Diet.

"At this stage, it's difficult to make a new personnel proposal from scratch," Jojima said.

Angered by the media reports on the personnel proposal, some opposition members have demanded the list be scrapped. The government and ruling parties are wary of such dissent becoming dominant in opposition parties.

The chairman and other members of the nuclear regulatory commission are required to have a high level of expertise. The government has also set strict criteria in choosing the candidates to exclude people involved in private companies, government officials and scholars who have promoted nuclear power--members of what is dubbed the "nuclear village."

The conditions included barring people who have worked at nuclear-related companies, such as electric power companies, in the past three years regardless of whether they were ordinary employees or executives. Another condition excluded those who have received 500,000 yen or more in annual remuneration from a single nuclear-related company in the past three years.

According to sources, the government believes it would be difficult to launch the nuclear regulatory commission in September if it has to make a new personnel proposal, so it plans to submit the original proposal to the Diet next week. It includes Shunichi Tanaka, 67, an advisor for the Research Organization for Information Science and Technology, as a candidate for chairman of the commission, Kayoko Nakamura, 62, head of a project team at the Japan Radioisotope Association, and three others.

The government is trying to launch the regulatory commission in September to establish a system capable of managing the nation's nuclear regulations, such as deciding on restarting nuclear power plants by winter, when electricity demand rises.

If the Diet approves the personnel proposal, future commission members will be able to prepare a list of nominees for a nuclear regulatory agency that will act as the commission's secretariat. The government expects such preparations will take about a month after the Diet approves the personnel proposal.

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Govt wary of power crisis

The first major task of the nuclear regulatory commission will be to evaluate the restart of nuclear power plants following the reactivation of the Nos. 3 and 4 reactors at the Oi nuclear power plant in Fukui Prefecture earlier this month.

The first nuclear reactor expected to be evaluated by the commission is the No. 3 reactor at the Ikata nuclear power plant in Ehime Prefecture, as it is the only suspended reactor that went through the Nuclear and Industrial Safety Agency's assessment of first-round stress tests. The power plant is operated by Shikoku Electric Power Co., while the Oi power plant is run by Kansai Electric Power Co.

There are also calls to restart the Nos. 1 and 2 reactors at Tomari nuclear power plant, operated by Hokkaido Electric Power Co.

However, it is expected to take about 10 months for the nuclear regulatory commission to draw up new safety standards on nuclear power plants. There is a possibility that the commission will adopt the government's temporary standards, but it will be the commission's prerogative to decide the process to restart nuclear reactors.

"It is difficult to predict how long the evaluation [of restarts] will take," a source close to the government said.

Any delay in approving the personnel proposals will lead to postponements of nuclear power plant restarts and ultimately may adversely affect the public.

A supplementary clause in the law to establish a nuclear regulatory commission stipulates that if the Diet does not take a vote on a personnel proposal within 10 days after the government submits it, the prime minister can appoint the commission's chairman and four other members.

However, the appointments have to be approved by the Diet afterwards and the move could end up fueling the anger of the opposition parties.

According to sources, the currently prevailing opinion in the government is to "appease" opposition parties to obtain their support for the initial personnel proposal.

Naoto Kan - A plan to reduce nuclear plants to zero

July 22, 2012

Lawmakers in Japan outline denuclearization bill
http://www3.nhk.or.jp/daily/english/20120722_10.html

Former Japanese prime minister Naoto Kan and other governing party lawmakers have announced an outline of a bill that would end Japan's reliance on nuclear energy by 2025.

The draft outline says nuclear power generation could lead to infinite damages in the event of an accident. It adds that lack of final disposal measures will end up leaving future generations piles of radioactive waste.

It calls for establishing alternative power sources and reducing the number of operating nuclear power plants to zero.

The draft also calls for promotion of solar, wind, and other sources of renewable energy to cut carbon dioxide emissions.

The outline also mandates the central government to create jobs in communities that host nuclear plants.

The secretary general of the governing Democratic Party, Azuma Koshiishi, has been asking Kan to compile a plan on future energy sources.

The former prime minister said he intends to **seek support within his party and that he wants to submit the bill with support from the opposition.**

Public hearings on energy future in West Japan

July 23, 2012

Zero option draws favor as government reactor meetings shift to west Japan
http://www.japantimes.co.jp/text/nn20120723a3.html#.UA0wH6BIwpU

By ERIC JOHNSTON
Staff writer

OSAKA — The central government-sponsored public hearings on Japan's energy future moved to west Japan on Sunday, with the majority of designated speakers and attendees favoring either a complete withdrawal from nuclear power by 2030 or a near halving of the nation's reliance on it.

About 140 people attended the hearing, part of a nationwide series sponsored by the central government. Officials said they received 318 comments directly and by mail from its Kansai region poll on three possible energy futures.

Of these, 211 people voiced support for abolishing atomic power completely by 2030. Another 40 said they favored cutting Japan's reliance on it to 15 percent.. Nuclear energy accounted for 26 percent of the nation's electric power in 2010.

The remaining 67 favored relying on nuclear for 20 to 25 percent of Japan's electricity needs.

Of the 11 who spoke at the hearing, six favored zero reliance, while three backed 15 percent and two 20 to 25 percent. Two speakers were women and both supported the zero option.

"Lots of people have said they do not want to rely as much on nuclear power and we want to reduce the amount as much as possible," said national policy minister Motohisa Furukawa in his opening remarks.

The Osaka hearing took place following intense criticism of earlier meetings in Sendai and Nagoya, where utility representatives were selected to speak. The two speakers in Osaka who favored the 20 to 25 percent scenario repeatedly stressed that they had no connections to either utilities or nuclear power-related firms.

Among the participants, who were from Osaka as well as surrounding prefectures, a clear majority favored ending reliance on nuclear power, loudly applauding the six speakers who variously explained why Japan should, and could, be nuclear-free by 2030.

Also, two speakers who favored the 15 percent option criticized the way the central government did its calculations for the three scenarios.

One from Kyoto said the forecasts presented for energy usage and cost lacked very basic data, such as population projections for 2030 and how the demography of a simultaneously aging and shrinking population would likely affect energy demand.

Denuclearisation vs economic growth

Choice must be made over contradictory options for vision of future

http://mainichi.jp/english/english/perspectives/news/20120723p2a00m0na020000c.html

The much-criticized government-hosted public hearings on energy policy do have their merits. They have managed to draw admissions from utility officials defending nuclear power, which has in turn triggered protest from anti-nuclear blocs, encouraging further debate.

Apparently, the government plans to prohibit power company employees from speaking at public hearings from here on forward. But what would be far more constructive than across-the-board restrictions would be to closely review the content of the remarks made by utility employees.

At public hearings held last week in Sendai and Nagoya, a ruckus ensued when members of the public objected to employees from Tohoku Electric Power Co. and Chubu Electric Power Co., respectively, being given the opportunity to speak.

Tohoku Electric received 100 complaints via phone and e-mail after a ranking official voiced a pro-nuclear position, while Chubu Electric received 802 after one of its employees likewise expressed pro-nuclear views. Chubu Electric subsequently posted an apology on its website.

So what was the comment made by Chubu Electric's nuclear energy division head that drew such ire from the public?
"(In the case of Tokyo Electric Power Co.'s Fukushima No. 1 nuclear plant disaster), no one has died from any direct effects of radiation. I don't think this situation will have changed five or 10 years from now. This is an indisputable fact, based on epidemiological data."

Such remarks and criticisms against such remarks have emerged repeatedly since last year. Indeed, there have been no deaths as a direct result of radiation exposure. But the statistics cannot be used to draw the conclusion that there are and will be no impact of internal exposure to radiation.

In the introduction to the latest edition of his book, "Chernobyl Shinryo-ki" (Records of my Chernobyl medical practice), Akira Sugenoya, the mayor of the Nagano prefectural city of Matsumoto and a surgeon who treated thyroid cancer patients in Belarus, writes: "The fatality rate may not have been high statistically, but in reality, there were children suffering from illness, and some who even lost their lives to it. ... Armchair analysis does not get at the pain of losing lives."

Of the government's public hearings in 11 cities, those in five have already been held. They are broadcast live on the Internet, and video footage is uploaded on the website of the government's National Policy Unit (NPU). Few people seem to be accessing them, however, and it's not surprising. The first half of the hearings are comprised of comments from the NPU minister and bureaucrats, and the meetings in general do not proceed smoothly.

However, following the video footage allows us to pick up pieces of the bigger picture that fail to make media reports. As it turns out, the Chubu Electric employee's comment was a part of his bigger message that happiness cannot exist without economic growth.

Among the other comments he made include: "What is the real damage sustained from the Fukushima crisis? I think it's the instances of economic repercussions on people's safety and lives, including loss of homes and jobs from the designation of no-go zones, and consumers' rejection of agricultural products due to the establishment of excessive safety standards."

He also said: "I believe that if the economy tanks, and corporations lose their global competitiveness, we will experience a crisis that far exceeds the one in Fukushima."

Hats off to the man, who, amid a public backlash, expressed his beliefs with his face and name exposed. But his argument that a bigger tragedy awaits if Japan does not operate its nuclear plants is going too far. The conviction that everything will fall into place as long as the money keeps flowing, is questionable. As for the notion that happiness is impossible without economic growth, it's probably shared by the establishments of all major economies.

Meanwhile, many of the opinions put forth by members of the public who participated in the hearings flew in the face of such a "happiness theory."

"Why is economic growth a given? Why, when our population is on its way to decline, and our working population is set to shrink even more rapidly, do we need to increase the products and services available in the country? Is a society of mass consumption and mass production -- in which what we want at any given time is available everywhere -- a society of spiritual wealth?" a university student from Tokyo at the Nagoya hearing said to applause.

Do we choose denuclearization over economic growth, or economic growth over denuclearization? Does it all boil down to money, or does it not? The debate over what constitutes true happiness is undoubtedly a demand made on us by history. (By Takao Yamada, Senior Expert Writer)

Despite the two reports on the disaster, Gov't is very slow to respond

July 24, 2012

Editorial: New nuke disaster report cue for Japanese people to join energy debate

http://mainichi.jp/english/english/perspectives/news/20120724p2a00m0na004000c.html

Why did the Fukushima nuclear disaster happen? Was there nothing that could have been done to prevent it from worsening, from spewing radioactive material over the Japanese landscape? And what lessons should we be learning from all this?

It has now been more than a year and four months since the meltdowns at the Fukushima No. 1 nuclear plant. On July 23, a commission appointed by the government to investigate the catastrophe released its final report, and there are plenty of important findings in its pages. However, though the commission interviewed 772 people for a total of 1,479 hours -- on top of the over 900 hours of interviews a Diet investigative committee conducted with 1,167 people -- we still don't have the full story, and it's impossible to say all the Japanese people's doubts have been addressed.

First of all, we still don't know exactly what happened in the disaster, primarily because high radiation levels around the ruined reactors make direct inspection problematic. It is, however, a shame that a re-evaluation of conditions could not be performed.

Furthermore, discrepancies remain between the investigative reports released so far. Points of disagreement include whether there was time to use data from the SPEEDI system for predicting the diffusion of radioactive material, and whether the March 11 earthquake damaged vital plant equipment before the tsunami hit and knocked out all power. These are both questions that have a direct bearing on

future accident response measures as well as evaluating the risks presented by other nuclear reactors in the country, and cannot be left unanswered.

In the end, even after the reports issued by the Diet committee and the government-appointed commission, the investigative process remains only half-done. The government, the Diet and plant operator Tokyo Electric Power Co. (TEPCO) must all continue their search for the causes of the disaster. As such, a permanent investigative committee must be established, one with complete independence from the government and whatever administration is in power at a given time.

On the other hand, the government-appointed commission's report does spell some things out very clearly. For instance, had TEPCO created a precise and well-prepared accident response plan in advance, the disaster at the plant and the damage it caused could have been constrained.

One reality that can't be pushed aside is that TEPCO's accident prevention policies were insufficient. Furthermore, the utility's tsunami defense and sever accident response measures were lacking in the extreme. The government commission concluded that TEPCO's response to the unfolding disaster was clumsy, and this, too, was because the utility was underprepared.

It's hard to lay blame on the workers actually at the plant when the meltdowns occurred. TEPCO, however, is deeply responsible for what unfolded there, having spent years prioritizing business concerns over ameliorating the risks of a major nuclear catastrophe. TEPCO's own report on the Fukushima disaster was one giant excuse from beginning to end, and the utility should redo its investigation while keeping the conclusions of the Diet and government committees firmly in mind.

The government, however, does not escape blame for the disaster. The government is tasked with regulating the nuclear industry, and yet the regulators were essentially captured by the regulated, doing the power companies' bidding. The Diet committee called the Fukushima meltdowns a "man-made disaster," and it's fair to say that the electric utilities and the government were "accomplices" in bringing it about.

Furthermore, TEPCO did not have a monopoly on ineptitude during the first days of the crisis. The government's disaster management was riddled with problems. Added to the well-documented stumbles within the prime minister's office was the nearly perfect uselessness of the Nuclear and Industrial Safety Agency (NISA) and the Nuclear Safety Commission, supposedly made up of experts who can inform and advise the prime minister during a nuclear crisis.

The government commission also looked into the events at Futaba Hospital, finding that the way the facility was evacuated raised the risks of rescuing the weakest of its patients too late. In the end, many of

the hospital's patients died in one of the most heartbreaking incidents of the nuclear disaster's early days. The Futaba Hospital case was, however, one among many instances of confusion and mayhem during the evacuation of the area around the stricken plant. A plainly deficient evacuation plan paired with atrocious information distribution to the evacuation zone meant that not only were large numbers of people forced to relocate several times, but many were also unknowingly subject to higher risks of radiation exposure. This is food for thought, indeed.

What we can't quite get our heads around is that, even though the Diet and government-appointed investigative committees have pointed out so many important issues, the Cabinet of Prime Minister Yoshihiko Noda along with the entire Diet are being very slow to respond. We do not see any serious attempt on the part of either to take the problems presented seriously, and this is a serious problem in itself.

There are a great many measures that need to be taken right now, such as alterations to the emergency situation chain of command, the appointment of a public information officer, and a system to get vital facts to crisis-stricken areas quickly and efficiently. Guards against an accident with the spent fuel rod pools at the Fukushima No. 1 plant fall into the same immediately necessary category.

However, we can see no substantive progress on any of these essential measures. If this is simply because government figures assume no disaster on a scale comparable to March 11 and the Fukushima meltdowns will strike again anytime soon, then the government is being dangerously overoptimistic. On the same note, we also have serious doubts about the government allowing the restart of two reactors at the Oi nuclear power plant in Fukui Prefecture before the results of the investigations were released.

Furthermore, the government must build new policies based on the two investigative committees' conclusions so far, and it must do so quickly. To this end, the government must deliberate on the two reports together in the Diet, talk out the discrepancies between them, and decide on its policy responses. Once those policies are in motion, the government must also reveal to the Japanese public exactly how much progress is being made in their implementation. It would be best to create an organization tasked with this information sharing.

The government is now mulling three scenarios for Japan's energy policy all the way up to 2030, and is using an intensive survey method to gauge public opinions on the issue to help it make a final decision. We at the Mainichi Shimbun intend to run an editorial series on what challenges need to be overcome and measures taken to choose the best policy.

As a starting point to that discussion, we propose that our readers have a look at the investigative committee reports on the Fukushima disaster. After experiencing nuclear calamity, what energy policy is most desirable? The risks of nuclear power are at the very center of that question.

Though the investigative reports are both enormous, anyone can download and read through them. The Diet committee report is probably the easier of the two to read, as it states its conclusions very clearly. While the government-appointed committee's report may be tougher-going, it does have the upper hand as far as detailed analysis goes. We hope that all of you will consider reading the reports your "summer homework" and discuss what you find with those around you. Together, we should be able to find the key to Japan's future.

July 24, 2012(Mainichi Japan)

How bad was the impact of sea water on Homaoka reactor No.5?

July 25, 2012

Seawater inflow accident could lead to decommissioning of Hamaoka nuke reactor

http://mainichi.jp/english/english/newsselect/news/20120725p2a00m0na006000c.html

An expert panel to the government will start considering whether to decommission a reactor at the Hamaoka Nuclear Power Plant in Shizuoka Prefecture after assessing possible damage from a seawater inflow accident last year, it has been learned.

The move comes after the nuclear plant operated by Chubu Electric Power Co. was suspended at the government's request on May 14 last year out of consideration for potential quake damage. Shortly after the suspension, **an estimated five metric tons of seawater gushed into the plant's No. 5 reactor due to a malfunction.**

"There are no such precedents in the world in which a large volume of seawater made its way into the reactor core," said an official with the government's Nuclear and Industrial Safety Agency (NISA). "There are possibilities that nuclear fuel rods have eroded, and we need to carefully look into the repercussions (of the seawater inflow)."

The expert meeting will be convened on July 25 to determine whether the nuclear complex can be reactivated after such a large amount of seawater covered an extensive area including the No. 5 reactor. Because nuclear reactors are mainly made of metal prone to corrosion by saline matter, the No. 5 reactor may likely face decommission in the worst-case scenario.

In the wake of the nuclear disaster at the Fukushima No. 1 Nuclear Power Plant in Fukushima Prefecture in March last year, a large volume of seawater was injected to cool down its No. 1 through No. 3 reactors after freshwater ran short, leading plant operator Tokyo Electric Power Co. to later decide to decommission the reactors.

Chubu Electric, however, is reluctant to decommission the Hamaoka nuclear plant's No. 5 reactor. "The seawater that reached the reactor had low saline concentrations, and decommission is not necessary," said a Chubu Electric official, suggesting that the utility will only repair and replace any necessary equipment.

In the Hamaoka plant's accident in May last year, a pipe holding coolant seawater ruptured inside a condenser, prompting the leaked seawater to circulate in the No. 5 reactor. Chubu Electric estimates that some 400 tons of seawater leaked in the facility, of which about five tons reached the reactor.

The utility has been investigating the impact of the seawater leakage on all affected equipment. In March this year, several holes believed to have been made due to corrosion were found inside a tank holding emergency coolant water for a reactor. Furthermore, screws of devices to maneuver control rods were found to be covered with rust the following month, prompting the utility to file a report with NISA. The utility will wrap up its investigation on the facility by the end of this year before drawing up a final report.

During the expert meeting on July 25, attendants will carefully review the current conditions of the No. 5 reactor based on Chubu Electric's report to NISA. The discussion will be taken over by a nuclear regulatory commission to be launched in September, where the validity of the final report to be complied by Chubu Electric will be determined.

Yamaguchi gobernatorial election and nukes

July 29, 2012

Voting starts in Yamaguchi governor's race, focus on nuclear plant

http://mainichi.jp/english/english/newsselect/news/20120729p2g00m0dm043000c.html

YAMAGUCHI (Kyodo) -- Voting in the Yamaguchi gubernatorial election started Sunday, with attention focused on the planned construction of a nuclear power plant in the western Japan prefecture.

The election is a de facto two-man race between prominent renewable energy proponent Tetsunari Iida, 53, who calls for scrapping plans to build a nuclear plant in Kaminoseki, and former senior bureaucrat Shigetaro Yamamoto, 63, who claims he will suspend the plan in the wake of events at Fukushima Daiichi nuclear plant.

Yamamoto, a former official at the Land, Infrastructure, Transport and Tourism Ministry backed by many municipality leaders, is seen as having the upper hand over Iida, who has sought to garner support from unaffiliated voters by running as an independent.

The two other contenders aiming to succeed retiring Gov. Sekinari Nii are former prefectural government official Shigeyuki Miwa, 53, and Tsutomu Takamura, 38, a former Democratic Party of Japan lower house member.

Voters have also focused on the stance of each candidate regarding the unloading of the Osprey military aircraft at the U.S. Marine Corps' Iwakuni Air Station in the prefecture. Before deployment at the Marines' Futenma base in Okinawa, the United States is hoping to start test flights of the Ospreys in late August around Iwakuni.

Safety concerns over the deployment exist among residents in Okinawa and Yamaguchi prefectures.

Election results are expected to be known later in the day.

Fukushima problems not to be resolved soon

July 30, 2012

Editorial: Fukushima nuke crisis opportunity to consider Japan's future energy policy

http://mainichi.jp/english/english/perspectives/news/20120730p2a00m0na014000c.html

A year and four months have passed since the outbreak of the crisis at the tsunami-hit Fukushima No. 1 Nuclear Power Plant. Many evacuees have been exhausted from their prolonged lives away from their homes, and still have a long way to go before they can return to their neighborhoods.

Work to decontaminate areas tainted with radioactive substances leaking from the crippled power station is not going well and the re-designation of evacuation zones has not progressed as planned. If a serious accident occurs at any nuclear plant, extensive areas around the power station are affected by serious damage over a long period. We must face this reality as we try to reduce Japan's reliance on nuclear power.

The government adopted a basic policy on the restoration of Fukushima at a Cabinet meeting earlier this month. It is natural that the government recognizes the restoration of Fukushima Prefecture as one of the most important tasks and pledges to set aside the necessary funds for such efforts over a long period. The basic policy also calls for steady progress in work to decontaminate affected areas, with the long-term goal of reducing additional exposure to radiation, excluding radiation existing in nature, to below 1 millisievert a year.

Since more than 30,000 children have been forced to evacuate due to health concerns, decontamination is an urgent task. However, demonstration experiments conducted by the government have shown that decontamination methods employed by the government are not as effective in reducing radiation levels in highly contaminated areas as expected. Almost no progress has been made in decontaminating forests.

A growing number of local bodies in disaster-hit areas have commissioned general contractors and other businesses to perform decontamination work. National and local governments have no choice but to slowly but steadily make efforts toward decontamination.

What is worrisome is that little progress has been made in the construction of temporary storage sites for radioactive waste. No negotiations have been held on the national government's request that such a site be built in the Futaba County of Fukushima Prefecture. It is no easy task to gain local communities' consent for the plan, and the government cannot just indefinitely postpone the construction of such a site. The national government is urged to exercise leadership in going ahead with the plan.

Those who have been forced to evacuate their neighborhoods affected by the nuclear crisis should receive reasonable amounts of compensation and receive help to steadily put their lives back on track in order to ensure the restoration of areas affected by the nuclear disaster.

After consulting with the local governments concerned, the national government has recently worked out and unveiled the standards for calculating the amounts of compensation for real estate and household articles in evacuation zones.

The government is now reclassifying evacuation zones into "hard-to-return zones," "restricted residency zones" and "evacuation order lifting preparation zones." However, if evacuation orders are not lifted within six years from the outbreak of the nuclear disaster, residents will receive full compensation for their real estate. Local residents basically appreciate the standards, which allow them to estimate the amount of compensation they will likely receive and decide whether they should aim to return home at an early date or move to other areas.

The adoption of the compensation standards is expected to offer a breakthrough in the re-designation of evacuation zones. Tokyo Electric Power Co., the operator of the Fukushima No. 1 nuclear plant, should sincerely and quickly pay compensation to those affected by the nuclear crisis.

The Fukushima Prefectural Government is aiming to transform itself into a body that does not rely on nuclear plants. In the basic policy on Fukushima's restoration, the central government shows a plan to set up a key facility to promote the introduction of renewable energy in the prefecture. Both the national government and the general public are called upon to continue supporting Fukushima in the future.

Beware of those independent voters

July 30, 2012
Major parties shaken by independent gubernatorial candidate's strong showing

http://mainichi.jp/english/english/newsselect/news/20120730p2a00m0na019000c.html

On July 29, former senior bureaucrat Shigetaro Yamamoto, backed by the Liberal Democratic Party (LDP) and New Komeito, beat out rival Tetsunari Iida and two other candidates to become the next governor of Yamaguchi Prefecture. This was not, however, just any gubernatorial election.

The 53-year-old Iida, who campaigned on an anti-nuclear power platform, made a serious challenge for the governorship **without the support of any major political party** with a strong appeal to independent voters. And although he lost, Iida has sent tremors through not only Yamaguchi Prefecture, which is known as the "kingdom of conservatism," but all of Japan, and sparked dread in the ruling Democratic

Party of Japan (DPJ) over what angry independent voters will have in store for them come the next general election.

"This battle was a good one," Iida told supporters on the night of July 29 after garnering over half the independent vote. "We gave the LDP and New Komeito a run for their money, even in this kingdom of conservatism. We've created a bridgehead for tomorrow."

Iida, chief of the NPO Institute for Sustainable Energy Policies, was the brains behind Osaka Mayor Toru Hashimoto, who leads the Osaka Restoration Association. Total voter turnout in the gubernatorial election reached just 45.32 percent, and the 63-year-old Yamamoto carried the day with the backing of so-called block voters -- members of organizations who all agree to vote the same way. However, Iida's strong showing illustrates the public's growing criticism of the policies of the established parties, particularly over nuclear power.

While Yamamoto, a former senior official with the Land, Infrastructure, Transport and Tourism Ministry, ran from a generally pro-nuclear power position, he did shift direction somewhat by coming out in favor of freezing plans to build a nuclear power plant in the prefectural town of Kaminoseki. Iida has demanded the power plant plan be cancelled outright. On the deployment of the U.S. Marine Corps' new Osprey MV-22 aircraft, meanwhile, Yamamoto has come out against allowing them to be unloaded at the U.S. Marine base in the city of Iwakuni. Yamamoto's predecessor Gov. Sekinari Nii had also protested to the national government over unloading of the aircraft.

During the campaign, however, Yamamoto did his utmost to avoid dwelling on nuclear plants and Ospreys, both issues under the jurisdiction of the national government, relying instead on block voters to get him into the governor's chair. In the last half of the campaign, with Iida getting larger in his rearview mirror, Yamamoto moved to tighten control over these block voters, working full-tilt with his LDP and New Komeito backers and industry groups to cement his lead.
According to an exit poll by the Mainichi Shimbun and Tys TV Yamaguchi, 76 percent of pro-LDP voters cast their ballots for Yamamoto, while 85 percent of New Komeito supporters did the same. Some 53 percent of independents, however, voted for Iida, as against only 28 percent who backed Yamamoto.

The exit poll also showed that the nuclear power issue was not enough to bring Iida victory.

Regarding the plan for the new reactors in Kaminoseki, 44 percent of voters said it should be cancelled entirely, 26 percent were in favor of a freeze, and just 11 percent wanted the reactors to be built. Some 68 percent of the pro-reactor respondents voted for Yamamoto, while 57 percent of those in favor of cancelling the new plant voted for Iida.

However, only 17 percent of voters said that the nuclear plant issue was most important in how they cast their ballots, well behind "character and gubernatorial qualities," the most common answer at 49 percent. Meanwhile, even among those in favor of scrapping the nuclear plant plans, 31 percent voted for Yamamoto.

The exit poll was conducted at 37 polling places, with 2,467 voters responding.

Public opinion more and more in favour of "zero percent" option

August 2, 2012
70 percent of citizens willing to attend policy hearings support zero-percent nuclear option

http://mainichi.jp/english/english/newsselect/news/20120802p2a00m0na016000c.html

About 70 percent of Japanese citizens who wanted to attend government-sponsored hearings aimed at sampling public opinion on the country's future energy mix voiced support for an option to cut the country's dependence on nuclear power to zero by 2030.

Nevertheless, there are still many officials within the government who are cautious about breaking dependence on nuclear energy completely because they are concerned about the impact of power shortages and soaring utility rates on business activities and people's livelihoods. Therefore, it is hard to predict whether and how "public opinion" expressed at such policy hearings and elsewhere will be reflected in the government's policy decision.

The government has held policy hearings at 11 locations across the country since mid-July to sample public opinion on three options it set for nuclear energy's share of total power generation in 2030 -- zero percent, 15 percent, or 20-25 percent.

When the Mainichi Shimbun asked those people who wanted to attend public hearings at eight venues which option they would express their support for, 70 percent of them picked the "zero percent" option, followed by 11 percent for the "15 percent" option, and 17 percent for the "20-25 percent" option. Most of the citizens who voiced support for the zero percent option at the hearings expressed concerns about the safety of nuclear power in the wake of the crisis at the Fukushima No. 1 Nuclear Power Plant. As to the other two options, many of the supporters expressed their concern about power shortages and skyrocketing electricity rates.

There was confusion over the handling of the hearings. Two senior officials of power companies expressed their support for nuclear power generation at hearings in Sendai and Nagoya, respectively, sparking bitter criticism of the credibility of the forums. Then, the government hastily decided to remove people linked to the power industry from the lists of speakers at such hearings. With the exception of the hearing held in Fukushima, the same number of speakers had been set for each option, but in the face of lingering criticism, the government decided to allocate a larger number of speakers for the "zero percent" option than the other two options at the fourth hearing and thereafter.

There are only two hearings left -- one in Takamatsu, Kagawa Prefecture, and the other in Fukuoka, Fukuoka Prefecture, on Aug. 4. Furthermore, the government is to conduct a telephone poll of randomly-selected citizens, followed by a deliberative opinion survey with some of the respondents to the telephone poll participating on Aug. 4 and 5 to deepen discussions on the issue. In addition, the Cabinet Office will use its website to collect "public comments" until Aug. 12.

In light of the "national debates," the government will start to map out the country's first energy policy since the outbreak of the Fukushima nuclear crisis. Out of consideration for the impact on domestic employment and the economy, the government has deemed the "15 percent" option as the most likely choice, but it is becoming increasingly difficult to ignore the prevailing opinion in favor of the "zero percent" nuclear option. Therefore, the government will be hard pressed to make a convincing decision.

Ozawa and his party on nuclear power

August 2, 2012

Ozawa vows to abolish all nuclear power plants within 10 years

http://mainichi.jp/english/english/newsselect/news/20120802p2g00m0dm070000c.html

TOKYO (Kyodo) -- Political heavyweight Ichiro Ozawa said Wednesday that his new party will aim to abolish all nuclear power plants in Japan within 10 years.

His remarks suggested the party Ozawa launched in July, People's Life First, will try to attract public attention with a general election looming by stressing policy differences on nuclear power with Prime Minister Yoshihiko Noda, whose government recently approved allowing two nuclear reactors to resume operating.

At a press conference to announce the new party's policy goals, Ozawa also vowed to pursue decentralization and to strive to stop the government from raising the sales tax rate while the Japanese economy is still in a deflationary slump.

Ozawa left the ruling Democratic Party of Japan early last month in protest at Noda's consumption tax hike proposal.

The 70-year-old former DPJ leader, nicknamed the "Shadow Shogun" for the influence he has wielded within several ruling parties, had argued the tax hike plan reneges on the DPJ's policy pledges in the 2009 general election through which the party came to power. Ozawa is credited with being instrumental in the DPJ's ascent.

The Nagasaki Peace Declaration & nukes

August 1, 2012

Nagasaki Peace Declaration will not call for end to nuclear power

http://mainichi.jp/english/english/newsselect/news/20120801p2a00m0na002000c.html

NAGASAKI -- While focusing mainly on seeking an end to nuclear weapons, the Nagasaki Peace Declaration this year will, like last year, call for a change in energy policy but stop short of seeking an end to nuclear power, it has been learned from an outline released by Nagasaki Mayor Tomihisa Taue on July 31.

According to the outline, the declaration, to be made at a peace ceremony on Nagasaki's bombing anniversary of Aug. 9, will deal with the current situation surrounding nuclear weapons and increased international discussion on the inhumanity of nuclear weapons. The declaration is also planned to cover the importance of peace education, call on the national government to better support A-bomb victims, mourn the victims of the bombings and express a resolution for an end to nuclear weapons.

In reference to the Great East Japan Earthquake, the declaration is planned to call for "a society where people are not threatened by radiation" and urge the government to make clear the country's energy situation.

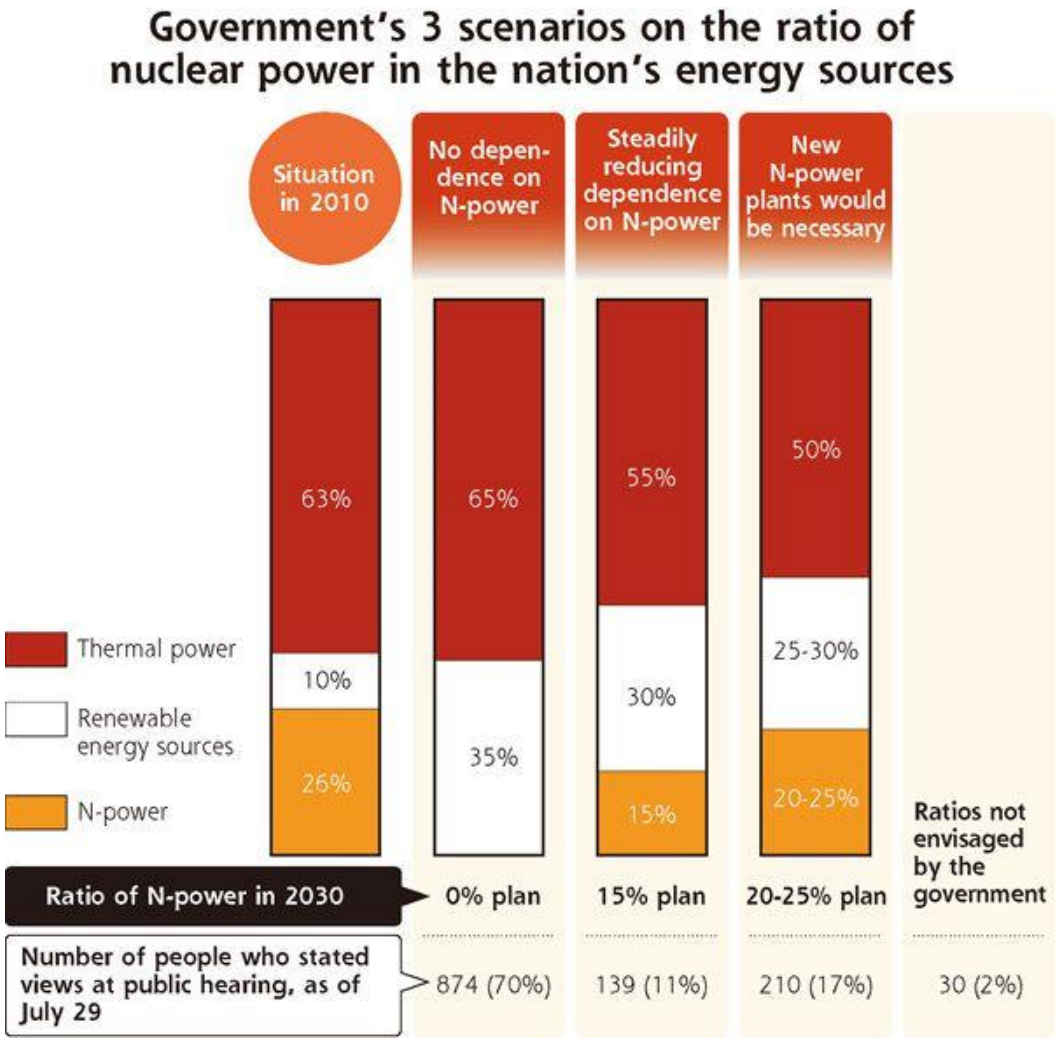
"This year's declaration is based on last year's declaration that called for a change to renewable energy," Taue said.

No nukes, but how?

August 3, 2012

Hearings yet to clarify alternatives to N-power

Takeo Miyazaki and Ryosuke Yamauchi / Yomiuri Shimbun Staff Writers
http://www.yomiuri.co.jp/dy/national/T120802006110.htm



While demands to eliminate nuclear power have prevailed at public hearings, the hearings have yet to tackle ways to secure a sufficient electricity supply to maintain the nation's economic vitality.

The government held a public hearing in Fukushima on Wednesday to discuss the possible ratio of nuclear power in terms of the nation's electricity generation in 2030.

"Although all nuclear plants, except for the one in Oi, have been suspended, we are managing to weather the situation this summer, too," said a participant who had taken refuge in Fukushima following the crisis that began at the Fukushima No. 1 nuclear power plant in March last year.

"If there's a power shortage, we can turn off the TV," said another participant, a company employee from Fukushima.
Thirty people expressed their opinions at the hearing. Almost all called for national denuclearization.

Residents of Fukushima Prefecture and those who had evacuated outside the prefecture due to the nuclear crisis were invited to express their views at the hearing. There were about 20 more participants in Fukushima than at similar hearings held at other locations. The Fukushima hearing also lasted 4-1/2hours, an hour longer than originally planned.

The government thought it necessary to hear the opinions of people, especially those from Fukushima Prefecture, who had been affected by the nuclear crisis before determining the nation's future energy policy.

"Of all the hearings, this is the most important. I'll listen to all participants sincerely," said Goshi Hosono, minister in charge of nuclear power policy, in the hearing's opening remarks.

"We should decommission all the reactors as soon as possible. I hope [the government] will gather all knowledge regarding renewable energy sources," a woman from Date in the prefecture said, drawing applause from the crowd.
In contrast, a man from Fukushima said, "As we can't manage to secure sufficient power, I think we should [restart reactors] for a limited time or under certain conditions." His remarks were met with boos and jeers.
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No-nuke plan favored

Starting in mid-July, the government has held a series of public hearings on the matter in major cities, including Saitama, Sendai and Nagoya.

Among the 1,253 people who applied to speak at the hearings, 70 percent called for no nuclear power, while 11 percent favored a plan in which nuclear power accounts for 15 percent of power generation in 2030. Another 17 percent backed an option to have nuclear power account for 20 to 25 percent.

The government is also soliciting public opinions through the Internet, among other venues, until Aug. 12. So far, about 80 percent of survey respondents support complete denuclearization.

Public hearings will also be held in Fukuoka and Takamatsu on Saturday. Additionally, the government plans to conduct a telephone survey and will hold discussions with some respondents this weekend in Tokyo.

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Feasibility is key

The scenario in which nuclear power accounts for zero percent of power generation means the ratio of renewable energy sources, such as solar and wind power, will have to increase to 35 percent. This plan would also be dependent on thermal power, which would account for the remaining 65 percent.

Currently, renewable energy sources, excluding hydraulic power, account for about 1 percent of power generation. Increasing this would be no easy task. Should the nation become reliant on thermal power, electricity charges could soar depending on factors such as increases in natural gas prices.

Many participants at the Fukushima hearing expressed high hopes for renewable energy, but stopped short of suggesting possible measures to help eco-friendly energy sources become more widely used.

"People really don't understand the difficulty in promoting a wider use of renewable energy sources," a source close to the government said.

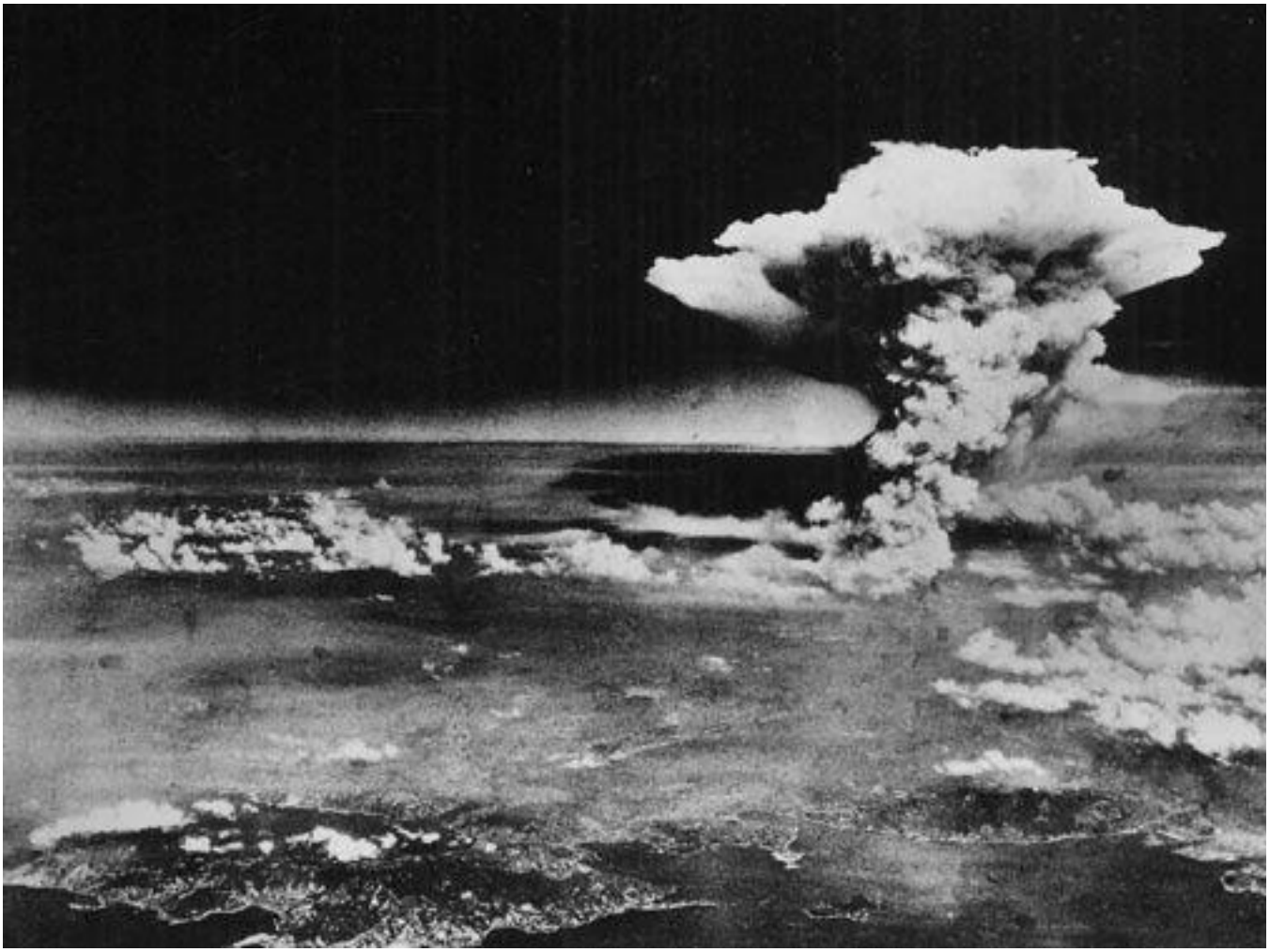
However, it remains unclear as to what extent public opinion will affect the government in formulating a national energy policy.

A company employee at the Fukushima hearing was skeptical, saying, "I'm afraid this [hearing] is only intended to let people vent their frustrations"

Nuclear weapons as a deterrent?

Friday, Aug. 3, 2012

Now should we become Death, destroyer of worlds? : A mushroom cloud rises above Hiroshima about an hour after the "Fat Man" A-bomb dropped by U.S. forces detonated above the city Aug. 6, 1945. U.S. ARMY VIA HIROSHIMA PEACE MEMORIAL MUSEUM / AP



Nuclear arms advocates get bolder amid energy debate

http://www.japantimes.co.jp/text/nn20120803f1.html

By YURI KAGEYAMA
AP

The contentious debate over atomic energy is also bringing another question out of the shadows: Should Japan retain the possibility of making atomic weapons — even if only as an option?

Hot zone: The reactor 4 building at the Fukushima No. 1 nuclear plant is in ruins on March 24 last year. AIR PHOTO SERVICE / AP

It may seem surprising in the only country to have ever come under nuclear attack, particularly as it prepares to mark the 67th anniversaries of the Hiroshima A-bombing on Aug. 6 and that of Nagasaki three days later. The government officially renounces nuclear weapons, and the vast majority of citizens oppose them.

But as the nation weighs whether to phase out atomic energy generation, some conservatives, including certain influential politicians and analysts, are becoming more vocal about their belief that Japan should at least not rule out producing a nuclear arsenal in the future.

The two issues are intertwined because nuclear power plants can develop the technology and produce the fuel necessary for such weaponry, as highlighted by concerns that allegedly civilian atomic energy research in Iran is masking a bomb program, as was the case in North Korea.

"Having nuclear plants shows to other nations that Japan can make nuclear arms," ex-Defense Minister Shigeru Ishiba told AP.

Ishiba stressed that Japan isn't about to start making nuclear weapons. But, he said, with North Korea widely thought to be developing nuclear warheads, the nation needs to assert itself and say it can also make them — although it is choosing not to.
Such views make opponents of nuclear weapons nervous.

"A group is starting to take a stand to assert the significance of nuclear plants as military technology, a view that had been kept below the surface until now," says "Fukushima Project," a book published by several experts with antinuclear leanings.

Adding to their jitters, the Diet amended the 1955 Atomic Energy Basic Law in June, adding the term "national security" to people's health and wealth as reasons for the possible uses of nuclear technology.

"The recognition that both nuclear issues must be addressed is heightening in Japan" and the link between the two is "becoming increasingly clear," said Hitoshi Yoshioka, professor of social and cultural studies at Kyushu University.
Yoshioka is part of a government panel investigating the nuclear disaster. The meltdowns at the Fukushima No. 1 power plant have called into question the future of atomic energy in Japan, in turn raising concern among some nuclear weapons advocates.

Most proponents don't claim — at least not publicly — that Japan should possess nuclear weapons. Rather, they argue that their mere ability to serve as a deterrent increases the country's diplomatic clout.

The issue dates to the 1960s. Historical documents released in the past two years show that the idea of developing nuclear arms was long talked about behind the scenes, despite repeated denials by successive

governments. The papers were obtained by NHK in 2010 and more recently by AP under a public records request.

In a previously classified 1966 document, the government outlines how the threat of China going nuclear made it necessary it too to consider the option, though it concluded that the U.S. nuclear umbrella rendered such a move unnecessary at the time.

In minutes of meetings from 1964, 1966 and 1967, government officials weigh the pros and cons of signing the Nuclear Nonproliferation Treaty, which means forgoing the nuclear option. Japan acceded to the accord in 1970.

The government denials continued even after former Liberal Democratic Party Prime Minister Yasuhiro Nakasone, who was in office from 1982 to 1987, wrote in his 2004 memoirs that, as director of the now-defunct Defense Agency, he had ordered a secret study of the nation's nuclear arms capability in 1970. The study concluded it would take five years to develop nuclear armaments, but Nakasone decided that they weren't needed, again because of U.S. protection.

After breaking the LDP's half-century grip on power, the Democratic Party of Japan in 2010 reversed the past denials and acknowledged that discussions on the issue had indeed taken place.

Given the secretive nature of the matter to date, former diplomat Tetsuya Endo and others are suspicious about the addition of "national security" to the atomic energy law in June. Backers of the amendment say it refers to protecting nuclear plants from terrorists. If that is the case, opponents ask why the phrasing inserted wasn't "nuclear security" instead of "national security."

Japan has 45 tons of separated plutonium, enough to produce several bombs of the magnitude dropped on Nagasaki — equivalent to roughly 21 kilotons of TNT. Its overall plutonium stockpile of more than 150 tons is one of the world's largest, although considerably smaller than those of the U.S., Russia and Britain.

Tokyo Gov. Shintaro Ishihara, an outspoken conservative, has repeatedly stated that Japan should flaunt the nuclear arsenal option to boost its diplomatic leverage. Ex-LDP Prime Minister Shinzo Abe, whose roughly one-year stint started in September 2006, voiced similar sentiments, but in a more subdued tone.

The Yomiuri Shimbun made a rare mention of the link between nuclear energy and weapons in an editorial defending atomic energy last year, saying Japan's plutonium stockpile "works diplomatically as a nuclear deterrent."

That kind of talk worries Tatsujiro Suzuki, vice chairman at the Japan Atomic Energy Commission. Himself an opponent of proliferation, Suzuki said that developing a nuclear arsenal is a decades-old ambition for some politicians and bureaucrats.

"If people keep saying (that atomic energy) is for having a nuclear weapons capability, that is not good," Suzuki said. "It's not wise. Technically it may be true, but it sends a very bad message to the international community."

The need for cutting-edge energy-saving technology

August 3, 2012

Editorial: Gov't must power up energy efficiency strategies

http://mainichi.jp/english/english/perspectives/news/20120803p2a00m0na001000c.html

As the government works out a new energy strategy following the outbreak of the crisis at the tsunami-hit Fukushima No. 1 Nuclear Power Plant, it is under pressure to promote both power conservation and economic growth.

The three scenarios for Japan's new energy policy place the ratio of atomic power to Japan's total electric power generation as of 2030 at zero percent, 15 percent and 20-25 percent, respectively. They are based on the assumption that power consumption across the country will decrease 10 percent from 2010 levels by that time.

All members of the public as well as businesses are required to save energy to both reduce Japan's reliance on atomic power and cut back on greenhouse gas emissions. The impact of such energy-saving efforts on Japan's economy can be minimized through technological innovation that increases energy efficiency. If innovative energy-saving technology is developed, it will contribute to economic growth. Government assistance in such efforts is indispensable.

In all three scenarios, the ratio of atomic power to Japan's total electric power generation lies below the 26 percent mark seen in 2010 -- prior to the outbreak of the Fukushima nuclear crisis.

If power generation at thermal power plants is increased to make up for a power shortage as a result of cutting down on the country's dependence on atomic power, then carbon dioxide emissions will rise. The promotion of renewable energy, such as solar power and wind power, and energy-saving measures will therefore play an important part in helping prevent global warming.

Electric power is indispensable in our daily lives. The appropriate use of electric power, such as that for air conditions to protect the health of people during a heat wave, should not be reduced. The important question is how to effectively slash energy consumption without adversely affecting people's lives.

Japan has become the world's most advanced country in terms of saving energy as a result of efforts that both the government and the private sector have made since the 1973 oil crisis. By 2009 Japan's gross domestic product had increased by 2.3 times from the level seen in 1973, but its energy consumption was just 1.3 times higher. Japan has managed to achieve both energy conservation and economic growth.

Industries, in particular, succeeded in reducing energy consumption by 15 percent over that period as a result of technological innovation and the streamlining of their operations. Business leaders have pointed out that industries cannot reduce their energy consumption any further, with one comparing additional energy conservation requests to "wringing out a dry towel." The Japan Business Federation (Nippon Keidanren) and other business organizations have criticized the government's requirement that businesses further cut their use of energy, as it could hinder economic growth.

However, development of cutting-edge energy-saving technology would not only create new domestic demand but also create new opportunities for Japanese businesses on the international market. Industries are urged to proactively develop such technology.

For example, batteries that store a massive amount of electric power at night -- when the demand for power declines -- then release the power during the daytime are effective in increasing the efficiency of electric power use. Developing compact and high-capacity batteries is an urgent task. The technology of such batteries could be applied to electric vehicles, contributing to Japanese automakers' international competitiveness.

The spread of smart grids, which utilize information technology to adjust electric power supply to the appropriate level, is also believed to be a key to increasing the efficiency of electric power use.

The government should support these efforts to boost energy efficiency through regulatory reform and financial assistance with the ultimate goal of substantially reducing energy consumption while spurring economic growth.

Gov't in favour of 15% option

August 4, 2012
the same info in the Mainichi Daily News of August 3 (based on the Kyodo news) but with a different title: "Gov't appears closer to supporting 15% nuclear dependence rate"

15% nuclear option backed

http://www.japantimes.co.jp/text/nn20120804x2.html

Kyodo

As the government sounds out the public about Japan's nuclear options, the intermediate option of reducing the nation's dependence on atomic energy to 15 percent by 2030 is winning favor.

If the government's policy to "basically" limit the service life of reactors to 40 years is strictly adhered to, as stated recently by Shunichi Tanaka, the candidate to head the new nuclear regulatory authority, their number will fall to 20 from 50 by 2030.
If the remaining reactors operate at 80 percent of capacity and no new ones are built, nuclear power would account for 15 percent of Japan's total energy supply. In fiscal 2010, the figure stood at 26 percent.

"We should strictly check nuclear reactors and not allow those beyond 40 years old to operate," Tanaka, a former vice chairman of the Japan Atomic Energy Commission, told members of the Lower House Steering Committee on Wednesday.

Given that the 15 percent option can be achieved simply by decommissioning reactors once they reach the 40-year limit, Environment Minister Goshi Hosono also has indicated his support, calling it a base scenario.

The government had planned to compile a new energy policy this month after holding public meetings nationwide to gather opinions on three scenarios for nuclear energy use by 2030: zero, 15 percent, and 20 to 25 percent. **But in the face of growing criticism that it is drafting the policy too hastily, it may delay an announcement beyond August.**
The 20 to 25 percent scenario — favored by the power industry — requires new reactors and would do little to change Japan's reliance on atomic energy from levels seen before last year's meltdowns at the

Fukushima No. 1 plant. It may also face strong public opposition as protests against nuclear power snowball.

Meanwhile, abolishing atomic energy altogether is expected to raise household electricity bills following the launch in July of a system requiring utilities to purchase all power generated from solar and other renewable energy sources at preset premiums, with permission to pass the costs onto consumers.

Households that usually pay ¥10,000 per month could see bills more than double, given that they could be paying as much as ¥11,000 more by 2030 if nuclear power is scrapped completely, the government said. The hike compares with an estimated increase of up to ¥8,000 for both the 15 percent and 20 to 25 percent options.

Kenji Yamaji, a professor emeritus at the University of Tokyo, said he supports the 20 to 25 percent scenario because nuclear power can contribute to Japan's energy security and economy, as well as efforts to combat global warming, in a well-balanced manner.

"Once the fuel is loaded, nuclear power plants can operate more than a year without a refill," Yamaji said. "By maintaining nuclear power generation, (Japan) can also gain an upper hand during price negotiations when buying fossil fuel from overseas."

Hiroshi Takahashi, a research fellow of the Fujitsu Research Institute, disagrees.

"Although nuclear power had a certain role to play during the transition period from fossil fuels to renewable energy, it has already fulfilled that function," he said.

Noting that the Fukushima crisis underscored Japan's inability to deal with a nuclear catastrophe on its own, Takahashi said the nation should make better use of renewable power because it has abundant geothermal energy sources and considerable potential to harness wind power at sea.
He said Japan should boost its energy self-sufficiency rate by increasing its use of clean energy.

Gov't will take into account people's opinion but how ?

Sunday, Aug. 5, 2012

Nearly 70% of Japanese who wanted to attend hearings on nuclear power hoped to discuss its complete abolition

Kyodo
http://www.japantimes.co.jp/text/nn20120805a6.html

FUKUOKA — Around 70 percent of citizens who wished to air their views on the future of nuclear power at public hearings held by the government wanted to discuss its complete elimination, officials said Saturday.

A series of 11 hearings, each in a different city, have been staged all around the country since July 14 to give the public an opportunity to express their opinions about the government's three options regarding the role nuclear power should play in Japan's new energy policy. The final forums held Saturday in Fukuoka and Takamatsu, Kagawa Prefecture.

Under the three options, the percentage of electricity to be generated through nuclear power by 2030 was set at zero, 15 percent, and 20 to 25 percent.

The government said Saturday that of the 1,542 citizens who wanted to take part in the hearings after being contacted by its officials, some 1,447 hoped to voice their thoughts about atomic energy.

Of the 1,447, some 983 people, or 68 percent, wanted to speak either for or against the complete abolition of nuclear power by 2030, according to the organizer of the hearings, the industry ministry's Agency for Natural Resources and Energy.

The majority wished to speak in support of scrapping all atomic energy generation, while 11 percent wanted to talk about the 15 percent option and 16 percent of them about the 20 to 25 percent option, the agency said. Five percent wanted to challenge all three options.

The 1,447 did not include anyone from the city of Fukushima, even though it was one of the 11 venues selected for the hearings. The prefecture hosts the crippled Fukushima No. 1 power plant, which suffered three catastrophic reactor meltdowns in March 2011.

Meanwhile, the government on Saturday began a two-day public survey in Tokyo on the country's new nuclear energy policy.

The government said it will take into account the results of both the public hearings and the Tokyo survey while formulating its energy and environmental policies, **although it has yet to explain exactly how it intends to incorporate the findings.**

Deliberative polling on Japan's energy future

August 6, 2012

Participants, experts discuss energy priorities, mix

New hearing held to gauge nuke sentiment

http://www.japantimes.co.jp/text/nn20120806a1.html

By AYAKO MIE
Staff writer

The government continued to solicit public opinion on nuclear energy policy over the weekend by holding a discussion-oriented polling session in Tokyo involving about 300 citizens from across the country.

This is the first time the government has used "deliberative polling," a type of poll developed by Stanford University to bring together a cross section of individuals to discuss an issue by themselves and with experts in order to gauge the opinion of a well-informed electorate, to develop national policy.

However, it's still unclear to what extent the results will be incorporated.

The 286 participants in the two-day forum, conducted by Keio University, were selected from among 6,849 people randomly polled by phone across the country. Unlike the 11-city tour of government-sponsored hearings that wrapped up on Saturday, utility employees were not deliberately excluded from speaking and their participation could not be confirmed.

The participants in the deliberative poll were surveyed three times, including before and after the weekend discussions.
In an initial phone survey in July, they were asked to prioritize the most important aspects of their power supply, such as stability, safety, cost or impact on the environment.

They were also asked which of the government's three scenarios they prefer for nuclear energy dependence by 2030: zero percent, 15 percent, or 20 to 25 percent.

The purpose of the sessions was to deepen the understanding of the energy debate through discussions. The participants were able to question nuclear experts on the issues and were polled before and after the two days of talks and question-and-answer sessions.

Keio and Stanford professors will study the results to determine the changes in their opinions. The results will be released later this month.

In two 90-minute sessions, 20 groups discussed the key elements of Japan's energy resources and their preference on the energy mix. Safety and securing a stable supply were the dominant issues, interspersed with critical comments aimed at the government and Tokyo Electric Power Co., the operator of the crippled Fukushima No. 1 nuclear power.
"We should think what's most important in our lives," said one female participant, who says she supports the zero percent scenario. "Lax safety measures are threatening our lives, and I want to have clear evidence that nuclear power is safe."

Some questioned the appropriateness of even raising the issues of safety and supply in same discussion.
"I understand our lives are important, but the cost will go up if we give up on nuclear energy, and it will drive more businesses to shift overseas," said a male participant. "These should not be debated on the same level."
Others complained of the difficulty of making an informed decision on the proper energy mix without full and accurate information from the government regarding its reserves of natural resources.

"When we were children, we were told that we will exhaust petroleum in 40 years, but we still have it," said a male participant. "I would like to have the real numbers."

After the discussion session, each group was given an opportunity to ask one question to experts on nuclear power and energy policy. But some of the participants criticized the responses as vague or contradictory.

"After the Fukushima accident, the government is trying to brace for unpredictable accidents," said Akira Yamaguchi, a nuclear engineering professor at Osaka University, when asked if Japan's nuclear power is really safe. "The government's standard will be in line with global standards."

Other experts disagreed. "The disaster prevention measures have not been implemented," said professor Hitoshi Yoshioka of Kyushu University, who served on a government panel investigating the Fukushima accident.

But experts admitted they were unsure how Japan could achieve a 35 percent dependency rate on renewable energy in the event that nuclear power generation is abolished altogether. "Every energy source has pros and cons," said Kazuhiko Ogimoto, a professor in energy system integration at the University of Tokyo. "We have to think in the context of the time frame as well, and it takes time to achieve 35 percent dependence on renewables."

The deliberative poll was part of the government's effort to encourage a national debate on Japan's energy future.
The previous 11 government-sponsored public hearings, which wrapped up on Saturday, were harshly criticized for how they were carried out, such as with the participation of employees of the energy industry.

The government is seeking public opinions until Aug. 12 via email, fax and regular mail.

After the two-day forum, some participants reported that their stance had not changed significantly but that it was a good learning opportunity.

"I am still against nuclear power, but I realized that it's really hard to achieve zero nuclear dependency," said Shizuyo Araki, 74, who attended from Sapporo. "But I can't believe everything the government says, either."

Many were skeptical of the government's effort. Even though the government is slated to compile the policy by the end of August, it has not declared how it will use the thousands of comments collected or if it can meet the deadline. "I do not know how much of the public's opinion will be reflected," said Yasukimi Sato, 45, from Okayama Prefecture. "My bet is they are going to use us as an excuse that they've heard us out when they decided on a scenario other than zero percent."

Noda ready to consider abolition of nukes?

PM Noda vows to examine possibility of zero nuclear dependency

http://mainichi.jp/english/english/newsselect/news/20120806p2g00m0dm068000c.html

HIROSHIMA (Kyodo) -- Prime Minister Yoshihiko Noda said Monday he will instruct his Cabinet members to consider what kind of challenges the government could face if it decided to reduce Japan's dependency on nuclear power to zero.
It is the first time that Noda has referred to the possibility of eventually abolishing all nuclear power plants in the country in the future.

He appears to be paying attention to public opinion, with growing numbers taking part in the antinuclear demonstrations outside his office every Friday, which have drawn tens of thousands of people in recent weeks.

"We believe we should aim to reduce dependency on nuclear power over the medium to long term," Noda told a press conference after attending the annual peace ceremonies in Hiroshima commemorating the U.S. atomic bombings of the city in 1945.

Opposition to nuclear energy is increasing especially after Noda's government decided in June to reactivate two nuclear reactors at the Oi power plant in Fukui Prefecture for the first time since Japan suffered its worst nuclear crisis at the Fukushima Daiichi complex last year.

The government said that about 70 percent of the Japanese citizens who expressed a desire to speak at government hearings on the future of nuclear power supported the so-called zero option. A series of hearings in 11 cities was held from July 14 through Saturday.

Noda has reiterated that the resumption of power plants is necessary for the time being to avoid power shortages. The Nos. 3 and 4 nuclear reactors at the Oi plant on the Sea of Japan coast have already been restarted.

The premier, meanwhile, suggested at the press conference that more time could be needed before the government maps out its new energy and environment strategy, which it had initially planned to finalize by the end of August.
"Nationwide discussions need to be deepened," Noda said.

Noda to examine issues to end nuclear dependence

http://www3.nhk.or.jp/daily/english/20120806_28.html

Japan's Prime Minister Yoshihiko Noda says he'll ask his ministers to clarify what issues lay ahead if the country should end its dependence on nuclear energy.

Noda told reporters in Hiroshima on Monday that he wants to see a thorough discussion on the matter, rather than rushing to reach a conclusion.

He indicated that he won't insist on sticking to the government's initial target of the end of this month in deciding the country's new energy policy.

The government has been holding public hearings nationwide as it reviews its energy policy in the wake of last year's accident at the Fukushima Daiichi nuclear plant. The participants discussed 3 options for the ratio of nuclear power reliance in 2030 -- zero percent, around 15 percent, or between 20 to 25 percent.

Many of them voiced support for the zero-percent option.

Nuclear energy accounted for nearly 30 percent of Japan's total power generation before the accident.

Never again

Noda stresses on nuclear-free world in Hiroshima

http://www3.nhk.or.jp/daily/english/20120806_18.html

Prime Minister Yoshihiko Noda says Japan needs to teach younger generations about the horrors of nuclear weapons. He also says it is time for Japan to end its dependence on nuclear energy.

Noda was speaking at a ceremony in Hiroshima marking the 67th anniversary of the US atomic bombing of the city.

In the speech, Noda said people should not forget the tragedy of the nuclear attacks and never let it happen again. He renewed his pledge to observe Japan's Constitution with an aim to abolish nuclear weapons and establish global peace.

He also pledged to stick to the country's 3 principles of not allowing the production, possession and entry of nuclear arms into Japan.

He said as the only country attacked by nuclear weapons, Japan has a responsibility to educate the world

about the dangers of such weapons.

He said Japan can fulfill that responsibility by passing the memories of the nuclear attacks on to younger generations and to people in other countries. He said the government will support the efforts in all possible ways.

He also said the government is determined to clean up districts contaminated in last year's nuclear accident at the Fukushima Daiichi plant. He said the government will do all it can to rebuild infrastructure so that residents can return home as soon as possible.

He said the government will reduce its dependency on nuclear energy and promote renewable energy over the long term so that people can feel more comfortable about the country's energy mix.

Phasing out of nuclear power not so bad, after all...

August 8, 2012

Nuclear-free not bad for economy: Edano

AFP-Jiji, Jiji
http://www.japantimes.co.jp/text/nn20120808a4.html

Industry minister Yukio Edano waded into the national debate on energy policy Tuesday, saying the nation could phase out nuclear power by 2030 without hurting the world's third-largest economy.

"We can do it," Edano told reporters in Tokyo when asked what the impact of Japan ditching its stable of nuclear reactors would be. Most have been shut down.

"I don't think the zero scenario is negative for Japan's economy. On the contrary, it can create growth as efforts to develop renewable energy and improve energy-efficiency could boost domestic demand," he added.

Tokyo ushered in new rules last month that require utilities to buy all electricity produced from renewable sources, including solar and wind power, at above-market rates for two decades, to stoke "green" power investment.

Edano meanwhile also said he opposes Prime Minister Yoshihiko Noda's plan to meet with an antinuclear citizen's group.

Such a meeting between the prime minister and a specific organization may send the wrong signal in terms fairness and transparency, Edano said.

The nation has a system in place that all citizens can participate in, Edano said, citing recent hearings the government held in 11 cities to glean public opinions about energy policy.

The state has refrained from listening directly to any specific group, including business lobbies, about energy policy, Edano said.

According to sources, Noda plans to hold talks as early as Wednesday with the Metropolitan Coalition Against Nukes, a citizen's group that holds antinuclear rallies every Friday outside the prime minister's office.

Edano's comments come as the government pursues a new energy strategy in light of the Fukushima atomic crisis, which led, directly and indirectly, to the shutdown of all 50 of the nation's nuclear reactors. Two were restarted last month on Noda's recommendation.

Noda has pledged to deliver a new energy policy by the end of 2012, with options ranging from cutting nuclear altogether by 2030 to nuclear power accounting for about one-third of Japan's electricity — the level before the Fukushima disaster struck.

Under the zero-nuclear scenario, government-chosen experts have forecasted Japan's economic growth could fall between 1.2 and 7.6 percent by 2030.

2030 no target year under the new energy policy

August 10, 2012

Edano says Japan will not stick with 2030 energy target year

http://mainichi.jp/english/english/newsselect/news/20120810p2a00m0na014000c.html

Economy, Trade and Industry Minister Yukio Edano says a new energy and environment policy under consideration will not set 2030 as a clear-cut target year for reduced nuclear energy dependency despite overwhelming public support for the so-called zero option.

Edano, appearing on a program on the Internet, said Aug. 9 that the government of Prime Minister Yoshihiko Noda has not decided to set 2030 as a target year under the new energy policy.

The government has presented three options regarding nuclear power in its new energy policy --- zero percent, 15 percent and 20-25 percent. Although a majority of people are in favor of the zero option, they differ over when Japan should end its reliance on nuclear energy.

After the Internet program, Edano told reporters the government has debated the issue based on the current energy policy which calls for boosting the nation's dependence on nuclear energy to 53 percent in 2030 from about 26 percent in 2010. He said the government will not stick with the 2030 target.

The current policy was formulated well before the Great East Japan Earthquake and tsunami triggered the crisis at the Fukushima No. 1 Nuclear Power Plant in March last year.

The industry minister expressed hope that the Noda government will decide on the proposed new energy policy before the House of Representatives will be dissolved for a general election,referring to a three-way agreement among the ruling Democratic Party of Japan, the largest opposition Liberal Democratic Party and New Komeito party to seek a public mandate.

Public response extremely strong

August 12, 2012

Japanese government receives over 50,000 comments from public on future of nuclear power

Kyodo
http://www.japantimes.co.jp/text/nn20120812a4.html

The government has received more than 50,000 comments from the public on the future of nuclear power, officials said Saturday, as the Fukushima meltdowns generated high interest in the nation's new energy policy.

The government on July 2 started to solicit the public's opinions on its three proposed atomic energy scenarios by 2030, and about 52,300 comments had been submitted as of Friday. The campaign will end next Sunday.

The public's response has been exceptionally strong, given that a total of more than 1,000 comments is usually considered high when the government canvasses opinion on its policies.

National policy minister Motohisa Furukawa on Wednesday will announce the final number of comments, which the government intends to publicly disclose.

The government's three options for nuclear power as a proportion of Japan's total energy generation by 2030 are zero, 15 percent, or 20 to 25 percent. Atomic energy supplied 26 percent of the nation's electricity in fiscal 2010.

The government also held public hearings in 11 cities on the three nuclear scenarios from mid-July to early August. About 70 percent of those who expressed a desire to voice their opinions at the events were in favor of the complete elimination of nuclear power, the government said earlier.

How much nuclear energy?

August 14, 2012
NHK poll: Opinions split on nuclear power
http://www3.nhk.or.jp/daily/english/20120814_11.html

An NHK poll shows that public opinion is mixed when it comes to deciding how much Japan should depend on nuclear power as a source of energy.

NHK conducted the poll over the weekend and received responses from 1,046 people.

The respondents were asked to choose from 3 options the government has presented for the nation's

dependence on nuclear energy as of 2030 -- zero percent, around 15 percent, or between 20 and 25 percent.

The results show that 36 percent favor the zero option -- up 2 points from last month, while 39 percent chose the middle option -- a drop of one point. 15 percent of respondents chose the highest option, up 3 points from last month.

Nuclear power accounted for roughly 26 percent of Japan's energy supplies before last year's nuclear disaster. The government is now reviewing its energy policy and seeking public input on the nation's nuclear dependency.

The NHK poll also asked respondents whether they trust the government's attempt to confirm the safety of the US military's Osprey transport aircraft.

The tilt-rotor aircraft is due to be deployed in Okinawa soon, but its record of accidents has touched off safety concerns across Japan.

The poll showed that 69 percent lack confidence in the Japanese government's attempt to have experts independently examine the Osprey's safety, while 25 percent said they trust the government.

Funds required for direct disposal of radioactive waste

August 14, 2012
METI wants research fund for burying spent nuclear fuel in budget draft

http://mainichi.jp/english/english/newsselect/news/20120814p2a00m0na009000c.html

The Ministry of Economy, Trade and Industry (METI) will seek to incorporate research funds for burying spent nuclear fuel without processing it into the fiscal 2013 budget draft, ministry sources said.

METI has decided to prepare radioactive waste for burying as the possibility of such direct disposal is growing as part of a major change in Japan's energy policy. If realized, it will be the first time for the ministry to allocate funds relating to the direct dumping of radioactive waste from the state budget.

The government has promoted a nuclear fuel cycle project in which spent nuclear fuel will be reprocessed, plutonium and other materials will be extracted and the remaining fuel will be then used to power nuclear reactors.

However, the government has been forced to review the project as Japan's policy of promoting nuclear power has come under fire following the outbreak of the Fukushima nuclear crisis in 2011.

As part of a review of Japan's energy policy, the government has offered three scenarios on the ratio of atomic power to Japan's total electric power generation as of 2030 -- zero percent, 15 percent and 20-25 percent. Under the zero percent scenario, all the existing spent nuclear fuel would be dumped because reprocessed fuel cannot be used. Under the 15 percent and 20-25 percent scenarios, the government would consider both reprocessing and burying of such radioactive waste.

Therefore, under all of these scenarios, the government would be required to consider **burying spent nuclear fuel without reprocessing such waste.**

In July, the Cabinet Office's Japan Atomic Energy Commission urged ministries and agencies concerned to incorporate funds in the fiscal 2013 state budget draft to develop technology for dumping radioactive waste.

In response, METI has deemed it necessary to study the examples of dumping radioactive waste in Sweden, Finland and other countries as soon as the government adopts its new energy policy.

DPJ pledges to phase-out nuclear

August 14, 2012
DPJ vow for next poll: a nuclear phaseout

Role for Kan urged to draft pre-election energy goals

Kyodo
http://www.japantimes.co.jp/text/nn20120814a1.html

Prime Minister Yoshihiko Noda's party is arranging to make a nuclear phaseout a key policy pledge in the next general election, sources in the Democratic Party of Japan said.

The DPJ's plan comes amid widespread opposition to the continued use of nuclear energy. Noda has drawn strong public protests over his recent decision to approve the restart of two reactors at the Oi power plant in Fukui Prefecture, the first reactivations since all of the country's reactors went offline amid the Fukushima nuclear disaster that started last year.

Many DPJ lawmakers fear the ruling party, via the restarts, signalled to the public that it is keen on using nuclear power when this is not the case, a senior party member said Sunday.

DPJ members said earlier this month that the DPJ will set up a panel to discuss the potential pledge for the House of Representatives election, which Noda said last week will take place "soon."

The panel will probably be headed by DPJ policy chief Seiji Maehara. Some DPJ lawmakers say former Prime Minister Naoto Kan, who has taken an increasingly antinuclear stance since the crisis started at the Fukushima No. 1 plant during his watch, should become an adviser to the new body.

To government is weighing three options for a new energy mix by 2030, including having nuclear power provide zero percent of Japan's total energy, or 15 percent, or between 20 and 25 percent. The state has also held hearings to gauge public opinion, which has strongly come out in favor of the first option.

60% against nuke power

jiji

Over 60 percent of the Japanese public thinks the country should give up nuclear power, a recent Jiji Press survey said.

About half of the respondents opposed restarting the dozens of idled nuclear reactors.

The survey covered 1,211 men and women 20 or older across the country between July 6 and 16.

In face-to-face interviews, respondents rated their attitudes toward various issues related to nuclear energy on a scale of zero to 10, with 5 meaning "neither agree or disagree."

Of the respondents, 62.6 percent opposed the use of nuclear energy, giving scores between zero and 4, with 17.8 percent saying they think Japan should idle all nuclear plants immediately.

By contrast, 9.7 percent assigned scores between 6 and 10 suggesting that Japan should continue using nuclear.

The results of the survey, the ninth by the news agency on national nuclear power use since May 2011, showed parallels with the previous surveys.

The poll was the fourth of its kind since March on sentiment toward restarting reactors halted chiefly for routine checks.
In the survey, 50.5 percent opposed resumption, with scores below 5. The figure dropped 8 percentage points from the March survey. About a fifth, or 21.4 percent, gave zero support for restarts.

Japan and nuclear weapons

August 15, 2012

Japan playing nuclear roulette

http://www.japantimes.co.jp/text/eo20120815a2.html

By KEVIN RAFFERTY
Special to The Japan Times

HONG KONG — J. Robert Oppenheimer, one of the prominent fathers of the atomic bomb, had read the Bhagavad Gita, and when he saw the first test of the weapon, he quoted the terrifying line from the Hindu scripture: "Now I am become Death, destroyer of worlds." It is hard to imagine the horror of the dropping of the atomic bomb on Hiroshima 67 years ago. It seared the sky and instantaneously wiped much of the city and tens of thousands of people, and left a trail of misery that continues today, but which should not be forgotten.

Sadly, leading Japanese politicians today seem to have forgotten the lessons of the war and its savage end. Powerful politicians are hard at work trying to scrap Article 9 of the Constitution — which renounces war — and some of them want to go all-out to build a Japanese nuclear weapon.

What are they thinking about? It beggars belief that a country that has suffered so much, first from being the only victim of nuclear war, and then from bungling over the use of nuclear energy, should be contemplating building nuclear weapons.

It is almost a game of Chinese roulette. Japan does not know how to cope with the rise and rise of an increasingly assertive and muscular China. It is also obviously concerned about nuclear-armed North Korea that is wont to making bellicose threats in spite of its small size and its impoverished economy. But Chinese roulette is more suicidal than the Russian version: If Japan built nuclear weapons for first-strike

capability against an overbearing China, it would be committing national suicide; second-strike, or retaliatory, capacity might be too late if China had done its job properly. Using nuclear weapons against North Korea, whatever the provocation, seems unthinkable.

That is without considering the suicidal economic costs. France and the United Kingdom have discovered that keeping up with the latest nuclear weapons technology is prohibitively expensive. For already heavily indebted Japan, it could be the final straw to economic ruin.

Any decision to build nuclear weapons would be a red rag to China, far more serious than the Tokyo government or Japan buying the Senkaku Islands. Even so, hawkish Japanese politicians claim that flaunting the bomb option will give Japan greater diplomatic clout.

The nuclear option is very much part of shadow politics, going on outside the public arena, but linked to the obvious reluctance of the government and bureaucrats to give up nuclear energy. Japan has years of expertise in production of nuclear energy, but, even so, it is questionable, especially in the light of the lessons of the Fukushima disaster, whether any part of a country sitting on so many earthquake fault lines is safe to host a nuclear plant.

However, the ability to produce nuclear power gives obvious material and technological advances toward weapons production. Former Defense Minister Shigeru Ishiba, from the opposition Liberal Democratic Party, said, "Having nuclear plants shows to other nations that Japan can make nuclear weapons."

"Fukushima Project," a book by anti-nuclear experts, claims that, "A group is starting to take a stand to assert the significance of nuclear plants as military technology, a view that had been submerged below the surface until now." In June, without fanfare, Japan's Diet changed the 1955 Atomic Energy Basic Law to add "national security" as a reason for using nuclear technology along with people's health and wealth.

The debate on Article 9 of Japan's Constitution has also been going on largely behind closed doors. The LDP sees itself as poised to sweep Prime Minister Yoshihiko Noda's fractious government from power. It is demanding early elections as the price for supporting Noda's controversial doubling of the consumption tax.

The party has been busy designing a nationalist campaign that, according to The Economist, "looks likely to border on emperor-worship." In April the LDP published proposals for a constitutional amendment, which would eviscerate Article 9, the key to Japan's peace Constitution. Article 9 famously renounces war and the threat or use of force as a means of settling international disputes.

Its second paragraph pledges that Japan will not maintain land, sea or air forces or other war potential. Some supporters of the peace clauses agree that the time has come to revise Article 9, especially given that Japan's Self-Defense Forces are armed forces in all but name and defense spending of $61 billion makes Japan the world's fifth or sixth largest in the global league, vying with France. The Self-Defense Forces have also contributed, controversially, to international peacekeeping efforts.

So there is a plausible case that the new realities be recognized and careful limitations and strict rules and conditions be set. Professor Craig Martin set out the arguments for updating Article 9 without destroying it in The Japan Times recently. **The essential core of the first paragraph of Article 9 should be preserved as Japan's contribution to humanity.**

The danger is that Japan's rightwing will set the terms of the debate and provide a *fait accompli* of a changed constitution and a new more militaristic agenda. You can see how the approach will be made. China is growing daily more assertive, undoubtedly true. Japan is highly vulnerable, also true. But a bright guy facing a bully needs to use brains, not to slug it out and get mashed up. Japan should be making friends, especially in the Asian region. It should also try to disarm the bully by friendship and point out — also undoubtedly true — that no one wins in a fight, least of all in the 21st century when the miseries of war would threaten the whole world's existence.

The bigger danger, ultimately for Japan itself, is that this small island country, highly dependent on the outside world for essential imports and for exports that provide jobs and economic growth, seems unable to see itself as the rest of the world does — largely irrelevant — and lives in its own bubble world. It should be a matter of concern, for example, that South Koreans hate Japan more than they hate the North Korean regime, that there is visceral hatred in China toward Japan.

Small island nations often have an undue pride in their own insular superiority. The U.K. is similar. But the U.K. recognizes that there is an alien world out there and you have to be active in knowing what goes on and sometimes to make concessions and occasionally sacrifice cherished interests for the greater good. The U.K.'s failure to engage Europe wisely, pretending to be aloof and not part of the eurozone problems, is costing its economy dearly.

But Japan, apart from exporters at the sharp economic end, who are increasingly taking their factories abroad, seems to wish the world outside does not exist. You can see this tragically any day on the state broadcaster NHK, which seems totally ignorant of the rest of the world.

As a small example, the main morning news of NHK on Aug. 9 devoted its first 19 minutes to the Olympics, with seven minutes for Japan's judo golds, a minute about Usain Bolt, before celebrating Japan's javelin thrower who failed to qualify for the finals, its decathlon competitor in 26th place and the vital women's field hockey match between Japan and South Africa to decide who comes ninth. Then there was a preview of the Japan-U.S. women's soccer final. There was no mention of the achievements of China or the United States, or of the world outside the Olympics.

The BBC on the same day started with the medal battle between China and the U.S., went to Jamaica to ask about the culture that produced Bolt, celebrated Japan's judo golds and found time to report on mayhem in Syria.

At 20 minutes after the hour, NHK went on to the intense political fight over the consumption tax and, very briefly, after 30 minutes, to the people of Nagasaki waiting to commemorate the dropping of the second atomic bomb on Aug. 9. Lest Japan forget: War in the 21st century would be tantamount to national suicide.

Kevin Rafferty is author of "Inside Japan's Powerhouses", a study of Japan Inc and internationalization.

Enough power without nukes

August 21, 2012-08-21

Power use falls; reactors unneeded

July saw 6.3% drop in demand despite heat amid efforts to save

http://www.japantimes.co.jp/text/nn20120822a3.html

By JUN HONGO
Staff writer

Sales by 10 major power utilities in July dropped by 6.3 percent due to a decline in demand, the Federation of Electric Power Companies of Japan has revealed.

But while efforts to cut down electricity use by households and the business sector are paying off, some say the numbers prove that last month's reactivation of two reactors at Kansai Electric Power Co.'s Oi nuclear plant in Fukui Prefecture may have been unnecessary.

"Electricity utilities may be opting to restart their nuclear reactors since they are cheaper than thermal power plants," Hideyuki Koyama, executive director of Mihama no Kai, which opposes Kepco's nuclear power use, told The Japan Times.

"The data are solid proof that Japan can supply enough electricity even without any nuclear power generation," he stressed.

The federation said Monday that overall electricity use in July dropped 6.3 percent compared with the same month last year. Nine out of 10 utilities reported a decline in sales, with the exception being Tohoku Electric Power Co., where recovery from the March 2011 disasters is making progress.

Rolling blackouts are to be implemented if necessary this summer in the Kansai region and Kyushu, but so far none has been needed.

The decline in electricity demand also came even though higher than average temperatures were recorded nationwide last month, according to the Meteorological Agency.

In announcing the restart of the two Oi reactors, Prime Minister Yoshihiko Noda in June warned that it was aimed at supporting the economy and the public's livelihood. His appeal was validated at least in the Kansai region, where electricity demand would have surpassed supply levels during peak hours had the reactors remained offline.

But pundits say that instead of relying on nuclear power, Kepco could have easily covered any shortage by requesting neighboring electricity utilities, which had an oversupply, to provide backup.

"Reactivation of the reactors was decided considering the cost and profits of the electricity utilities," Mihama no Kai's Koyama said. "But under the circumstances, nuclear plants should be shut down for the safety of the public."

Zero nukes by early 30's?

August 21, 2012
Gov't panel considers completely eliminating nuclear power plants by early '30s

http://mainichi.jp/english/english/newsselect/news/20120821p2a00m0na017000c.html

The government's Energy and Environment Council is considering setting a goal of shutting down all nuclear plants by the early 2030s, government sources said.

The move is in response to growing public calls for the total elimination of atomic power, and is also aimed at spurring technological innovation in renewable energy such as sea-based wind-power generation and solar power generation.
However, there are many challenges to reducing Japan's dependence on atomic power to zero, and the business world would likely voice stiff opposition to the policy.

The government has worked out three scenarios on the ratio of atomic power to Japan's total electric power generation in 2030 -- zero percent, 15 percent and 20-25 percent -- following the outbreak of the March 2011 Fukushima nuclear crisis.

However, Economy, Trade and Industry Minister Yukio Edano said the government will not stick to the 2030 deadline. "We haven't drawn a line on the year 2030," he said in a TV program.

The government had earlier been considering an option to end the use of atomic power in 2040, which Foreign Minister Koichiro Gemba revealed during a speech in Fukushima in late July.

Government officials have since been backtracking on the proposal, saying, "a plan that surfaced before an official announcement cannot be used," according to a senior government official.

Behind the move are growing public calls for the total abolition of nuclear power. During public hearings held at 11 locations across the country, about 70 percent of those who applied to attend the gatherings said they support the option to completely eliminate atomic power by 2030. Moreover, demonstrations in front of the Prime Minister's Office in protest against the reactivation of nuclear plants have shown no sign of ending.

Calls for the elimination of nuclear power are also growing even among members of the ruling coalition including Naoto Kan, who was prime minister when the nuclear crisis broke out.

Prime Minister Yoshihiko Noda cannot ignore these calls as he is supposed to dissolve the House of Representatives "sometime soon" for a snap general election and the ruling Democratic Party of Japan (DPJ) is scheduled to hold its next presidential election in September.

Noda underscored the need to consider specific challenges to reducing Japan's reliance on atomic power to zero by 2030. "We need to consider challenges to cutting down Japan's dependence on nuclear plants to zero," he told a news conference in Hiroshima on Aug. 6.

Later in the day, the prime minister instructed four Cabinet ministers concerned, including Edano and State Minister for National Policy Motohisa Furukawa to consider challenges to reducing Japan's reliance on atomic power to zero.
Specifically, shutting down of all nuclear plants could result in a sharp rise in electricity charges and cause companies to transfer their factories overseas in the short run.

In the mid- and long-term, energy consumption must be substantially slashed and renewable energy made available at low costs. Moreover, experts must be trained to decommission and dismantle nuclear reactors.

The government is aiming to spur technological innovation by clearly showing the deadline for eliminating nuclear power.
However, there are no prospects that stable renewable energy will be made available at low prices. "Solar power is expensive while wind power is unstable," says a government official.

Under the government's scenario of eliminating nuclear power by 2030, energy consumption would be reduced by 22 percent from 2010 levels, and the ratio of renewable energy including hydraulic power to Japan's total power generation would be raised to 35 percent from 10 percent in 2010. However, this scenario is based on the assumption that the introduction of solar power would be promoted even if it requires households and businesses to shoulder a heavy financial burden with the goal of installing solar panels at 12 million households.

Stiff opposition to the complete elimination of nuclear power persists within the DPJ-led government.

The DPJ intends to coordinate views on Japan's basic energy policy at its newly established energy and environment research panel by early September.

Therefore, the government's compilation of its energy and environment strategy will be delayed from the end-of-August deadline.

Minister seeks zero dependence on nuclear power
http://www3.nhk.or.jp/daily/english/20120821_23.html

National Policy Minister Motohisa Furukawa says he's aiming for zero dependence on nuclear power for Japan when drawing up a new energy policy.

Furukawa said on Tuesday that the government must face up to reality and think hard how to reduce the country's dependence on nuclear power.

He said he will set up a panel of experts on Wednesday to analyze the volumes of public opinion the government has received on the country's future dependence on nuclear power. The government has held public hearings as it reviews its energy policy in the wake of last year's nuclear disaster.

Furukawa added that he shares the view held by many Japanese that the government should create a society without nuclear power plants.

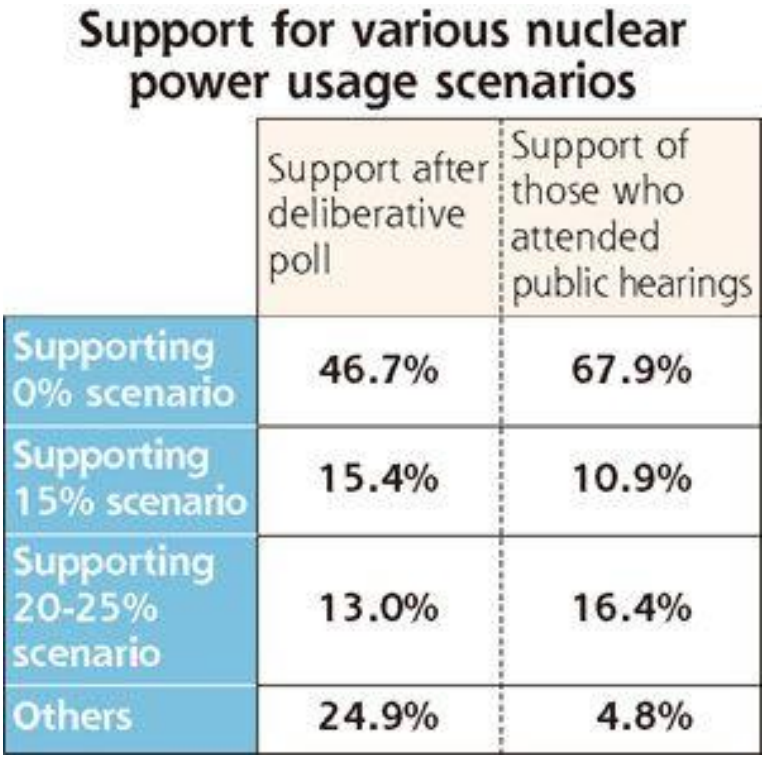
Zero nuke option favored by almost 50%

August 23, 2012

Poll: Nearly 50% favor zero nuclear power scenario

http://www.yomiuri.co.jp/dy/national/T120822004329.htm

The Yomiuri Shimbun



Support for various nuclear power usage scenarios

	Support after deliberative poll	Support of those who attended public hearings
Supporting 0% scenario	46.7%	67.9%
Supporting 15% scenario	15.4%	10.9%
Supporting 20-25% scenario	13.0%	16.4%
Others	24.9%	4.8%

The government's executive committee, which conducted a deliberative opinion poll on mid- and long-term energy policies in April and May, said Wednesday that 46.7 percent of respondents supported a scenario in which nuclear power generation would cease.

In the poll, which asked about the percentage of energy to be generated by nuclear power as of 2030, the largest portion of respondents favored the zero percent scenario among three presented by the government.

The choice was followed by 15.4 percent who favored a 15 percent supply scenario and 13 percent who favored a scenario with a supply percentage between 20 percent and 25 percent.

Those who favored the zero percent scenario were nearly 70 percent of participants in earlier public hearings and other occasions in which attendees voluntarily gathered.

But the percentage of zero percent scenario supporters did not reach 50 percent in the deliberative poll.

The poll surveyed 285 randomly selected people from among 6,849 who responded to prior telephone surveys.

The participants gathered in Tokyo and participated in the deliberative poll, which comprised group discussions and interpellation with experts.

The government committee analyzed the results of telephone surveys and three questionnaires taken before and after the deliberative poll.

In the telephone surveys, 32.6 percent supported the zero percent scenario. But the percentage increased before and after the deliberative poll.

The percentage of supporters of the 15 percent scenario fell 2.8 percentage points after the deliberative poll. The percentage of supporters of the 20 percent to 25 percent scenario did not markedly change before or after.

Among those who favored the zero percent scenario after the deliberative poll, 96.2 percent cited safety as the reason.

Among supporters of the 15 percent scenario, 88.6 percent cited a stable energy supply as the reason for their choice. Of those who chose the 20 percent to 25 percent scenario, 89.2 percent cited the same reason.

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Questions over legitimacy

By Ryosuke Yamauchi / Yomiuri Shimbun Staff Writer

The result of the deliberative poll, along with results of prior public comments and public hearings, will be considered by the government in setting mid- and long-term energy policies to be compiled by the end of this month.

The deliberative poll aimed to obtain an informed public response the objectivity of the public as the randomly selected people were asked for their opinions after sufficient discussions and explanations.

However, it remains doubtful whether the poll result can be seen as a neutral "public opinion."

The participants in the deliberative poll are viewed as being highly interested in the nuclear power issue. Some of the participants said after the discussions that the debates were influenced by those who spoke more loudly than others.

The government committee explained that the reason the percentage of zero percent scenario supporters increased was that safety measures and other tasks were made clear.

The government should carefully consider effects on the economy and maintaining technological capabilities. They also must consider business groups that have voiced concerns.

It cannot be wise to decide important policy decisions, which will affect the future of the nation, through popular vote.
(Aug. 23, 2012)

August 22, 2012
Poll finds half want nuclear-free energy policy
http://www3.nhk.or.jp/daily/english/20120822_19.html

Nearly 50 percent of respondents to a government survey say they want to completely get rid of nuclear power generation in 2030.

The "deliberative polling" study was conducted earlier this month. Randomly chosen participants took part in discussions and question-and-answer sessions with nuclear experts. The polls were conducted

before and after the debates. It is believed that deliberative polling allows participants to address an agenda more deeply than ordinary polls.

The views of 280 participants were collected before and after the debates. Respondents were asked how much of Japan's total energy supply should be generated by nuclear power in 2030: zero percent, about 15 percent, or 20 to 25 percent.

Forty-six-point-seven percent of the respondents said after the debates that Japan should completely get rid of nuclear power. That figure represented an increase of 14 percentage points from before the debates.

Fifteen-point-four percent of respondents said after the debates that nuclear power should account for 15 percent of total energy generation. That was down more than one percentage point. Those who support a 20 to 25 percent share of nuclear energy stayed unchanged at 13 percent.

Asked what they consider to be the most important factor in formulating energy policy, 76.5 percent cited ensuring safety. Forty-point-four percent said a stable supply of energy, and 16.1 percent cited costs.

The government plans to assign a panel of experts to analyze the results and consider how to incorporate the findings into a new set of energy policies.
Aug. 22, 2012 - Updated 06:29 UTC (15:29 JST)

Gov't poll shows about 50% want to end Japan's nuclear reliance

http://mainichi.jp/english/english/newsselect/news/20120822p2g00m0dm029000c.html

TOKYO (Kyodo) -- A government opinion poll on Japan's future energy policy showed Wednesday that nearly 50 percent of respondents want to end Japan's atomic power generation by 2030, a far larger portion than those supporting more gradual reductions of nuclear reliance.

The outcome of the "deliberative polling" survey showed that the more participants were informed on energy issues, the greater their support for reducing Japan's nuclear reliance to zero by 2030.

It is the first time the government has conducted an opinion poll on the future role of nuclear power since last year's Fukushima Daiichi nuclear power plant disaster.

Keio University professor Yasunori Sone, who headed the committee organizing the survey, said at a press conference that a large portion of participants hoped the country would withdraw from nuclear power generation despite "knowing that they (would) have to confront a rise in (electricity) costs as a result of an increase in reliance on renewable energies, and a change in lifestyle."

To assess the numerous opinions it received through the survey and other methods, the government held its first meeting with the experts the same day as it plans to have the results reflected in a new energy policy that it has been working on.

But with some quarters of the ruling Democratic Party of Japan and the business circle opposed to the idea of abandoning nuclear power generation, it is still uncertain if the government will come up with an energy policy that clearly seeks the end of the nuclear power.

In addition to the deliberative polling, the government solicited opinions from the public via fax and the Internet, and held opinion sessions nationwide over the past month or so, asking for people's opinion on how reliant Japan should be on nuclear power by 2030.

The government-proposed options are zero percent, 15 percent and 20 to 25 percent of total power generation -- compared with 26 percent in 2010.

Of a total of 89,124 comments the government solicited between July 2 and Aug. 12, the government said it has so far created a tally of about 7,000 and found about 90 percent supportive of zero nuclear reliance.

National policy minister Motohisa Furukawa said at the opening of the meeting with the experts that the nation's energy policy used to be compiled through consultations with experts. But this was the first time for the government to work in a way that reflected public opinion in formulating an energy policy.

"We'd like to analyze the opinions we received fairly and neutrally, while ensuring transparency," he said.

The deliberative polling involved a two-day discussion event through Aug. 5 among some 290 randomly selected people, whose opinion was checked three times -- before, during and after the debate.

The poll showed that the portion of people who attach paramount importance to safety increased from 67 percent in the first survey to 76.5 percent in the third and final survey, higher than those who seriously regard energy security and cost issues, said the survey organizing committee.

Meanwhile, the percentage of people who supported the zero nuclear reliance option stood at 32.6 percent in the first survey. It increased to 41.1 percent in the second survey after participants were asked to study distributed materials, and rose again to 46.7 percent in the third and final survey.

The percentage of those who preferred the 15 percent option started off at 16.8 percent and ended at 15.4 percent, while those who supported the 20 to 25 percent option showed little change and ended at 13 percent.

Numbers

August 23, 2012

90 percent of public submissions favor zero nuclear power plants

http://mainichi.jp/english/english/newsselect/news/20120823p2a00m0na010000c.html

About 90 percent of public comments solicited by the government over the nation's future energy policy support the abolition of nuclear power, an analysis of the data released Aug. 22 has shown.

The results of the analysis were reported Aug. 22 at a meeting to review public debate. Of the 89,124 submissions from the public, the government analyzed about 7,000 of them. It found that 81 percent favored immediate abolition of all nuclear power plants, while 8.6 percent favored a shift to a society free of nuclear plants in stages. Altogether, about 4 percent of people said they either supported or permitted nuclear power.

The government will announce statistics on the remaining submissions, numbering about 80,000, once the data has been compiled.

"Rather than interpreting the results numerically, we should focus more on qualitative analysis and the paths leading toward people's views," a member of the review panel commented. Another member said, "Two months of public debate is insufficient for careful deliberation of the issue."

The review gathering will discuss how to utilize public comment and views obtained through deliberative polling in the future. The review of public comments will be reported to the government's Energy and Environment Council with a view to have the outcome reflected in a the nation's new energy and environment strategy.

No more dependancy on nukes, says Furukawa

August 22, 2012

Energy policy chief inclined toward nuclear-free Japan

Jiji, Kyodo
http://www.japantimes.co.jp/text/nn20120822a4.html

The nation's new energy policy goal should be to no longer depend on nuclear power, national policy minister Motohisa Furukawa said Tuesday.

Furukawa told reporters this means Japan would have to embark on a broad quest to become totally nuclear-free. His comments could spark a backlash because he chairs the government panel that this month must unveil the nation's future energy mix.

His remarks came as he announced the government will convene a meeting of experts Wednesday to study public opinions it collected during the course of hearings on the future use of atomic power. Furukawa said the government will reflect the results when drawing up a plan that will wean Japan off nuclear power.

But Environment Minister Goshi Hosono cautioned against immediately ending Japan's reliance on atomic power, warning that doing so would lead to a decline in the number of nuclear experts, who are needed to deal with the decades-long work of scrapping the crippled reactors at the Fukushima No. 1 power plant.

"Unless we have the knowledge of how to maintain such technology (for decommissioning), we can't simply say that we will be able to abandon nuclear power generation," said Hosono, who is also nuclear disaster minister.

He also stressed the need to consider the risks of relying too much on fossil fuels amid the unstable Middle East situation.

The government is stepping up efforts to compile its new energy policy in light of the Fukushima nuclear crisis, which sparked public fears over the safety of dozens of reactors.

As part of its policymaking process, the government held public hearings nationwide and solicited comments on three options for reducing reliance on nuclear energy: zero percent, 15 percent and 20-25 percent by 2030, compared with 26 percent in 2010.

The expert meetings from Wednesday will study the public opinions amassed.

Gov't responsible for disposal of nuclear waste

Editorial: Gov't responsible for progress on decommissioning of nuclear reactors

http://mainichi.jp/english/english/perspectives/news/20120822p2a00m0na006000c.html

The national government has come under mounting pressure to launch a full-scale project to decommission, dismantle and decontaminate nuclear reactors amid national debate on decreasing Japan's reliance on nuclear power.

Even if Japan maintains the current ratio of atomic power to its total power generation, the number of nuclear reactors that must be decommissioned will steadily increase as those currently in operation are aging. It is necessary for the central government to proactively improve and accumulate technologies and know-how to safely and efficiently decommission nuclear reactors.

The government has decided to decommission nuclear reactors after 40 years have passed since the beginning of their operations in principle. Throughout the world, more than 400 nuclear reactors are in operation, and aging reactors, mainly those in developed countries, will need to be decommissioned one after another in the near future. One cannot help but wonder whether Japan is prepared to do this.

The reactors at the Japan Atomic Power Co.'s Tokai plant are the only commercial reactors in Japan that are in the process of being decommissioned. The reactors are Japan's first commercial reactors that began operations in 1966. The plant was shut down in 1998 and work to decommission the reactors got under way in 2001. According to the plan, the decommissioning process will be completed in 2020.

However, there are serious challenges to the work. The burial site for radioactive waste generated as a result of the dismantling of the reactors has not been determined yet.

Since radiation levels are high in the reactor core and the equipment around it, the operator of the plant will wait about 10 years for the radiation levels to decline sufficiently before dismantling the reactor core. Until then, the plant operator will remove equipment situated away from the reactor core. However, full-scale work to remove the reactor core and equipment near it, which is scheduled to begin in 2014, cannot be launched until a disposal site for radioactive waste stored in these areas is secured.

This is reportedly due to Japan Atomic Power's internal regulations. However, unless the radioactive waste disposal site is secured, the work to decommission the reactor could stop.

In accordance with the government's policy, in principle electric power companies must take responsibility for decommissioning their own nuclear reactors. However, the government should be responsible for selecting radioactive waste disposal sites and their management, considering the safety of such sites and the need to gain consent from local residents.

In particular, if the burial of radioactive waste from nuclear reactor cores, which is supposed to be stored and properly managed 50 to 100 meters below ground for 300 to 400 years, is left to the discretion of private companies, local residents will feel uneasy and never accept it.

Decommissioning nuclear reactors requires special know-how such as radiation management. The government should consider ways to strategically accumulate technologies, such as fully using the experiences gained from decommissioning the Tokai power plant for other nuclear plants. Once Japan establishes a competitive edge in this field, Japanese firms will benefit from demand for such technologies that is expected to grow overseas.

However, Japan cannot accumulate such necessary experiences unless it solves problems involving the disposal of radioactive waste domestically. If the government evades its responsibility for disposing radioactive waste by postponing the decision or leaving the matter entirely to the private sector, other developed countries will overtake Japan in the nuclear reactor decommissioning business.

Abolition of nukes the new goal ?

August 25, 2012

Japan to include zero nuclear power goal in new government policy

Kyodo
http://www.japantimes.co.jp/text/nn20120825b7.html

The Democratic Party of Japan-led government may set as its new mid- to long-term energy policy the goal of abolishing nuclear power, due to the heightened public safety concerns since the triple-meltdown crisis started last year at the Fukushima No. 1 atomic plant, sources said Friday.

The government may unveil the new energy policy possibly early next month at a ministerial meeting, and lay out a timetable for ending nuclear power, including procedures for decommissioning the nation's reactors.

The government has shifted its stance toward adopting the zero nuclear power goal, given the strong urging of the public. The change may also be an effort to prevent the future of nuclear power from being a campaign issue in the next general election.

Given calls to maintain nuclear power in some quarters, the government is also expected to set a clause that will allow regular reviews of policy goals.

Due to the Fukushima nuclear crisis, the government has scrapped the previous energy policy that aimed to increase the nation's reliance on atomic energy, and has been working to create new goals.

Gov't cannot ignore its own surveys

August 24, 2012

Editorial: Gov't must respect public's readiness for zero dependence on nuclear power

http://mainichi.jp/english/english/perspectives/news/20120824p2a00m0na002000c.html

In exploring a new energy policy, the government has used several different survey methods to feel out the public's take on the ratio of atomic power to Japan's total electric power generation in the year 2030.

Results from public hearings in 11 cities across the country, as well as public comments and deliberative polls, have shown that **supporters of "zero dependence" on nuclear power comprise the largest group.**

The results don't necessarily accurately reflect the views of the entire Japanese public. Those who attended hearings and submitted public comments wanted to make their opinions known, and although participants eligible for deliberative polls were chosen randomly, those who actually attended the deliberations were there because they wanted to be there. We must keep in mind that the results of these surveys are skewed.

Still, the fact that the government has opened itself to a range of input from the public is worthy of praise. Prime Minister Yoshihiko Noda made an additional step by meeting with anti-nuclear activists on Aug. 22. Let us hope that he takes to heart the public's fervent hope for zero nuclear dependence.

It is now important for the government to gain an in-depth understanding of the public's views by analyzing the reasons behind the opinions, taking into account the characteristics of each survey method.

For example, the purpose of deliberative polls -- as opposed to standard public opinion polls -- is to sound out public opinion through in-depth discussion. They entail tracking shifts in opinions as participants take part in small group discussions and question-and-answer sessions with experts. Through this process, the number of participants supporting "zero dependence" increased, and those for "15-percent dependence" decreased.

The deliberative poll was not without its shortcomings; reference materials for the discussions were wanting, and the experts were ill-prepared. The age brackets and sex of the participants were also skewed. Still, it is significant that through deliberation, the number of "zero dependence" supporters rose.

A 15-percent ratio of nuclear power to Japan's total electric power generation is expected in 2030 if a requirement to decommission reactors after 40 years is instituted for all currently existing nuclear reactors. The government had believed this scheme to be the most promising, but such a policy fails to clarify whether the government is moving toward a future of zero-dependence, or maintaining nuclear power at current levels. The public views such ambiguity with suspicion.

Another fact that emerged from deliberative polling -- and one that the government must take seriously -- is that **the guarantee of safety is a higher priority for participants than a stable power supply or the cost.**

It is problematic that the government has yet to indicate how it will incorporate the survey results into its policy making process. It must show us what messages it has received from the people, and how it will overcome the obstacles we face in reducing dependence on nuclear power. To take the politically responsible route, **the government must set down a clear road map.**

The results of deliberative polling are said to indicate that the public is ready to accept higher costs and changes in lifestyles if the government decides on a policy of bringing nuclear dependence down to zero. It is time for the government to show that it, too, is ready.

"Women more concerned about nuclear power than men"

August 27, 2012

Gov't explores opinion differences on nuclear power by age, gender

http://mainichi.jp/english/english/newsselect/news/20120827p2g00m0dm086000c.html

TOKYO (Kyodo) -- The Japanese public's opinion on nuclear power varies according to age and gender, the government reported Monday following its second meeting with a panel of energy policy experts.

In efforts to derive a new energy policy following the March 2011 Fukushima nuclear disaster, the government has held public hearings nationwide as they look at how they can reflect public opinion in Japan's energy policy.

Among those who attended the public hearings, a larger percentage of people in their teens and 20s preferred maintaining nuclear power's share of electricity generation at 20-25 percent in 2030 than those in other age groups.

While all age groups preferred reducing the nuclear share to zero by 2030, the idea of retaining some nuclear power generation appears to have gained a greater level of support from the teens and 20 year olds, who will form the core of the working generation in 2030. This is due to their concern that a sharp reduction in nuclear power would affect electricity fares and the stability of power supply, analysts said.

During the hearings, the government implemented a poll and solicited comments on three options it presented for nuclear energy's share of total electricity generation in 2030.

The three options are zero percent, 15 percent and 20-25 percent, compared with 26 percent in 2010.

The public hearing sessions showed that the percentage of people who prefer the 20-25 percent option stood at 18.7 percent among those in their teens and 20s, higher than 17.6 percent among those in their 40s and 50s and 15.2 percent of those in their 60s or older.

The government also said the surveys showed that women are more concerned about nuclear power than men, but that fewer women and young people utilized the opportunities to convey their opinions to the government, compared with men and older people.

The government will hold its third meeting with the experts Tuesday.

Most Japanese want to do away with nukes

August 29, 2012

Government acknowledges most Japanese favor nuclear-free society

Kyodo
http://www.japantimes.co.jp/text/nn20120829a3.html

The government said Wednesday in a draft report that public consultations on the future of nuclear power show that most people favor doing away with all reactors.

In formulating a new energy policy following the Fukushima nuclear disaster, the government has held public hearings nationwide, conducted a poll and solicited comments via the Internet and through other means.

People were asked their views on the degree that Japan should rely on nuclear power by 2030.

The were zero percent, 15 percent or 20 to 25 percent of total power generation, compared with 26 percent for nuclear power in 2010.

The report presented by the government Wednesday at the third meeting to analyze the results of the surveys with a group of experts states: "We can say with certainty that a majority of citizens want to achieve a society that does not rely on nuclear power generation."

However, to also states: "On the other hand, opinions vary on the speed to realize it."

The report, after being finalized through discussions with the experts, will be submitted to a ministerial meeting in charge of formulating the new energy policy, a government official said.

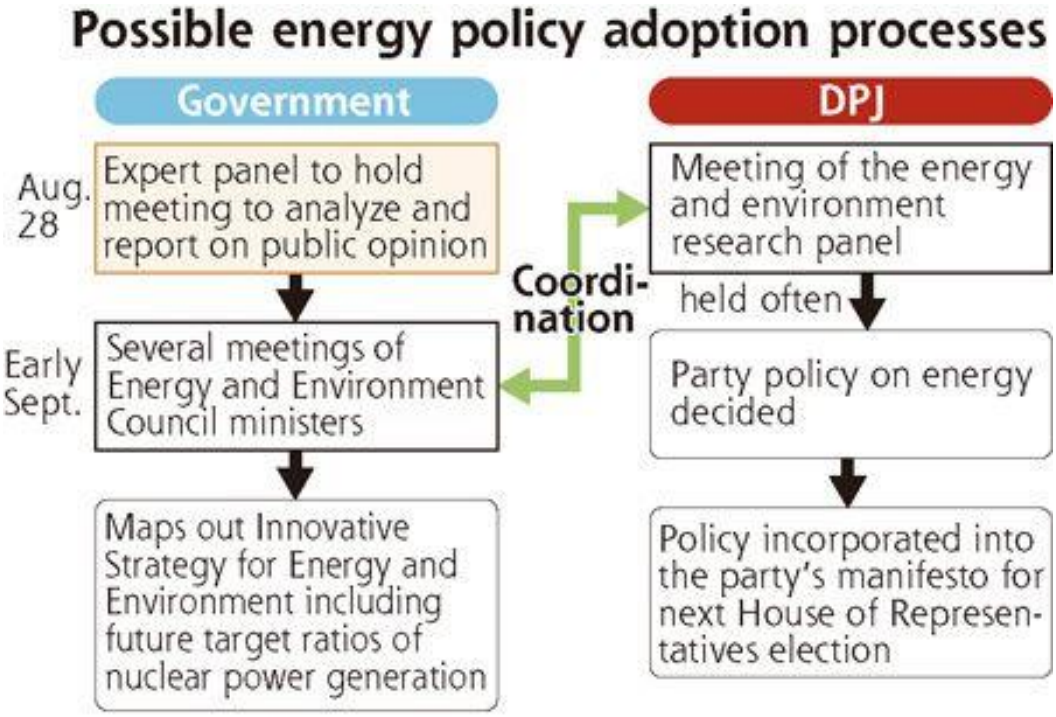
Gov't and DPJ divided over nuclear future

August 30, 2012

Opinion remains divided on energy plan

http://www.yomiuri.co.jp/dy/national/T120829004685.htm

The Yomiuri Shimbun



Opinions are divided among the government and the Democratic Party of Japan over the nation's nuclear policy, and even Cabinet ministers have different sentiment to each other.

Motohisa Furukawa, state minister for national policy, said, "A major direction [of public opinion] is that the majority want denuclearization."

The comments show Furukawa's willingness to move toward forming a consensus to abolish Japan's nuclear dependency in 2030.

Sources said Economy, Trade and Industry Minister Yukio Edano, Furukawa and Goshi Hosono, state minister for nuclear power policy and administration, met in Tokyo on Monday to discuss a basic policy on the percentage of Japan's power supply in 2030 that will come from nuclear sources.

Unofficial meetings dubbed the "three plus two," which included the three ministers, Yoshito Sengoku, acting DPJ Policy Research Committee chairman and Tsuyoshi Saito, deputy chief cabinet secretary, were held intermittently in August.
Edano was scheduled to leave Japan early Wednesday for an international conference, making the Monday meeting one of the best opportunities for the attendees to make a decision.

While Furukawa and Edano were willing to decide that the nation's nuclear dependency in 2030 be reduced to zero, Hosono was cautious and remained opposed. "It would be difficult to secure human resources and technology necessary to operate nuclear reactors" if the government decided to abolish nuclear power, Hosono said.

Sengoku reportedly refused to take part in the meeting because he wanted to avoid a hasty decision. Sengoku has been critical of abolishing nuclear power because of fears this would adversely impact the Japanese economy.
As Edano is scheduled to return to Japan on Friday night, the meeting's conclusion is likely to be made early September.

During August several policy panels were established.

For example, the government conducted a deliberative opinion poll to learn the public's choice from among three scenarios about the amount of nuclear power used in the country in 2030. This ranged from zero percent to 30 percent of the nation's total power generation. The government hastily created a panel of experts at Furukawa's initiative to analyze public opinion on the matter.

Last Thursday, the DPJ created an energy and environment research committee chaired by Seiji Maehara, the chairman of the party's Policy Research Committee.

As the dissolution of the House of Representatives and a subsequent general election becomes more likely, various research forums and places where opinions can be presented were created "to justify policy decisions," said a senior government official.

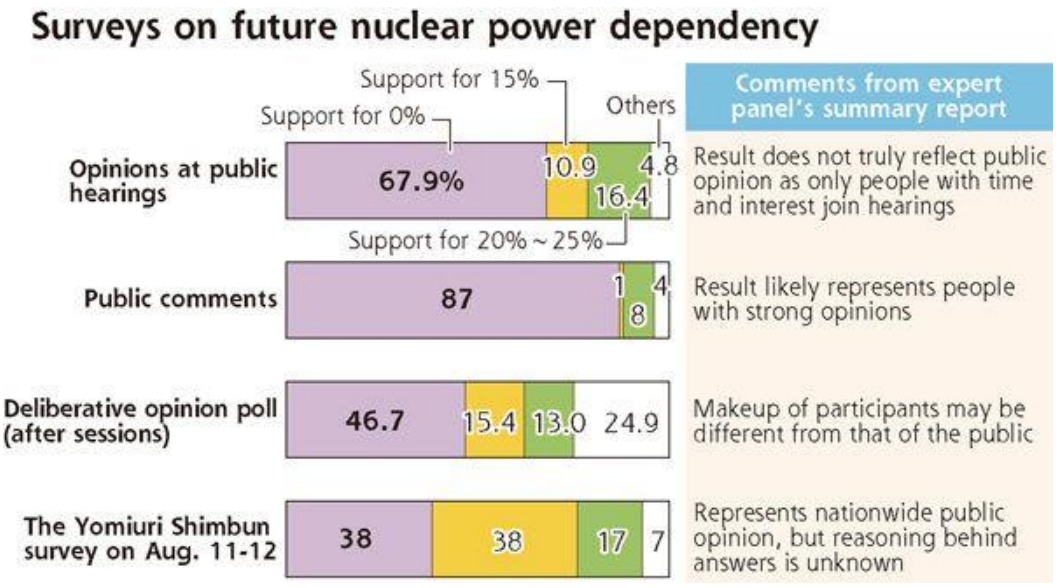
The DPJ is divided with some members pushing for denuclearization and others wanting to create a policy that prioritizes securing stable energy resources.

The future of nuclear power : A very tricky question

Panel avoids tough nuclear power questions / Report refrains from policy suggestions; some members say they needed more time for discussions

http://www.yomiuri.co.jp/dy/national/T120829004315.htm

Ryosuke Yamauchi and Hironori Kanashima / Yomiuri Shimbun Staff Writers



A summary report by a government panel of experts that analyzed recent public polls on future nuclear power dependency refrained from making concrete suggestions on a future energy policy, but said most people want to move away from nuclear power.

The government plans to use the report to compile its "Innovative Strategy for Energy and the Environment" by the end of the current Diet session on Sept. 8.

However, as opinions within the government and the ruling Democratic Party of Japan remain divided over an energy vision, it is unlikely the government will settle on a target proportion of nuclear power in power generation.

The panel, chaired by Motohisa Furukawa, state minister in charge of national policy, compiled the summary report after its eight members, including experts on opinion polls, discussed the matter in three meetings.

The report, compiled Tuesday, concluded, "At least a majority of the public wish to realize a society that isn't dependent on nuclear power."

However, it avoided outlining a clear direction in the country's energy policy among the three scenarios of nuclear power dependency in 2030--zero, 15 percent or 20-25 percent.

The panel's report was based on 90,000 public comments and opinions gathered at hearings in 11 locations as well as a deliberative opinion poll. It also analyzed 1,300 responses to questionnaires and opinions from industry groups to clarify main issues on the matter.

In the report, the panel took a reserved stance toward a plan to achieve zero dependency by 2030, saying it remains a question how early denuclearization should be realized, even though the majority of the public support the policy.

At one panel meeting, the government showed results of a survey conducted by an Internet company, covering about 1.27 million people. According to the results, about 30 percent of people in their 20s and younger consider it unnecessary to reduce nuclear power dependency if safety is enhanced. Only about 20 percent of people in their 50s or older agreed, indicating stronger support for maintaining nuclear power among younger generations.

Asked whether nuclear dependency should gradually be reduced to zero, about 65 percent of female respondents said yes, while only 53 percent of male respondents said they agreed.

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Politicians to make final decision

The panel's report pointed out that a majority of the public support zero dependency because of a growing "distrust in policy-making processes on nuclear policy and anxiety over the safety of nuclear power generation."

The report also noted that many people who support "zero dependency" also promote renewable energy and are willing to accept increased power costs. People with other opinions tended to emphasize the need to secure human
resources and technology for nuclear power generation, as well as concerns over stable energy supply and costs.

Furukawa said: "We carried out the analysis with fairness, neutrality and transparency. Politicians, who are representatives of the public, will make a final decision."

However, some officials criticized the panel, with a senior official of an economy-related government body saying: "We were already aware of those points of contention. Did we really need such panel meetings?"

Members of the panel also voiced concern, with one saying three meetings was insufficient to discuss such an important issue, and that it was merely an ad hoc panel.

Despite such criticism, the panel fulfilled its role in cross-analyzing various opinions and surveys on the power issue. Some Cabinet members have suggested a political decision should be made as soon as possible.

15% dependance by 2030 before complete elimination of nukes

September 2, 2012

Zero option for nuclear power may be added to revamped energy plan

Jiji
http://www.japantimes.co.jp/text/nn20120902x3.html

Eliminating dependence on nuclear power is expected to be part of the government's revamped energy policy, officials say.

Prime Minister Yoshihiko Noda will reveal the new policy to his ministers after making a formal decision this month, government officials said Saturday.

According to the officials, the government will make the 15 percent option its interim target for nuclear power dependence in 2030 before completely eliminating it from electricity generation at an unspecified date.

Shooting for 15 percent dependence by 2030 was expected to be the goal of the new energy policy, but given the feedback compiled from weeks of public hearings and a deliberative opinion poll, the government now thinks it necessary to clarify that Japan will become nuclear-free because the majority of the public favors the zero-percent option.

The zero option will be part of the innovative energy and environmental strategies to be adopted at the ministerial meeting, the officials said.

The new energy policy will require the government to conduct progress reports on efforts to reduce nuclear dependence every five years starting in 2015.

The upcoming policy paper will also state the numerous difficulties Japan is expected to experience in pursuing the goal, such as how to expand the use of renewable energy and permanently dispose of spent nuclear fuel, they said.
Noda plans to call on all citizens to cooperate in achieving the target, they added.

As for decommissioning the nation's reactors, the paper will state that the government is to "strictly apply" the basic 40-year age rule for shutdowns.

Other options under consideration include termination of the commercialization program for "fast-breeder" reactors and of research on the experimental Monju prototype in Tsuruga, Fukui Prefecture.

As for the all-important nuclear fuel cycle, the government is actually discussing scaling down its reprocessing and recycling pursuits.

How much investment to replace nukes?

September 4, 2012

¥50 trillion for renewables needed to end nuke power
http://www.japantimes.co.jp/text/nn20120904x1.html

Kyodo

The nation will have to invest at least ¥50 trillion in renewable energy by 2030 if nuclear power is completely phased out, the government estimated Tuesday.

It also predicted that households would see their monthly energy bills, including gas and other sources, nearly double if the phaseout goal is to be reached by 2030, rising to as high as ¥32,243 on average, compared with ¥16,900 in 2010.
These estimates were presented at a meeting to discuss future energy policy that was attended by national policy minister Motohisa Furukawa and other key members of the Cabinet.

Prime Minister Yoshihiko Noda has asked his Cabinet to outline the challenges if Japan decides to go completely nuclear-free.

Furukawa said the government will finish drawing up the new energy plan "by the end of this week or early next week."
Lawmakers on the energy and environment panel of the ruling Democratic Party of Japan met separately in an effort to compile their recommendations on the new energy policy.

Members of the panel, which is headed by DPJ policy chief Seiji Maehara, exchanged views on drafted recommendations that urge the government not to allow construction of new nuclear plants and to eventually abandon atomic power.

But they remain divided over the target date for achieving that goal.

Furukawa said the government intends to compile the new energy plan after taking into account the ruling party's recommendations coming possibly later this week.

Under the phaseout scenario, the nation's energy to be generated from solar, wind and other renewable sources would need to rise to 350 billion kwh in 2030 from 106 billion kwh in 2010 to cover the loss of nuclear power.

If reliance on nuclear power is reduced to 15 percent in 2030, the government said, ¥40 trillion in investments would probably be needed to increase output from renewable energy sources to 300 billion kwh. In that case, the average monthly household energy bill would probably rise to as high as ¥29,290, the government said.

The government also pointed out that even if nuclear power is taken off the board, disposing of the spent nuclear fuel stored in Aomori Prefecture and at the nation's nuclear plants will remain a pressing question.

Before the Fukushima disaster, the national policy goal was to reprocess all spent nuclear fuel and reuse the extracted plutonium and uranium as reactor fuel. If the government ends atomic power generation, there would be no point in pursuing fuel recycling.

Aomori has been calling on the government to maintain the fuel-recycling policy. The government noted that a decline in the nation's nuclear power-related technologies and human resources specializing in the field also needs to be considered if atomic power is to be abandoned.

Ridding Japan of nuclear power: Difficult task ahead

September 6, 2012

Editorial: Nuclear power must go, and we need a plan to make it happen

http://mainichi.jp/english/english/perspectives/news/20120906p2a00m0na003000c.html

The government's new energy policy, including the weighty question of what percent of Japan's generating capacity will be nuclear, is close to completion. With the nation's energy future all the way up to 2030 on the line, we must point out that nuclear power brings with it a host of problems, from reactor safety to used fuel disposal. As such, a nuclear-free future is most desirable, and the government must make its goal the elimination of atomic energy in this country.

Ridding Japan of nuclear power will be painful, both for industry and citizens. That being so, the government must lay out a clear and realistic path to eliminating atomic energy and do all it can to earn the people's trust and support.

The government has already revealed plans to decommission reactors once they've been in service for 40 years. If no new reactors are built to replace them, by 2030 nuclear plants will be producing just 15 percent of Japan's electricity, and by 2050 it will drop to zero. However, the end of nuclear power generation could well come earlier than that, as reactors could be decommissioned before they turned 40 if they failed to meet safety standards or other operational requirements.

Meanwhile, our dependence on nuclear power could be reduced a notch with the broader adoption of electricity-saving measures and technologies, and renewable energy sources such as wind, solar, tidal and geothermal. With these options available, we call on the government to push these alternative energy sources and clearly indicate its will to work to end atomic power generation as soon as possible.

Before the Fukushima nuclear disaster began last year, reactors were providing some 30 percent of Japan's electricity. To say we will go from that to zero is indeed a policy shift of revolutionary proportions, and of course it's easy to imagine there will be difficulties along the way.

For example, what would happen to industry and to our daily lives if the government allowed electricity rates to rise to as much as double current prices? Certainly the blow would be a tough one to absorb, especially for the industrial world, and would likely invite a further hollowing-out of domestic manufacturing. To prevent this bleak scenario from becoming a bleak reality, the government must spark price competition among power companies by introducing a truly free domestic energy market, as well as secure cheap fuel sources such as North American shale gas.

Meanwhile, the problem of what to do with spent nuclear fuel is becoming all the more urgent. The very raison d'etre of Japan's nuclear fuel cycle program, which was supposed to underpin the operation of reactors in this country, is falling to pieces. If the nuclear fuel cycle program is indeed dead, then we can no longer delay answering the question of what to do with all Japan's spent fuel, massive amounts of which now languish in "mid-term storage" at nuclear stations and at the Rokkasho Reprocessing Plant in Aomori Prefecture.

At the Rokkasho plant alone, there are some 3,000 metric tons of spent fuel collected from across the country. One might term this poisonous stockpile the bill we are leaving to our descendants for the cost of maintaining our cushy lifestyle. We cannot run away from this challenge. If the government indeed declares it will aim for a nuclear-free Japan, then as part of that it must set about disposing of the country's nuclear waste once and for all.

The ruling Democratic Party of Japan (DPJ) and the government in general have begun final deliberations on Japan's energy future. The outcome we fear most is that the government will raise the nuclear-free banner and then do nothing. With a general election approaching, the parties must not turn this issue into just another work of political theater. This policy will determine the future of our country, and must be treated with the gravity it merits.

For Japan to rid itself of atomic power, nothing short of a revolution in society and economics is needed, and to make that happen the government must have the agreement of the nation -- including industry. As such, we call on the government to produce a concrete and persuasive policy laying out how Japan will realize its non-nuclear future.

Keeping nukes more expensive than phasing them out completely

September 6, 2012
Eliminating all nuke power cheapest option: Softbank's Son

http://www.japantimes.co.jp/text/nn20120906x3.html

By ERIC JOHNSTON
Staff writer

Softbank CEO and renewable energy advocate Masayoshi Son said Thursday that **choosing nuclear power as either 15 percent or 20 to 25 percent of the total energy mix by 2030 would actually mean marginally higher electricity costs than phasing it out completely.**

Speaking at an international symposium sponsored by the Japan Renewable Energy Foundation, the organization he founded last year, Son said his foundation's calculations take into account a number of factors the government's three energy scenarios for 2030 appear to have avoided.

The government, in its two scenarios that call for some nuclear power, didn't sufficiently consider the **insurance costs of the aftermath of an accident,** Son said.

"There are also costs related to running a nuclear power plant past 40 years, decommissioning costs and the question of what to do with the nuclear waste," he said. "Have all of these costs been factored into the costs of nuclear power plant operations?"

According to his group's calculations, the cost of generating electricity under the zero percent option would be ¥13.2 per kwh. If the 15 percent scenario is chosen, the cost would be between ¥12.6 and ¥13.4, and the 20 to 25 percent scenario would mean a cost of ¥12.6 to ¥13.9.

However, Son noted that regardless of which scenario is chosen by the government, it's going to mean a drastic increase in the amount of renewable energy used.

"In each scenario for 2030, the target for renewables is between 30 and 35 percent. So, even under the zero nuclear scenario, we are going to have to provide more than 30 percent of our energy with renewable sources by 2030," he said.

To reach that goal, the key will be developing the potential of renewable energy and making sure there is an interconnected grid for transmitting it, as well as breaking the utilities' monopoly on the grid, a goal Son has pushed hard for since announcing in spring 2011 his plans for a series of huge solar parks and wind farms to replace nuclear power.

"Real competition between energy producers is needed, so that the energy they offer is delivered on an improved transmission system operated by a neutral operator who gives all competitors equal opportunities to transmit their electricity," said Tomas Kaberger, executive board chairman of Son's energy foundation.

Son said he believes Japan could become the world's third-largest user of solar energy and that Hokkaido and Kyushu have huge potential for wind-generated power. To reach that goal, he said, the question is not

about a lack of resources but getting power to consumers as efficiently as possible, and that means integration of the current regional grids into a unified national delivery system.

New nuclear emergency center not ready

September 10, 2012

Transfer of nuclear emergency center delayed
http://www3.nhk.or.jp/daily/english/20120910_10.html

The emergency operations center of Japan's new nuclear regulatory commission will not be ready when the body is inaugurated later this month.

The government plans to set up the nuclear watchdog by the end of September.

It is a replacement for the Nuclear and Industrial Safety Agency, which is part of the Ministry of Economy, Trade and Industry. The ministry has promoted nuclear energy development.

Most of the staff and functions of the new commission are to be moved from the ministry's offices in the Kasumigaseki district to a building in Roppongi around the middle of this month.

But, the emergency operations center will remain in Kasugimaseki for some more months. The center has a system that tracks the current conditions of nuclear reactors across the county. It also has telephone hot lines to the Prime Minister's official residence and the offices of prefectures with nuclear plants.

A preparatory office of the new commission says the moving delay will not cause problems as staff members can get back to Kasumigaseki within 30 minutes in the event of an emergency.

Professor Emeritus Hirotada Hirose of Tokyo Woman's Christian University says it is critical to collect data and act immediately in a nuclear emergency, and that it's not clear if all staff can actually turn up in 30 minutes. He says the delay in moving indicates the government has not fully absorbed the lessons from last year's accident at the Fukushima Daiichi nuclear plant.

No consensus - Gov't puts off energy policy deadline

September 11, 2012

New energy policy deadline extended

Kyodo
http://www.japantimes.co.jp/text/nn20120911a5.html

The government put off setting a new energy policy, originally planned for Monday, due to difficulties in forming a consensus.

The decision comes after business circles opposed a goal presented last Thursday by the Democratic Party of Japan to end all dependence on nuclear power in the 2030s as the key component of the new policy.

It might take time before an agreement is reached within the government on whether to indicate a specific time frame for ending nuclear power, as opinions are sharply divided. Some DPJ members also want to avoid making the issue a focal point in the party's Sept. 21 presidential election.

Future of nuclear waste

September 12, 2012
same Kyodo information as in the Mainichi article below
Scientists sound alarm on plan to bury nuclear waste

http://www.japantimes.co.jp/text/nn20120912a3.html

Kyodo
An organization representing the nation's scientists called on the government Tuesday to drop its plan to dispose of spent nuclear fuel and other high-level radioactive waste deep underground, saying the risk of geological-based problems is too high.

The Science Council of Japan proposed keeping the waste in "temporary safe storage" sites during a moratorium that could last hundreds of years while efforts are made to establish a safe way to dispose of the lethal substances.

The council compiled the proposal in response to a request by the Atomic Energy Commission to look into the current efforts to select a final repository for high-level radioactive waste — a situation that is currently in a stalemate.

"Based on current scientific knowledge, we cannot determine a geological formation that would be stable for hundreds of thousands of years. . . . And thus the best possible option is temporary storage," said Harutoshi Funabashi, a professor at Hosei University involved in working out the proposal.

"This does not mean postponing the problem irresponsibly to the future. It is to secure time to find ways to more appropriately handle the matter," he said.

During the moratorium period, the country should promote research on the stability of geological layers and improve the ability to store the waste more safely.

Funabashi said the proposal can be applied if the government maintains or gives up on its current program to reprocess spent fuel from nuclear power plants for recycling.

Under the current plan, fuel reprocessing would produce vitrified high-level radioactive waste, which is to be placed in a final disposal site more than 300 meters underground after being stored for about 30 to 50 years for cooling.

September 11, 2012

Experts advise overhaul of nuclear disposal policy
http://www3.nhk.or.jp/daily/english/20120911_18.html

An organization of Japanese science and technology experts says the government's nuclear waste disposal plan needs to be overhauled.

Science Council of Japan President Takashi Onishi presented the organization's proposal to Japan Atomic Energy Commission Chairman Shunsuke Kondo on Tuesday.

The council was asked in 2010 to review the government plan, which called for burying highly radioactive nuclear waste more than 300 meters underground, where it would remain for tens of thousands of years.

The plan has been stymied since being enacted in 2000, due to opposition from candidate burial sites.

The council's proposal says in view of the accident at the Fukushima Daiichi nuclear power plant, it is inappropriate to select disposal sites without social consent over nuclear policies. It also stresses that since Japan is prone to seismic and volcanic activity, there are limits with current technology to determining sites that will remain stable for tens of thousands of years.

The council says the government should brace itself for an overhaul of the current plan. It suggests temporarily storing highly radioactive waste for decades to hundreds of years either above or underground. It says during this time, technological development and public consensus should take place.

Scientists council calls for review of nuclear waste disposal method

http://mainichi.jp/english/english/newsselect/news/20120911p2g00m0dm080000c.html

TOKYO (Kyodo) -- An organization representing scientists in Japan on Tuesday called on the government to review its plan to dispose of spent nuclear fuel and other high-level radioactive waste deep underground, citing the geological uncertainties regarding the current method.

The Science Council of Japan also proposed keeping the waste at what it calls "temporary safe storage" sites during such a moratorium period for several decades to hundreds of years while seeking to establish the final disposal method.

The council compiled the proposal in response to a request by the government's Atomic Energy Commission to look into the current efforts to select a final repository site for high-level radioactive waste, which are at a stalemate.
"Based on the current scientific knowledge, we cannot determine a geological formation that would be stable for periods of hundreds of thousands of years...And in that case the best possible option is temporary storage," said Harutoshi Funabashi, a professor at Hosei University who was involved in working out the proposal.

"This does not mean postponing the problem irresponsibly to the future. It is to secure time to find ways to more appropriately handle the matter," he added.

The waste in temporary storage, either located underground or in a facility above ground, should be placed in such a way that it can be recovered, the council said.

During the moratorium period, the country should promote research on the stability of geological layers and improve the ability to store the waste more safely.

Funabashi said that the proposal can be applied in the event of either the government maintaining or giving up the current policy to reprocess used fuel from nuclear power plants for recycling.

Under the current plan, fuel reprocessing would produce vitrified high-level radioactive waste, which is to be placed at a final disposal site more than 300 meters underground after being stored for about 30 to 50 years for cooling.

A process to solicit local governments to host the repository site is ongoing, but not much progress has been seen.

The government is currently reviewing the country's energy policy in the wake of the Fukushima Daiichi nuclear power plant disaster, which has raised questions about continuing to expand nuclear power generation.

TEPCO's underlying reasons for own task force

Tepco reforms seen as reactor restart bid

Task force boss: Safety push not part of Niigata plant image boost

http://www.japantimes.co.jp/text/nn20120913a1.html

Kyodo

Tokyo Electric Power Co. said it has set up teams to reform its nuclear division, a move viewed by some as laying the groundwork for the restart of idled reactors amid the disaster at its Fukushima No. 1 power plant.

The teams include a supervisory panel consisting of former U.S. Nuclear Regulatory Commission Chairman Dale Klein and management consultant Kenichi Omae among others, as well as a task force headed by Tepco President Naomi Hirose to implement the reform steps.

"The mission of this task force is to build an organization for nuclear plant management that has the world's highest level of safety awareness and technical ability," Hirose told a news conference Tuesday at the company's head office.
The panel will work with another project team that will study investigative reports released by a government-appointed committee and other entities on the Fukushima crisis.

Tepco will compile by the end of the year specific plans to reform its nuclear division, which has been criticized for lacking transparency, Hirose added.

He denied the purpose of the teams is to ensure the restart of the utility's idled reactors at the seven-reactor Kashiwazaki-Kariwa nuclear plant in Niigata Prefecture but suggested that carrying out reforms would be a minimum requirement to seek the OK to bring its reactors online.

"We are aware that restarting the reactors would not be allowed by the people in Niigata unless we properly do these things," Hirose said.

The need to restart idled reactors was stipulated in a 10-year comprehensive special business plan for Tepco, which is struggling to compensate victims of the nuclear disaster and pay rising fuel costs for thermal power generation to make up for the halt in nuclear power.

Restarting reactors is not an easy task for utilities amid strong public nuclear safety fears. The Niigata complex was halted by a strong quake in 2007, and in 2003 as part of an overall Tepco reactor shutdown amid a scandal over falsified safety inspections.

Meanwhile, Tepco disclosed 600 new photos taken after the Fukushima plant was struck by the huge quake and tsunami on March 11, 2011, which triggered the three meltdowns at the site.

The pictures include images of evacuation scenes, flooded power source rooms, and reactor buildings shortly after the hydrogen explosions. Tepco said it asked other firms working with the utility to submit photos if any of their employees had taken them at the time.

Tepco spokesman Junichi Matsumoto said it took 18 months to disclose these pictures because they had to be checked carefully to make sure they did not violate nuclear security.

US worried

September 13, 2012

U.S. official airs concern about Japan's nuclear phaseout policy

http://mainichi.jp/english/english/newsselect/news/20120913p2g00m0dm037000c.html

WASHINGTON (Kyodo) -- U.S. Deputy Energy Secretary Daniel Poneman has voiced concern about Japan's new energy policy, which aims to abolish nuclear power generation in the 2030s, a Japanese ruling party lawmaker said Wednesday.

In a meeting Tuesday in Washington with Seiji Maehara, policy chief of the Democratic Party of Japan, Poneman urged Japan to make efforts to minimize the negative impact from possible abandonment of atomic energy by Japan, Maehara told reporters.

Maehara said **such a concern is understandable as Japan's policy shift toward a phaseout of nuclear energy means a change to the existing nuclear energy cooperation between Tokyo and Washington.**

He also said he got the impression Poneman understood to some extent the energy policy shift in Japan given the devastating nuclear disaster last year and the desire of many Japanese for a society without nuclear power.

Last efforts to finalise energy policy - End of nukes in the 2030's

September 13, 2012
Japan to aim for nuclear phaseout in 2030s: draft energy policy

http://mainichi.jp/english/english/newsselect/news/20120913p2g00m0dm038000c.html

TOKYO (Kyodo) -- The Japanese government is contemplating setting a target to abolish nuclear power generation in the 2030s under a new national energy policy, in light of the Fukushima nuclear crisis last year, according to a draft of the policy obtained by Kyodo News on Wednesday.

"We will devote all policy resources to achieving zero nuclear power generation in the 2030s," the draft said.

The draft said Japan will begin research on directly disposing of spent nuclear fuel, suggesting a shift in the current policy of reprocessing all spent nuclear fuel and reusing the extracted plutonium and uranium as reactor fuel.
The draft also said the government will keep its word not to make Aomori Prefecture, which has accepted facilities for the reprocessing of nuclear fuel and storage of radioactive waste under the current nuclear fuel recycling plan, a final disposal site.

It added that the government will review Japan's new energy policy, which may be finalized this week, every year through 2015 and every three years afterwards.

The government has been struggling to balance the pros and cons of nuclear power. The review of the energy policy is intended to give consideration to the concerns of some local governments, as well as the United States, over the possible phasing out of nuclear power generation by Japan in the 2030s, government officials said.

In the wake of last year's Fukushima disaster, the government has been working to create a new national energy strategy as the current policy, which calls for increased reliance on nuclear power, is no longer tenable.

The Democratic Party of Japan, headed by Prime Minister Yoshihiko Noda, has proposed that the government set a goal of completely eliminating nuclear power generation in the 2030s in the new policy.

On Wednesday, Noda, Chief Cabinet Secretary Osamu Fujimura and other relevant ministers discussed how to address the concerns of local governments that are still willing to keep nuclear facilities as well as the United States, with which Japan has a civilian nuclear cooperation pact.

Noda also sent his special adviser Akihisa Nagashima and Hiroshi Ogushi, a parliamentary secretary at the Cabinet Office, to Washington to explain the new policy.

Under the plan, the government has listed 10 areas in which it will review energy policy, including Japan's relations with the international community and local cooperation on hosting nuclear facilities.

The draft said the government would transform the Monju prototype fast-breeder nuclear reactor in Fukui Prefecture into a research reactor.

To achieve a society that does not rely on nuclear power, Japan plans to limit the operation of existing reactors to up to 40 years since they first went online and not allow utilities to build new ones, according to the draft.

In the meantime, Japan will use existing nuclear reactors if they are confirmed as safe by the Nuclear Regulation Authority, it said.

Japan will also consider providing new support to local governments that have hosted nuclear plants for many years and receive subsidies to that end, the draft said.

The government is making last-ditch efforts to finalize the energy policy on Friday.

September 12, 2012

Zero-nuclear policy ready for inclusion in new energy and environment strategy

http://mainichi.jp/english/english/newsselect/news/20120912p2a00m0na014000c.html

The government has entered the final stage of incorporating a zero-nuclear policy into a new energy and environment strategy that is expected to be determined as early as the end of this week, government sources have revealed.

The zero-nuclear policy is to stipulate halting the operations of all nuclear power stations in Japan by the 2030s, and comes in response to mounting calls among the public for eliminating all nuclear reactors in the country in the aftermath of the disaster at the Fukushima No. 1 Nuclear Power Plant.

The sources said the government has apparently informed Aomori Prefecture -- host to the Rokkasho Reprocessing Plant for a nuclear fuel cycle and a staunch opponent of a nuclear-zero policy -- of the outlines of the new energy policy and presented it with alternative regional promotion measures to make up for the drastic policy change and to minimize adverse effects on local economies.

The government will make a formal decision on the new energy and environment strategy at an Energy and Environment Council meeting to be convened as early as the end of this week.

After the ruling Democratic Party of Japan (DPJ) made policy proposals on Sept. 6 that "all necessary policy and resources will be devoted to achieving the zero-nuclear policy goal by the 2030s," the industrial circle and Aomori Prefecture fiercely opposed the plan, prompting the government to push back the date for the final decision on the new energy policy from Sept. 10 to the end of this weekend at the earliest.

Government sources said Aomori Prefecture is still strongly concerned that the zero-nuclear policy would lead to the abandonment of the nation's nuclear fuel cycle policy and is apparently reluctant to show understanding of the new policy anytime soon. The government is poised to seek the prefecture's understanding by drawing up outlines of new pump-priming measures in lieu of nuclear fuel reprocessing and dispatching Cabinet ministers there after finalizing the new energy strategy, the sources said.

The government is also making fully fledged coordination with the U.S. government over the new energy and environment strategy after Washington showed a strong interest in Japan's atomic energy policy.

At a press conference on Sept. 10, Prime Minister Yoshihiko Noda clearly stated that the government will abide by the three DPJ-proposed principles on the country's future nuclear policy -- no new or additional construction of nuclear reactors; the strict application of the 40-year limit to the operation of existing reactors; and only reactors that were confirmed to be safe by the nuclear regulatory commission will be allowed to be reactivated. Several senior government officials admitted on Sept. 11 that "the prime minister's position won't change."

The government is further intending to gain Cabinet approval of the new energy and environment strategy. Under the current legal system, the country's energy policy is required to be reviewed every three years. The energy policy is also subject to modification if the regime changes after the next House of Representatives election.

New head for the new nuclear regulatory agency

September 13, 2012

Ex-MPD chief to head N-agency

The Yomiuri Shimbun

Katsuhiko Ikeda

The government has decided to appoint Katsuhiko Ikeda, a former superintendent general of the Metropolitan Police Department, as the founding director of the nuclear regulatory agency that will serve as the new nuclear regulatory commission's secretariat, government sources said.

The government is set to approve the appointment at a Cabinet meeting as early as Friday to launch the commission and the agency next Wednesday, the sources said Tuesday.

Ikeda, 59, headed the National Police Agency's Security Division and the MPD's Security Bureau before serving as the superintendent general of the MPD from January 2010 to August 2011.

The new agency will be tasked with promptly dealing with any accident at a nuclear power plant. By nominating Ikeda as the agency's first director general, the government aims to boost its crisis management capability, observers said.

Shunichi Tanaka, a former acting chairman of the Japan Atomic Energy Commission of the Cabinet Office, who was recently tapped as the commission's head, will formally designate Ikeda for his new post, the sources said.

As for the agency's deputy director, the government will likely name Hideka Morimoto, who heads the Cabinet Secretariat's Office for the Preparation of Nuclear Safety Regulatory Organization Reform, the sources added.

In relation to the appointments, Goshi Hosono, the nuclear disaster management minister, met Tanaka as part of preparations to launch the commission.

He asked Tanaka to ensure that the new commission will listen to the opinions of various people, especially those who are critical about nuclear power.

Reprocessing to go on? (2)

Govt to continue N-fuel recycling program

http://www.yomiuri.co.jp/dy/national/T120913004237.htm

The Yomiuri Shimbun

The government plans to stick with its policy of supporting the reprocessing of spent nuclear fuel as part of a fuel recycling program for the time being, it has been learned, although this appears to contradict the goal of ending nuclear power generation by the 2030s.

The fuel policy will be part of the new energy and environment strategy to be released Friday, according to sources.

A copy of the final draft of the document seen by The Yomiuri Shimbun says, "The government will fulfill its responsibilities concerning nuclear nonproliferation and the peaceful use of nuclear energy with respect to the international community, and continue with fuel reprocessing in line with the previous policy."

The strategy contains a commitment to discontinue all nuclear power plants by the 2030s. However, without running nuclear reactors, the reprocessing of spent fuel to extract plutonium, which is done mainly in Aomori Prefecture, would be unnecessary.

How the new energy policy would tackle the issue has been a focus of attention.

A reprocessing plant run by Japan Nuclear Fuel Ltd. in Rokkasho, Aomori Prefecture, currently stores about 2,900 tons of spent nuclear fuel from nuclear plants nationwide.

The prefectural government has said it would send the spent fuel back to the plants if the government discontinued the fuel recycling program. Nuclear power plants would have a difficult time running without a place to store nuclear waste.
The draft of the policy appears to support contradictory goals--the Democratic Party of Japan's proposal to do away with nuclear power, and a vow to continue reprocessing nuclear fuel.

The government plans to submit legislation based on its new energy strategy, but political observers foresee the bill receiving a cool welcome by opposition parties.

The final draft also advocates effectively giving up on the troubled Monju project, an experimental fast-breeder reactor of the Japan Atomic Energy Agency in Tsuruga, Fukui Prefecture.

The strategy allows for an option in which Monju could be used to study how to reduce the radioactive waste in spent nuclear fuel, and then be decommissioned.

The final draft proposes that the government will use all policy measures available to idle all the nation's nuclear plants by the 2030s, that nuclear plants will be utilized until then if their safety can be confirmed, that there will be no new construction of nuclear power plants or nuclear reactors, and that the nuclear fuel reprocessing project will be reviewed through discussions with the relevant international organizations and other countries.

Aomori Prefecture rejects nuclear waste, eyes continued reprocessing

http://mainichi.jp/english/english/newsselect/news/20120914p2a00m0na007000c.html

When it comes to nuclear fuel reprocessing and the fate of the nuclear fuel cycle that has emerged during discussion on Japan's future nuclear policy, the Aomori Prefectural Government stands firm on the issue.

"There is no policy to follow other than reprocessing. We will have them keep their promises," an Aomori Prefectural Government official said firmly, calling on the government to uphold its nuclear fuel cycle policy.

Aomori Prefecture is the location of the Rokkasho nuclear reprocessing plant, whose future is swayed by Japan's nuclear fuel cycle policy. The prefectural government and the village of Rokkasho have signed memorandums with the central government and Japan Nuclear Fuel Ltd., which operates the plant, stating that Aomori Prefecture will not be made a final disposal area for nuclear fuel, and if reprocessing becomes difficult, then spent nuclear will be transported outside the facility.

If the government withdraws from nuclear fuel reprocessing, Aomori Prefecture intends to send the spent nuclear fuel held at Rokkasho back to the nuclear power plants from which the fuel came. Furthermore, it plans to forbid the transportation of spent nuclear fuel destined for reprocessing to an interim storage facility that is being constructed in the prefectural city of Mutsu.

Behind the prefecture's strong stance is a sense of crisis over the possibility of the prefecture becoming the final disposal site for nuclear waste that has no other place to go.

At a meeting in January this year to decide on the outline for the government's new nuclear power policy, Aomori Gov. Shingo Mimura fiercely protested that it was totally unacceptable to assume that things would somehow work out if the spent nuclear fuel in Aomori Prefecture was left there. All the same, it remains a fact that reprocessing has reaped precious finances for local bodies in the prefecture. As of fiscal 2011, the prefecture had received 233.4 billion yen in grants in connection with the use of land for nuclear fuel cycle and nuclear power plant facilities.

Japan Nuclear Fuel Ltd. is the biggest company in the prefecture, employing about 1,400 people from Aomori Prefecture. As of fiscal 2010, it had issued contracts worth 509.5 billion yen for local companies. Rokkasho Mayor Kenji Furukawa has commented that if reprocessing ended, the future of the town would be threatened.

The Ministry of Economy, Trade and Industry on Sept. 12 continued providing working-level explanations on the issue to Aomori Prefecture and other bodies.

In addition, Akihisa Nagashima, a special adviser to Prime Minister Yoshihiko Noda on foreign affairs and security, and Hiroshi Ogushi, a parliamentary secretary at the Cabinet Office, visited the United States for talks with the U.S. government, which has expressed strong interest in Japan's nuclear energy policies.

Chief Cabinet Secretary Osamu Fujimura told a news conference on Sept. 12, "We are carefully explaining the transition in current discussion (to U.S. officials)."

Japan officially phasing out nukes by 2040

source AFP

Japan to phase out nuclear energy by 2040
http://www.google.com/hostednews/afp/article/ALeqM5itoWMYYjAPxOjvzw-BKoFC4T-kGg?docId=CNG.ead5e98eea75b0c7d9d8538a8cbc9386.3a1

By Harumi Ozawa (AFP) – 6 hours ago

TOKYO — Japan on Friday said it planned to phase out nuclear power over three decades in an apparent bow to public pressure after last year's Fukushima disaster, the worst atomic accident in a generation.

The disaster-struck country would work to cut its use of nuclear energy to zero by 2040 by eventually shutting down its stable of reactors, which once supplied resource-poor Japan with about one-third of its energy.

"The government will introduce every possible policy resource that would enable nuclear power generation to be at zero during the 2030s," the paper said.

The move would bring resource-poor Japan into line with Italy, Switzerland and Germany, which has said it will wean itself off nuclear power by 2022, and comes amid regular vocal protests against nuclear power.

Tokyo's new energy policy calls for shutting down reactors that are more than 40 years old, not building any new nuclear reactors and only restarting existing reactors if they pass standards issued by a new regulatory agency.

Ahead of a general election expected this autumn, nuclear energy has become a hot issue in Japan with regular protests that sometimes attract tens of thousands of people calling for it to be ditched.

The decision on Friday comes about 18 months after a huge tsunami swamped reactor cooling systems at the Fukushima Daiichi plant, sparking meltdowns and radiation leaks in the worst atomic accident since Chernobyl in 1986.

In the months that followed, all of Japan's working reactors were shut down for routine safety checks, with only two of them ever having been restarted, and those in spite of strengthening anti-nuclear public opinion.

Japan is now heavily dependent on Middle East oil and has been forced to ramp up its imports to make up the energy shortfall since the accident.

Last week, Prime Minister Yoshihiko Noda's ruling Democratic Party of Japan (DPJ) said Japan should aim to cut nuclear power and released a policy paper that recommended the country make greater use of renewable energy, and take further energy saving measures, including the use of smart metering.

It also said Japan should develop resources in nearby waters and look to cheaper procurement of liquefied natural gas and other fossil fuels, including shale gas.

At the same time the country's powerful business lobbies have worked hard to push for a restart of shuttered reactors, fearing power shortages.

Germany last year said it would shut down its 17 nuclear reactors by 2022, while in Italy, a referendum rejected any resumption of nuclear energy generation, which was halted after the 1986 disaster at Chernobyl.

Switzerland has approved plans to close its five reactors by 2034. However a number of Asian countries are pushing ahead with expanding their nuclear programmes.

A rather murkey strategy

September 13, 2012

Internal contradictions on nuclear power hobble Japan's new energy strategy

http://mainichi.jp/english/english/features/news/20120913p2a00m0na014000c.html

In the final version of the new national energy and environmental strategy set for release this week, the government will officially make it its mission to end nuclear power in Japan by the 2030s. At the same time, however, the plan will preserve Japan's nuclear fuel cycle program -- the long-running project to reprocess spent nuclear fuel into mixed plutonium-uranium MOX fuel for reuse.

The badly delayed nuclear fuel cycle program, centered on the Rokkasho fuel reprocessing plant in Aomori Prefecture, underpins the continued operation of nuclear reactors in Japan. **In other words, the government has included two obviously contradictory parts -- and all the confusion that entails -- in its strategic framework.**

The inclusion of both a zero-nuclear target and the continuation of the fuel cycle in the energy strategy has its roots in government concern for pro-nuclear local governments hosting fuel cycle facilities, including the village of Rokkasho and Aomori Prefecture.

The reasons for these local governments' resistance to a zero-nuclear future are fairly obvious. If Japan goes nuclear-free, MOX fuel production will no longer be needed and, as Rokkasho and Aomori Prefecture have pointed out with some ire, may be stopped.

As such, both the village and prefecture have said, they may refuse to accept any new spent nuclear fuel and could go so far as to send the stock already in their jurisdictions back where it came from. With spent fuel pools filling up at plants across the country and nowhere else to put it, the move could "quickly make nuclear power generation impossible" in Japan, said Economy, Trade and Industry Minister Yukio Edano recently.

Spent nuclear fuel is extremely hot and extremely radioactive, and **at present there is 2,919 metric tons of it sitting in cooling pools at the Rokkasho plant. What's more, the Rokkasho pools have a capacity of 3,000 tons, and the only other storage pools in Japan are the ones at each nuclear plant -- and these, too, are nearly out of space.**

According to materials produced by the Japan Atomic Energy Commission in May this year, if reactors are restarted and the Rokkasho plant starts returning the spent fuel in its pools, many nuclear plants on the receiving end would soon go over their maximum storage capacity and have to shut down.

Specifically, Kyushu Electric Power Co.'s Genkai plant would have to go off-line this fiscal year, followed by Japan Atomic Power Co.'s Tokai No. 2 plant in fiscal 2013, and Tokyo Electric Power Co.'s Kashiwazaki-

Kariwa plant and Chugoku Electric Power Co.'s Shimane plant in 2014. The plant with the longest operational life in such circumstances would be Tohoku Electric Power Co.'s Higashidori plant, which would have to shut down in fiscal 2027.

On Sept. 7, the Rokkasho village assembly adopted a text declaring that should Japan abandon the nuclear fuel cycle project, Rokkasho would not accept MOX fuel returned from Britain and France, where some of Japan's spent conventional nuclear fuel was shipped for reprocessing. Though a municipal resolution, the text demonstrated how the nuclear waste issue might spawn international disputes.

And so the government decided to avoid the vital question of what to do with the project, instead stuffing it into its long-term energy strategy together with a promise to ditch nuclear power as a whole. Will the cobbled-together nature of the new energy policy inspire trust, or will it rather draw widespread suspicion and doubt? As things stand, the latter is all-too possible. (By Hiroshi Hisata, Tokyo Business News Department)

New energy strategy draws criticism from all sides

September 14, 2012

No-nuke plan official, quick to draw flak

Policy called poll ploy to save DPJ, hit by fuel cycle foes, Keidanren

http://www.japantimes.co.jp/text/nn20120914x1.html

By KAZUAKI NAGATA and ERIC JOHNSTON
Staff Writers

Prime Minister Yoshihiko Noda's Cabinet on Friday officially adopted a new long-term energy strategy that calls for elimination of nuclear power dependency by the end of the 2030s, but the new goal quickly came under fire from experts, antinuclear activists and lobbying groups.

Critics said the new energy vision lacks critical details of how to achieve the target and will still maintain the existing nuclear fuel recycling program, which they say is a major contradiction with the zero-nuclear goal.

The Democratic Party of Japan-led government is advocating the zero-nuclear policy only because it is desperate to curry favor with voters ahead of the next Lower House election, in which the party is now expected to suffer a crushing defeat, they said.

Polls conducted by major media companies have indicated a majority of the public wants to end reliance on nuclear energy sometime in the future.

"I think the DPJ and the government just wanted to set a 'zero' goal because a general election is coming up," said Takeo Kikkawa, a professor at Hitotsubashi University and an energy policy expert.

"The decision to approve this new energy strategy is premature," said Kikkawa, who has taken part in a panel under the industry ministry to discuss the long-term energy strategy.

The government also indicated the zero-nuclear policy could be revised, depending on such factors as progress in the development of renewable energy and public opinion.

The new energy vision doesn't discuss crucial details in abolishing nuclear power, including likely electricity rate hikes following the termination of reactors, how to increase renewable energy and how to win the consent of local governments that host nuclear facilities.

The new energy vision states the government will maintain the existing program to recycle uranium and plutonium fuels after it was argued that the recycling program is needed to keep consuming plutonium for peaceful purposes and prevent proliferation of nuclear materials.

Consideration was also given to the prefectures still eager to maintain facilities related to the recycling, the government said.

Keeping the recycling program in place "is proof that the current government is not serious about phasing out nuclear power," argued antinuclear activist Aileen Mioko Smith of the Kyoto-based group Green Action.

Kikkawa said if the government wants to really end nuclear energy, it needs to be more concrete about how to deal with the expected challenges, including how to get local governments, such as Fukui and Aomori prefectures, to give up atomic facilities that have been long lucrative cash sources.

Hiromasa Yonekura, chairman of the powerful Keidanren business association, said Thursday he called Noda and told him that the zero scenario is unacceptable because the resulting higher electricity fees will hurt businesses and the economy.

"The ruling parties should not be swayed by elections. They should think about the future of this country," he said.

A contradiction in terms?

September 16, 2012

basically the same information three times
Japan OKs proceeding with nuclear plants already under construction

http://mainichi.jp/english/english/newsselect/news/20120916p2a00m0na006000c.html

AOMORI (Kyodo) -- Japan has no plans to stop the construction of nuclear plants that have already received government approval, industry minister Yukio Edano said Saturday.

The minister of economy, trade and industry made the remark only a day after the government endorsed a new energy policy pledging to try to phase out atomic power generation in the 2030s, following last year's Fukushima nuclear disaster.

"I am not considering changing (construction plans for) nuclear power plants for which the industry ministry has given the go-ahead," Edano said during his talks with local leaders in the northeastern city of Aomori.

Before the crisis at the Fukushima Daiichi plant, the government had authorized the construction of **two nuclear power plants in Aomori Prefecture and one reactor in Shimane Prefecture.**

Under the new energy policy, the government has decided not to allow utilities to build new reactors while limiting the operation of existing reactors to 40 years. Should the government finally endorse the

operation of Electric Power Development's new Oma nuclear plant in Aomori Prefecture, the plant could run until the middle of the 2050s.

Following Edano's remark, Electric Power Development Co. said the Oma plant "plays an important role in the stable supply of electricity and the nuclear fuel cycle," adding that the company will "do all it can to make a safer plant."

Chugoku Electric Power Co. said that a third reactor being built at its nuclear plant in Shimane Prefecture should not be recognized as a new plant, which the government has pledged not to build under the new energy policy.

Edano told reporters after the meeting with the leaders, including Aomori Gov. Shingo Mimura, "The fact that the government has already permitted the construction carries significant weight."

Edano said approval of the newly established Nuclear Regulation Authority would be necessary to start operating these plants.

Local leaders of Aomori hosting nuclear fuel cycle facilities, meanwhile, expressed doubts over the government's new energy policy, with Mimura indicating concerns about how the zero-nuclear power policy will affect public and industrial activities.

"Will the government be able to promise to secure a stable electricity supply for future generations?" he asked Edano during their talks, which were open to the media.

Under the new policy, the government also decided to keep seeking the recycling of all spent nuclear fuel for reuse while aiming to end nuclear power generation.

Given this, Mimura urged Edano to clarify the future of the nuclear fuel-cycle policy and how to deal with spent nuclear fuel and plutonium that is extracted during reprocessing.

Junichiro Miyashita, mayor of Mutsu where the construction of a temporary storage facility for spent nuclear fuel is under way, said it is contradictory to have a zero-nuclear society while maintaining reprocessing.

New reactor projects still on: Edano

http://www.japantimes.co.jp/text/nn20120916a2.html

Kyodo

AOMORI — Construction of new nuclear plants will be allowed if the government has already approved the projects, trade minister Yukio Edano said Saturday.

The minister of economy, trade and industry made the remark just a day after the government endorsed a new energy strategy that pledges to phase out atomic power by the 2030s.

"I am not considering changing (construction plans for) nuclear power plants for which the industry ministry has given the go-ahead," Edano said in talks with local leaders in Aomori.

He was referring to the already authorized plan for Electric Power Development Co. to build a nuclear plant in Oma, Aomori Prefecture.

Under its new energy policy, the government said it will not allow utilities to build new reactors and will limit the runs of the existing ones to 40 years. Should the government ultimately back the Oma plant project, it could run until the mid-2050s.

The Ministry of Economy, Trade and Industry has also OK'd plans to build a new Tokyo Electric Power Co. plant, also in Aomori, and a third reactor for Chugoku Electric Power Co.'s plant in Shimane Prefecture.

Edano said after the meeting with the leaders, including Aomori Gov. Shingo Mimura, "The fact that the government has already permitted the construction carries significant weight."

Edano also said the approval of the newly established Nuclear Regulation Authority will be necessary to start these plants.

Local leaders in Aomori, where nuclear fuel-cycle facilities are located, voiced misgivings over the new energy policy, with Mimura questioning how the zero-nuclear policy will affect public and industrial activities.

"Will the government be able to promise a stable electricity supply for future generations?" he asked Edano at the talks.
Under the new policy, the government plans to continue the program to recycle all spent nuclear fuel for reuse, while also aiming to end atomic power.

Given this, Mimura urged Edano to clarify the future of the fuel-cycle policy and how the nation will deal with spent nuclear fuel and the plutonium that is extracted during reprocessing.

Junichiro Miyashita, mayor of Mutsu, where a temporary storage facility for spent fuel is being built, said a zero-nuclear society and reprocessing are incompatible.

September 15,2012

Construction of Oma nuclear plant to be continued

http://mainichi.jp/english/english/newsselect/news/20120915p2g00m0dm065000c.html

Public support of phasing-out essential

Editorial: Public must back Japan's goal of ending nuclear power in 2030s

http://mainichi.jp/english/english/perspectives/news/20120915p2a00m0na004000c.html

The government has officially set a target of ending Japan's reliance on nuclear power plants by the 2030s. Both the government and members of the general public must be firmly determined to achieve this goal.

The goal is part of the government's new energy and environmental strategy, released on Sept. 14. It is of great significance that the government has reversed its atomic power promotion policy in the wake of the outbreak of crisis at the Fukushima No. 1 Nuclear Power Plant.

Still, specific measures incorporated in the strategy to overcome various challenges in achieving zero nuclear power are still half-baked. The government needs to draw up a clear road map toward the achievement of the goal so that it will not end up being just a slogan to attract voters for the next general election, set to be held within a year.

The new strategy calls for the early realization of a society not dependent on nuclear plants for power, and establishes three basic principles: strictly enforcing the regulations under which nuclear reactors must be decommissioned after 40 years in service; allowing the reactivation of idled reactors only after their absolute safety is confirmed; and refraining from setting up new reactors. It calls for the injection of all policy resources to ensure that all nuclear power stations will be shut down by the 2030s.

The adoption of the new strategy should be highly appreciated, as the government has settled the dispute over whether nuclear power should be eliminated or promoted, an issue that split public opinion. The decision was based on thorough national debate. Every member of the public must now show determination in upholding this decision and achieving the goal, taking on responsibility for Japan's future.

To that end, the government must minimize any hardship that the policy change lays on the public and present specific measures to achieve the goal in an effort to win understanding from society.

However, the new strategy delays compilation of specific measures to achieve the zero-nuclear power goal, which is problematic. Further problems are highlighted by the government's decision to continue the nuclear fuel cycle project, in which spent nuclear fuel is processed, and plutonium is extracted from the radioactive waste and used for fast-breeder reactors.

Japan already possesses a massive amount of plutonium -- enough to produce approximately 4,000 atomic bombs. One cannot help but wonder what Japan would do if it stockpiled plutonium further despite its goal of getting rid of nuclear power by the 2030s. The decision to continue the nuclear fuel cycle project was made to show consideration to Aomori Prefecture, which stores a huge volume of spent nuclear fuel as an interim measure, as well as to the United States, France and Britain, which are involved in Japan's nuclear fuel cycle project.

Tokyo should take the opportunity to review the fuel cycle project at an early date, show its determination to solve problems involving the final disposal of radioactive waste, and win understanding from Aomori Prefecture and other relevant parties.

The government should speed up its efforts to show how it will inject policy resources to achieve a zero nuclear power society.

The promotion of renewable energy and stepped-up efforts to save electric power and other forms of energy are indispensable in ending Japan's dependence on nuclear power. We urge the government to quickly carry out regulatory reform and work out measures to help develop technology toward that end.

If electric power charges increase sharply, it will deal a serious blow to Japan's economy. To trim a rise in electricity bills, it is essential to introduce a market mechanism into the electric power industry. The government intends to draft a plan to reform the electric power supply system, such as full liberalization of electric power retailing and the proposed separation of electric power generation and transmission. The government should work out a system to promote competition in the industry that will not destabilize electric power supply, learning from overseas examples.

Needless to say, the goal of a society that does not depend on nuclear power could end up a pie in the sky without understanding and cooperation from the public. The government is obligated to present convincing measures to achieve the goal of ending Japan's reliance on nuclear power for present and future society.

Gov't ambiguous and contradictory policy

September 18,2012

Ambiguous new nuclear policy

http://www.japantimes.co.jp/text/ed20120918a1.html

The government on Sept. 14 announced a new-long term energy policy that stated the government "will mobilize all available policy resources to reach 'zero operation' of nuclear power plants in the 2030s" to "realize as soon as possible a society that does not rely on nuclear power." The announcement shows that the people can, by publicly expressing their desires and coming together as one voice, pressure the government into ending reliance on nuclear power generation. Still, the people need to remain vigilant as **the government's policy is ambiguous and contains contradictions.**

The new policy is not a clear commitment to end Japan's reliance on nuclear power in the 2030s. In fact, even under the policy, Japan will still rely on nuclear power for about 15 percent of its total electricity in 2030, a goal which the government earlier tried to make people accept.

Of Japan's 50 nuclear power reactors, only the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Oi nuclear power plant are currently online. If the government, the power industry, other industrial sectors and the household sector make a serious effort, including further cutting their electrical use, Japan should be able to end its reliance on nuclear power at an earlier date. Many people are willing to pay higher electricity bills entailed by reduction and ending of nuclear power generation.

Businesses should look at the withdrawal from nuclear power generation as an opportunity for investment and innovation. Investment is needed for development of new technologies to promote renewable energy, improvements in power transmission lines to link green energy sources to end users, development of a smart grid and construction of alternating current cycle conversion facilities for two-way transmission of electricity produced in western Japan (60 cycles per second) and eastern Japan (50 cycles).

Under the new policy, a 40-year operation limit will be imposed on each reactor. But the relevant law allows a 20-year extension if certain conditions are met. It is not certain what specific policy the Nuclear Regulatory Commission will take. Keeping a strict watch over the government and the NRC is called for. Trade and industry minister Yukio Edano said that the three nuclear power plants now under construction will not be abandoned. This means that they will remain online at least into the 2050s.

The biggest contradiction in the policy is continuation of the nuclear fuel cycle to extract plutonium and uranium from spent nuclear fuel to make new nuclear fuel. Current agreements with Aomori Prefecture, which houses nuclear fuel cycle-related facilities, say that if the nuclear fuel cycle policy is abandoned, nearly 3,000 tons of spent nuclear fuel stored there must be returned to nuclear power plants. The agreements have forced the government to continue the policy. Technologies for the nuclear fuel cycle and for the permanent storing of high-level nuclear waste have not been established. There are **moral reasons as well, such as the mess we will leave for future generations**. The logical conclusion is that Japan should end the nuclear fuel cycle. Spent nuclear fuel storage at most nuclear power plants is already filling up and will reach capacity in the not-so-distant future, so there is even stronger reason to end nuclear power generation at an earlier date.

Nuclear fuel cycle not to be given up

September 18, 2012

FUEL CYCLE

Vicious nuclear fuel cycle proving difficult to break

http://www.japantimes.co.jp/text/nn20120918i1.html

By KAZUAKI NAGATA
Staff writer

Under the government's new energy strategy, announced last week, Japan will aim to end its reliance on nuclear energy during the 2030s. But the public was quick to spot a contradiction, as the strategy states that the nation's contentious nuclear fuel cycle policy will remain intact.

Why wouldn't the government decide to give it up at this point? Following are questions and answers about Japan's nuclear fuel cycle policy:

What is the nuclear fuel cycle?

The nuclear fuel cycle describes the stages the fuel goes through in its lifetime. Fuel that is only used once has an open nuclear cycle, whereas fuel that undergoes reprocessing is described as having a closed cycle. Since Japan must import practically all of its energy resources, it opted to pursue a closed cycle for its nuclear program.

The idea is to reprocess spent fuel by extracting the key materials, uranium and plutonium, and reuse them to generate power. Nuclear fuel is mainly made of uranium isotopes 235 and 238. The uranium 235 produces the fissile energy, while the uranium 238, which makes up the bulk of the fuel, produces plutonium, another fissile element, through the fission process.

Spent fuel usually contains a small amount of uranium 235 that can still generate fission. By extracting the uranium 235 and the plutonium and combining them with uranium 238, a fresh source of fuel can be produced.

When reprocessed fuel is used in a special type of reactor called a fast breeder, which uses sodium instead of water to cool the fuel, it increases the amount of plutonium in the fuel, allowing it to be extracted once the fuel is spent and reused.

In theory, a closed nuclear fuel cycle can produce fuel for hundreds of years.

What are the advantages of Japan's fuel cycle?

The fact that great amounts of energy can be produced through continuous recycling is attractive to resource-poor countries like Japan.

Some experts also say that since Japan is the only country without nuclear weapons to gain approval from the international community to sustain a nuclear fuel cycle, it would be unwise to get rid of such an intangible asset.

Another benefit is that reprocessing can reduce the amount of high-level radioactive waste produced by nuclear power plants — and the space needed to store it — by about half.

How successful has Japan been in developing its fuel cycle?

More than half a century has passed since the government committed to setting up the cycle in the 1950s, but implementation has dragged on for decades.

Fast-breeder reactors, while experimental, are a crucial piece of the plan. Japan has been betting on the Monju, a prototype fast breeder in Fukui Prefecture run by the Japan Atomic Energy Agency, to pave the way. Since it was built in 1991, however, the Monju has run into several problems, including a major fire triggered by a sodium-coolant leak that was later the subject of a coverup attempt. When sodium reacts with water, it catches fire.

Monju has never reached full-scale operation despite the ¥960 billion or so the government has poured into it.

In addition to fast breeders, reprocessing facilities are another key part of the cycle. But a reprocessing plant in Rokkasho, Aomori Prefecture, another experimental facility run by the Japan Nuclear Fuel Ltd., has experienced several problems in its quest for full operations and has cost more than ¥2 trillion so far.

Rokkasho is also building a plant to make MOX, an alternative reprocessed fuel made of mixed uranium oxides and weapons-grade plutonium that is designed for fast-breeder reactors.

Opponents of nuclear power have been pressuring the government to give up its fuel cycle quest in light of the prolonged failures of these two facilities.

Was the nuclear fuel cycle expected to take this long to set up when the policy was drafted?

No. According to the long-term nuclear power policy Japan compiled in 1961, a fast-breeder reactor was to be developed and in engaged in practical use by the late 1970s. That now looks unlikely to happen until the 2050s.

Hiroshi Tasaka, who was a special adviser to Prime Minister Naoto Kan during the Fukushima crisis, said it is obvious that the bureaucrats who drafted the fuel cycle plan were uninformed about the feasibility of the project.

In the planning stages, it is often difficult to say a project is scientifically impossible, but that doesn't necessarily mean it's feasible, said Tasaka, who has a doctorate in nuclear engineering and is a professor of business at Tama University.

"Seeing that the plan has been delayed this long, it means the policymakers didn't thoroughly examine its feasibility or that it is too difficult to achieve because of technological challenges. . . . I think it's a combination of both factors," Tasaka said.

On an NHK program about the fuel cycle in June, a former bureaucrat involved in the initial stages of drafting the fuel cycle policy said that because the United States was already developing a fast-breeder reactor for research in the 1950s, officials believed it would soon be put into practical use.

Meanwhile, professor Minoru Takahashi of the Tokyo Institute of Technology, an expert on fast-breeder reactors, said that Japan has the knowhow to build fast breeders for commercial use but that its safety technology needs further development before it can pass public muster.

Why isn't the government terminating the fuel cycle project if it is officially abandoning nuclear power?

In June, a panel set up by the Japan Atomic Energy Commission said that if the government decides to end the nation's reliance on nuclear power, there won't be any need to reprocess spent fuel and it should all be disposed of.

But it's not that easy. The central government is having difficulty winning over governments in areas that host all the facilities built for the cycle, especially Fukui and Aomori prefectures. These areas stand to lose huge government subsidies if the fuel cycle spigot is turned off.

Moreover, Aomori is concerned the central government may end up choosing it as a final disposal site for high-level radioactive waste because much of the nation's spent fuel is already sitting in storage at the Rokkasho facility.

The new energy policy states that the central government will keep its promise not to make Aomori a final disposal site.
Since the Rokkasho facility isn't running full bore yet, Japan has been shipping spent fuel to French and British facilities for reprocessing. The high-level radioactive waste produced as a byproduct is usually shipped back to Japan with the fuel. Both countries have called on Japan to make sure it will still be taken back.

The new energy strategy also gives consideration to the international community by saying the recycling program must be maintained to keep consuming plutonium for peaceful purposes and prevent nuclear materials from proliferating.

If the government ever decides to end the fuel cycle project, what would happen to the spent fuel?

Japan currently has about 14,200 tons of spent fuel and 29.6 tons of plutonium. Before the Fukushima disaster, it is estimated that the nation's reactors were producing 1,000 tons of spent fuel a year and were on course to exhaust all available storage space within six years.

If the fuel cycle is abandoned, the spent fuel would most likely be stored hundreds of meters underground and perpetually monitored because materials like plutonium remain dangerous for tens of thousands of years. The problem is, Japan hasn't found anywhere to build a permanent repository because no municipality will host it.

"The question of where to dispose of high-level radioactive waste has not been solved since I was a student (back in the 1970s)," said Tasaka, who researched high-level radioactive waste disposal methods for his doctoral thesis.
The waste eventually has to go somewhere, but Fukushima will make it incredibly difficult to find a spot.

If the Fukushima crisis hadn't occurred and the nuclear plants had kept their noses clean for another decade or so, it might have been possible to convince a municipality to host the final disposal site, Tasaka said. The disaster, however, has basically shattered those hopes, he said.

Given how difficult it is just to get municipalities to store lightly tainted tsunami debris from Tohoku, it will be challenging to find a site for storing high-level radioactive waste, Tasaka said.

The Weekly FYI appears Tuesdays. Readers are encouraged to send ideas, questions and opinions to hodobu@japantimes.co.jp

Japan's new energy policy exposed to IAEA

September 18, 2012

Japan details new energy plan at IAEA conference
http://www3.nhk.or.jp/daily/english/20120918_06.html

Japan detailed its new energy policy to the UN nuclear watchdog on Monday.

Senior vice foreign minister Ryuji Yamane told the annual conference of the International Atomic Energy Agency that Japan plans to reduce the country's dependency on atomic power to zero.

The conference began Monday in the Austrian capital of Vienna.

Yamane said Japan will increase its use of green energy to lessen its reliance on nuclear power.

The government says it aims to achieve zero reliance on nuclear energy by the 2030s. But the senior vice minister hinted at flexibility over the schedule, saying the road to zero reliance may not be a straight one.

In a separate meeting, Japanese officials discussed a new regulatory body to be launched on Wednesday.

The Nuclear Regulatory Commission will be independent from the industry ministry which oversees the current regulatory body.

Confirmation of contradiction

September 18, 2012

Nuclear plants under construction to continue
http://www3.nhk.or.jp/daily/english/20120918_20.html

The government will allow construction of nuclear plants that have already been started to continue, despite its recent ban on new plant projects.

The government's new energy policy limits nuclear reactor operation to 40 years, and bans construction of new plants or additional reactors.

Chief Cabinet Secretary Osamu Fujimura said on Tuesday that the ban does not apply to nuclear plants currently under construction. But he said the final decision is up to the nuclear regulatory panel.

Fujimura was referring to plants whose construction has already started in Aomori Prefecture, northern Japan, and Shimane Prefecture, western Japan.

Under the watchful eye of IAEA

September 19, 2012

IAEA to watch govt's N-plant deactivation
http://www.yomiuri.co.jp/dy/national/T120918003183.htm

VIENNA (Jiji Press)--The International Atomic Energy Agency will closely watch Japan's implementation of its new target of realizing a society without any active nuclear power plants in the 2030s, IAEA Director General Yukiya Amano said Monday.

Amano made the remark at a meeting with Ryuji Yamane, a parliamentary senior vice foreign minister, according to government officials.

Three reactors to be scrapped (maybe)

Govt to scrap 3 N-reactors in Mihama, Tsuruga
http://www.yomiuri.co.jp/dy/national/T120918003826.htm
The Yomiuri Shimbun

The government has decided to decommission three nuclear reactors at Japan Atomic Power Co.'s Tsuruga power plant and Kansai Electric Power Co.'s Mihama power plant, both in Fukui Prefecture, on the basis that nuclear reactors should not operate for more than 40 years.

This is the first time the government has mentioned decommissioning specific nuclear reactors after adopting its "innovative energy and environmental strategy," which aims to stop operations at all nuclear plants in the 2030s, last week.

"On the principle [of the 40-year rule], we're going to decommission [the reactors]," Chief Cabinet Secretary Osamu Fujimura said at a press conference Tuesday. The reactors Fujimura referred to were the **No. 1 reactor at the Tsuruga plant and the Nos. 1 and 2 reactors at the Mihama plant.**

The government's strategy stipulates it will strictly adhere to the rule limiting operations at nuclear reactors to 40 years. However, the decision of whether to actually decommission the reactors will be made by the nuclear regulatory commission, which is scheduled to be launched Wednesday.

Operations began at the Tsuruga plant's No. 1 reactor in March 1970. The Mihama plant's Nos. 1 and 2 reactors began operating in November 1970 and July 1972, respectively.

At present, the three reactors are the only ones in Japan that began operating more than 40 years ago.

Construction at Electric Power Development Co.'s Oma nuclear plant in Oma, Aomori Prefecture, and the No. 3 reactor at Chugoku Electric Power Co.'s Shimane nuclear power plant in Matsue has been suspended since the Great East Japan Earthquake last March.

Fujimura indicated the government would approve resuming construction of these facilities, saying, "The government won't call off construction permits or take back approval for building plans at nuclear reactors currently under construction."

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3 reactors sit above crush zone

Additionally, the three nuclear reactors and other buildings at the two plants are **located right above a crush zone,** which experts have pointed out may be an active fault.

The Economy, Trade and Industry Ministry's Nuclear and Industrial Safety Agency ordered JAPC and KEPCO to conduct additional drilling research on the plants' premises.

Within the next five years, six other nuclear reactors in the nation will exceed the 40-year operation limit.

Difficult to follow (2)

September 19, 2012

Govt. defends new energy policy

http://www3.nhk.or.jp/daily/english/20120919_37.html

The government is defending its decision to endorse a new energy policy without approving a document compiled by relevant ministers that calls for halting all nuclear reactors sometime in the 2030s.

National Policy Minister Motohisa Furukawa said on Wednesday that the new policy lays a clear course while retaining the flexibility to deal with any eventuality.

He said the Cabinet took into consideration that the new policy will be used as the basis for future environmental and energy measures. He stressed that the Cabinet had not changed the contents of the ministers' proposal.
Sep. 19, 2012 - Updated 08:49 UTC (17:49 JST)

Govt. approves new energy policy
http://www3.nhk.or.jp/daily/english/20120919_27.html

The Japanese government has approved its new energy policy, based on a proposal to halt all of Japan's nuclear reactors sometime in the 2030s.

A Cabinet meeting on Wednesday debated the proposal compiled by relevant ministers last Friday.

The meeting approved the proposal, which calls for consulting host municipalities and the international community on whether to continue nuclear power generation. But they didn't approve the document itself.

Some in Japan's business sector oppose halting nuclear power generation.

The United States, which signed a civilian nuclear pact with Japan, has also expressed concern.

Prime Minister Yoshihiko Noda said earlier that the government should come up with a strategy that has a stable direction but also r**emains flexible.**

Observers express doubt that Japan will really phase out nuclear power in the 2030s, as the Cabinet is suggesting it wants to respond flexibly to future changes in circumstances.
14h47 JST

Difficult to follow (1)

September 19, 2012
Cabinet fails to OK new nuclear strategy

Deadline for abolishing atomic energy by 2030s not endorsed

http://www.japantimes.co.jp/text/nn20120919x4.html

Kyodo, Jiji

In a shocking reversal, the Cabinet on Wednesday failed to approve the government's new energy policy by watering down its main goal — the elimination of Japan's reliance on nuclear energy by the 2030s — in a document needed to confirm the full power of its endorsement.

The document that the Cabinet signed off on stirred speculation that it gave special consideration to big business and governments that benefit from hosting nuclear facilities, the main entities opposed to the zero option.

The endorsement document, which the government put up for the Cabinet's official decision Wednesday, drops the 2030s deadline for eliminating atomic energy and states that the government will hold talks with local governments and the international community based on the policy and "implement (the policy) by conducting ongoing studies and review."

The full document on the government's new energy strategy was meanwhile attached to the approval document as "reference material."

The government usually takes up major bills and other important issues with the entire Cabinet to ensure the result will be endorsed as a "Cabinet decision" — signaling that future Cabinets will also be held responsible for the decisions approved. If major issues are only "reported to the Cabinet" or "acknowledged by the Cabinet," however, they are considered less binding than official "Cabinet decisions."

The turnabout came after the government's new energy strategy was reported to Tuesday's meeting of the national strategic council, which consists of several private-sector experts opposed the zero-nuclear policy.

Of the five private experts on the council, three were absent from Tuesday's meeting. But Japan Association of Corporate Executives Chairman Yasuchika Hasegawa, who was in attendance, requested that the council scrap the plan to abandon nuclear power, saying it was strange.

Nobuaki Koga, president of the Japanese Trade Union Confederation (Rengo), also questioned the strategy.
Internal affairs minister Tatsuo Kawabata said the government still needed to explain the principle behind the strategy.
The government, however, claimed Wednesday that it was still sticking to the new policy, with trade minister Yukio Edano telling a news conference that its full content was "authorized" by the Cabinet because the decision says the government will take actions "based on" the strategy.

The new energy strategy announced Friday states that Japan will devote all policy resources to end nuclear power in the 2030s.

Edano did not clarify why the strategy itself was not included in the Cabinet document, saying only that there are "several ways" to handle the government's decision-making at Cabinet meetings.

Nuclear disaster minister Goshi Hosono separately said it was "a better way to go through such decision-making as we still have various uncertain factors."

Business lobbies have grown more vocal in their criticism of the nuclear-free goal, fearing that giving up atomic power will lead to electricity rate hikes that will adversely affect the economy.

Not so difficult to follow

September 19, 2012

Business leaders criticize gov't nuclear power phaseout policy

http://mainichi.jp/english/english/newsselect/news/20120919p2g00m0bu039000c.html

TOKYO (Kyodo) -- Leaders of Japan's major business groups on Tuesday criticized the government for setting a target of completely phasing out nuclear power in the 2030s, warning that such a move will seriously affect the economy.

It is rare for leaders of the three business groups, including the Japan Business Federation, the nation's most influential business lobby, to jointly hold a press conference to oppose a specific policy.

The business leaders said it would become difficult for Japanese companies to keep jobs in the country, as the phaseout policy would lead to higher electricity prices. They added that the target had been set without thorough study.
"It is extremely regrettable that our voices were not heard at all," Hiromasa Yonekura, chairman of the Japan Business Federation, known as Keidanren, told the news conference in Tokyo. "We strongly urge the government to re-create a responsible energy strategy from scratch."

The Japanese government decided Friday that the nation will seek to phase out nuclear power completely sometime in the 2030s, approving a big shift in national energy policy following the Fukushima Daiichi nuclear plant disaster triggered by the March 2011 earthquake and tsunami.

Yonekura hinted that he may consider resigning from the government's national strategy council, where he serves as a private-sector member, saying, "I will consider various means," when asked whether he will continue in the post. Yonekura did not attend a meeting of the council held Tuesday.

At the press conference, Tadashi Okamura, chairman of the Japan Chamber of Commerce and Industry, said he is "utterly unconvinced" by the government's plan as it fails to clarify solutions for alleviating the burden on people from the phaseout or show a path toward realizing a high level of energy saving.

The group "wants the plan to be created after a strict investigation that comprehensively assesses safety, stable supply and security of energy, as well as measures to deal with global warming," Okamura said.

Yasuchika Hasegawa, chairman of the Japan Association of Corporate Executives, echoed the view, saying the government's decision will destabilize energy supply in Japan, an island country which is poor in energy resources such as fossil fuels and cannot receive electricity from other countries.

"It is important to secure mixes of various electricity sources as much as possible," Hasegawa said, adding that Japan also needs to contribute to the development of safe and effective nuclear power generation by utilizing its cutting-edge technology.

In Osaka, Shosuke Mori, chairman of the Kansai Economic Federation, also expressed opposition to the policy, saying, "We strongly urge (the government) to withdraw it immediately."

At a news conference, Mori said a rise in electricity charges stemming from increased fuel costs to make up for nuclear power generation would lead to an "industrial decline," and demanded the government hold thorough discussions and study on the energy policy.

Still trying to understand

September 19, 2012

Gov't stops short of approving no-nuclear power policy at Cabinet meeting

http://mainichi.jp/english/english/newsselect/news/20120919p2a00m0na015000c.html

The government stopped short of approving the innovative energy and environment strategy, which calls for an end to Japan's reliance on nuclear power by the 2030s, at a Cabinet meeting on Sept. 19.

Instead, the Cabinet adopted a statement that Japan will "put the strategy into practice in a flexible manner while constantly verifying and reviewing it" and "hold responsible discussions on the strategy with local governments hosting nuclear plants as well as the international community to win understanding from the public."

The government plans to draft a road map toward expanding the use of renewable energy and specific measures to prevent global warming by the end of this year.

At a news conference on Sept. 19, State Minister for National Policy Motohisa Furukawa emphasized that the government's policy remains unchanged.

"In the past, the Cabinet approved a policy in a similar way. We've never changed the direction of the new strategy," he said.

He made the remarks in an apparent reference to a previous Cabinet's adoption of a statement saying that the government respected the atomic power policy outline instead of endorsing the outline itself.

However, the statement fails to mention the goal of eliminating atomic power stations, representing a back-down in the government stance to pursue a society that does not rely on nuclear power in the wake of the outbreak of the Fukushima nuclear crisis in March 2011.

The government made the decision apparently to show consideration to the business world that opposes the total elimination of nuclear power.

Hiromasa Yonekura, head of the Japan Business Federation (Nippon Keidanren), had criticized the government on Sept. 18 for not taking into account the business world's opinions on the issue in working out the innovative energy and environment strategy. "The government didn't listen to the business world's views at all," he said. Yonekura had even threatened to resign as a member of the government's national policy council in protest.

However, the latest decision appears to have convinced him. "I guess the goal (of ridding Japan of all nuclear plants by the 2030s) has been effectively retracted," he said.

At a meeting of the Energy and Environment Council on Sept. 14, the government for the first time incorporated the goal of ending Japan's use of nuclear power by the 2030s in its new energy policy.

However, there are some inconsistencies in the government's policy on nuclear power.

The strategy calls for the continuation of the nuclear fuel cycle project, in which plutonium is extracted from spent nuclear fuel and used for fast-breeder reactors, to show consideration to Aomori Prefecture that hosts a spent nuclear fuel reprocessing plant. This is despite the fact that the project would be unnecessary if Japan were to get rid of all its nuclear plants.

Furthermore, Economy, Trade and Industry Minister Yukio Edano said the government will allow the construction of J-Power's Oma Nuclear Power Plant and the No. 3 reactor of Chugoku Electric Power Co.'s Shimane Nuclear Power Plant to continue. However, the new policy clearly states that no new nuclear plants should be built.

If these plants are built, they can be operated until the 2050s in accordance with the government's policy of decommissioning all nuclear reactors after 40 years of operation. This contradicts the goal of shutting down all nuclear power stations by the 2030s.

September 20, 2012

Govt fails to OK zero N-target document

http://www.yomiuri.co.jp/dy/national/T120919004464.htm

The Yomiuri Shimbun

The government decided Wednesday to refrain from approving a document on its new energy strategy, virtually shelving its target to halt operations at all nuclear power plants in the 2030s.

After adopting an innovative energy and environmental strategy last week aimed at reducing its reliance on nuclear energy to zero, the government came in for a barrage of criticism from the United States and municipalities hosting nuclear power plants.

Under the circumstances, the government apparently sidestepped the issue by having the Cabinet only approve a future policy regarding the new energy strategy.

The Cabinet ministers at the meeting agreed to "have responsible discussions with related municipalities and the international community on the matter regarding the new strategy, and flexibly carry out consistent verification and reexamination, while gaining public understanding."

The phrase calling for "zero nuclear power plants operating in the 2030s" was not included in the policy approved at the meeting.

In explaining the shift in position, Motohisa Furukawa, state minister in charge of national policy, said similar decisions had been made in the past.

As examples, Furukawa cited the Japan Atomic Energy Commission's policy outline and the council for regulatory reform's report on various proposals.

Chief Cabinet Secretary Osamu Fujimura defended the latest move by saying it was not aimed at making the contents of the new strategy obscure.

The policy approved at the meeting is aimed at dealing with energy policies later, he said.

However, Goshi Hosono, state minister for the nuclear crisis, indicated the government avoided approving the document because there is a possibility it may change its policy.

"There are various uncertain factors [in future energy measures]. As the government needs to face the issues firmly, flexibly and humbly, I think the way it was approved today was desirable," Hosono said.

In addition to the zero nuclear target, the new strategy offers three principles including strict adherence to a plan to limit nuclear reactor operations to 40 years.

The other principles call for nuclear power plants to resume operations only after the nuclear regulatory commission confirms their safety, and prohibit the construction of new reactors and the expansion of existing facilities.

"A mere reference material"

September 20, 2012

Editorial: Failure to approve new energy strategy defies calls to scrap nuke power

http://mainichi.jp/english/english/perspectives/news/20120920p2a00m0na009000c.html

The Cabinet's decision not to adopt the innovative energy and environment strategy has raised serious doubts about the administration's determination to end Japan's reliance on nuclear power by the 2030s.

The Cabinet of Prime Minister Yoshihiko Noda stopped short of adopting the strategy that calls for the elimination of nuclear power by the 2030s and instead approved a statement that the government will put the strategy into practice while constantly reviewing it in a flexible manner. In other words, the Noda administration regards the new strategy as mere reference material.

Since the government is not legally bound by the strategy, the policy of ending Japan's dependence on atomic power could be considerably watered down. The Noda administration should be aware of the gravity of the decision to get rid of nuclear plants it had made following national debate, and show its determination to achieve that goal.

A policy can be established as a Cabinet decision only after it is approved at a Cabinet meeting. Successive Cabinets are bound by all policy decisions made at Cabinet meetings unless they are revised. However, the Noda Cabinet's decision not to approve the strategy has raised doubts about whether it is committed to implementing the anti-nuclear move.

When the compilation of the new strategy was in its final stage, the Cabinet appeared to hesitate over its details.

The Noda administration declared that it will pursue a society without nuclear power in response to public opinion calling for the elimination of nuclear plants following the outbreak of the crisis at the tsunami-stricken Fukushima nuclear plant. Still, it chose to continue the nuclear fuel cycle project, in which plutonium is extracted from spent nuclear fuel and is used for fast-breeder reactors, out of consideration for Aomori Prefecture, where a massive amount of such radioactive waste is stored as an interim measure, as well as the United States, Britain and France, which have cooperated in the project.

The government had intended to seek legislation to implement the new strategy, but the plan was deleted in the final stage.

Despite these moves, the government retained its goal of getting rid of all nuclear plants in a reversal of its policy of promoting atomic power.

However**, the Cabinet abandoned adopting the new strategy bowing to stiff opposition voiced by local governments hosting nuclear power stations, the business world and the United States.**

While the government has watered down its policy of seeking to get rid of nuclear power, moves have emerged that could lead to continued dependence on nuclear power.

Although the strategy confirms that no new nuclear reactors will be built, Economy, Trade and Industry Minister Yukio Edano gave the green light to the resumption of construction work on two nuclear reactors, which had been suspended since the outbreak of the Fukushima nuclear crisis. In accordance with the policy of decommissioning nuclear reactors after 40 years in operations, the new reactors can be operated until the 2050s, which is contradictory to the goal of ending Japan's reliance on atomic power by the 2030s.

It is true that numerous challenges, including securing alternative power sources and preventing electricity charges from surging, must be overcome to get rid of all nuclear plants. It is only natural that opposition has been voiced to such a policy because the government has not shown how to overcome these challenges.

These challenges were pointed out during deliberations at the Advisory Committee for Natural Resources and Energy that lasted for six months as well as during national debate. Based on these discussions, the Noda Cabinet adopted the no-nuclear power policy.

As such, the government should adopt the new strategy at a Cabinet meeting. It should then work out specific measures to overcome challenges and ask the public for understanding and cooperation.

We urge Prime Minister Noda to clearly explain how to keep consistency between a series of revisions made to the strategy shortly before it was announced and the policy of ending Japan's dependence on nuclear power, and show his determination to achieve such a goal.

The 19th postponement of Rokkasho

Rokkasho N-fuel plant completion delayed

http://www.yomiuri.co.jp/dy/national/T120919004612.htm

AOMORI (Jiji Press)--Japan Nuclear Fuel Ltd. has decided to postpone the completion of its spent nuclear fuel reprocessing plant in the village of Rokkasho, Aomori Prefecture, by one year to October 2013, Japan Nuclear Fuel President Yoshihiko Kawai said Wednesday.

Kawai explained the plan to Ikuo Sasaki, vice governor of Aomori, during their meeting at the prefectural government office here. The company will report it to the central government shortly.

At a press conference, Kawai said the delay in the plant's completion is expected to increase the total project cost by about 110 billion yen. This is the 19th postponement.

German hand extended over nuke phase-out

German minister hopes for talks with Japan over nuclear phase-out

http://mainichi.jp/english/english/newsselect/news/20120920p2g00m0dm002000c.html

BERLIN (Kyodo) -- German Environment Minister Peter Altmaier expressed a desire Wednesday to begin consultations with Japan on abolishing atomic power generation, following the compilation of an energy strategy by the Japanese government that includes a plan to terminate nuclear power in the 2030s.

After the March 2011 accident at the Fukushima Daiichi Nuclear Power Station in Japan, Germany decided to end nuclear power generation by the end of 2022. Tokyo and Berlin have so far been holding working-level talks on renewable energies and other related issues.

Altmaier suggested that this framework be upgraded for him and Japanese Environment Minister Goshi Hosono to hold direct talks.

Speaking to foreign media, Altmaier said Germany "has already exchanged notes with Japan on various occasions." Given the drawing up of Japan's new energy strategy, he said that "the counterpart ministers should hold talks."

He stopped short of providing the timing and other specifics of such dialogue, saying arrangements are needed with the Japanese government.

German Chancellor Angela Merkel also expressed at a news conference Monday that Germany wants to strengthen cooperation with Japan over issues including the development of renewable energy and efficient power use.

A hopeful sign

September 21, 2012

Experts who value nuclear power plunged by 30 percent after Fukushima disaster

http://mainichi.jp/english/english/newsselect/news/20120921p2a00m0na019000c.html

HIROSHIMA -- Nuclear energy experts who believe nuclear power generation is valuable plunged by 30 percent following the Fukushima nuclear disaster, a survey by the Atomic Energy Society of Japan (AESJ) has shown.

The survey, reported at an AESJ meeting held at Hiroshima University on Sept. 20, is part of an annual awareness survey conducted by the society's expert panel on some 500 randomly selected urban residents and around 600 AESJ members. The latest survey compared the results from January 2011 and January 2012.

Asked whether nuclear power would be useful in their everyday lives 20 years from now, the ratio of experts who clearly answered it would be useful sharply plunged to 50.1 percent after the Fukushima disaster from 79.5 percent prior to the nuclear catastrophe.

Regarding a sense of security toward nuclear energy, the ratio of citizens who answered they feel "insecure" jumped to 70.8 percent after the Fukushima disaster from 49.8 percent prior to the crisis. The same poll on experts showed a surge to 17 percent from 5.3 percent prior to the disaster.

The percentage of citizens who believe that Japan should continue to use nuclear energy also dropped to 20.6 percent in the post-disaster survey from 43.8 percent in the pre-disaster poll. The same question on experts showed a decrease from 95.5 percent prior to the crisis to 85.4 percent after the disaster.

Those who support the idea of putting priority on the development of and nurture of human resources for renewable energy rather than the technological development of nuclear power rose to 79.4 percent among surveyed citizens from 59 percent prior to the nuclear disaster, and doubled among experts from 13.1 percent before the disaster to 26.9 percent.

"Nuclear energy experts are upset after experiencing a nuclear disaster. They are apparently trying to rethink the safety and value of nuclear power generation," said Kansai University professor Shoji Tsuchida, a member of the survey team.

What is the plan, M. Noda?

September 23, 2012

Japan's nuclear phaseout: Is it all smoke and mirrors?

http://www.japantimes.co.jp/text/fe20120923sh.html

By STEPHEN HESSE

On Sept. 14, Prime Minister Yoshihiko Noda's administration announced that Japan would end nuclear-power generation by 2040. Five days later his Cabinet failed to endorse the new policy; but on the same day, Sept. 19, Trade Minister Yukio Edano insisted that the government would still act "based on" the plan.

Confused? Here in Japan it seems everyone is.

Phasing out nuclear power is a not bad idea. On the contrary, it's the only reasonable and rational choice for Japan: a nation on the Pacific Rim of Fire where continuous seismic activity is a given; a nation where politicians, government bureaucrats and utility executives are so cozy that the citizens' interests are never the first priority; a nation rich in alternative-energy potential, including wind, solar, hydro, geothermal and oceanic.

And since no one is truly happy with Noda's plan, some might argue that this proves it is a reasonable compromise among competing interests. But ambiguity in laying out Japan's 21st-century energy policy is simply bad politics, and will likely accelerate Noda's fall from the political stage.

In a Sept. 15 article, the New York Times quoted Tetsunari Iida, director of the Institute for Sustainable Energy Policies — which supports an end to nuclear power and the adoption of renewable energies — saying: "It's trickery with words and numbers. The zero number might be symbolic politically, but in reality, it holds little meaning."

In the opposite corner stands Keidanren, Japan's powerful business federation, which is pro-nuclear. Keidanren Chairman Hiromasa Yonekawa termed the plan "unrealistic and unreachable."

"Industrial circles, which have been doing everything possible to maintain the level of employment, can never approve such a policy. It's a total contradiction to the government's growth strategy," a Yomiuri Shimbun editorial on its Sept. 15 English website quoted Yonekawa as saying.

Clearly, the country's two major daily newspapers, the Asahi and the Yomuri, are taking opposite sides in this battle — but both are critical of the plan.

"It was extremely irresponsible of the government to set out a 'zero nuclear power' policy without illustrating the details of how the nation is supposed to secure a stable supply of electricity," said the pro-nuclear Yomiuri. "Such a sloppy, immature scheme is totally unworthy of a national energy policy," the paper lamented.

The Asahi was more charitable, but still displeased.

"We welcome the government's decision, which is based on the fact that many Japanese are seriously concerned about the magnitude of the problems with nuclear-power generation. That said, the government cannot yet claim that it has offered a clear road map toward a future without nuclear power," that paper chided.

"The new energy strategy adopts three principles to realize that vision: Idled reactors will be restarted only if they are judged to be safe by a new nuclear regulatory commission; a 40-year limit on the lifetime of reactors will be strictly applied; and no new nuclear reactors will be built.

"But simply applying a legal lifespan of 40 years to the existing reactors would leave 20 reactors in operation in January 2030, and five reactors would be still on line even in 2040," the Asahi pointed out.

In the 18 months since the explosions and three meltdowns at the Fukushima No. 1 nuclear power plant, a majority of Japan's citizens and increasing numbers of politicians have come to support a non-nuclear future for the nation.
Seemingly intent on wooing this anti-nuclear majority, the Noda camp has proposed a vague no-nukes policy — but one that Noda himself does not fully support.

"The prime minister has not changed his opinion that nuclear power plants are important," notes the Yomiuri on Sept. 16, quoting a Noda aide.

But the same Yomiuri article cited a senior ministry official as saying, "(The strategy) is full of contradictions and can't be explained in a logical manner."

In an effort to make no enemies, Noda has made no friends. He and his supporters have crafted a proposal that has many Japanese hoping for zero nuclear power by 2040, or sooner, and their opponents scrambling to find loopholes that will allow nuclear-power generation to remain up and running decades beyond that date.

And since those who drafted the proposal have ensured that there is plenty of wiggle room to restart, to build and to extend the life of reactors in Japan, no one can fully embrace Noda's plan because no one knows where it will lead over the next 30 years.

Far better to be decisive and clear, as the German government has been with its stated intention and plan to make the country nuke-free by 2020.

Obviously many in the Keidanren wouldn't be happy if the Japanese declared a policy similar to Germany's, but at least the business sector would be able to invest in alternative energy sources with confidence, knowing that the government will not make random policy changes over the next three decades.

Beyond the Tokyo government's muddled policymaking, however, there is little doubt how Japanese residents feel about their own energy future.

An Asahi Shimbun public opinion poll conducted in early August found that 79 percent of respondents had either "not much confidence" (50 percent) or "no confidence" (29 percent) in the government's safety measures regarding nuclear power. Only 1 percent of the respondents declared themselves as having "great confidence" in those measures, while 18 percent expressed "some confidence."

Asked how much hope they placed in renewable energies such as solar and wind power, 12 percent of respondents said "not much hope." Significantly, however, 54 percent expressed "some hope," while 29 percent replied with "great hope."

Meanwhile, the same Asahi poll also asked respondents whether they felt that the national debate regarding nuclear-power production and future energy policy has been sufficient.

Just 10 percent felt the debate had been "sufficient," while 81 percent replied it had been "insufficient."

Japan's friends overseas, too, are confused and concerned — except perhaps Germany, which is likely wondering why Japan has taken so long to move toward the non-nuclear option, which Germany did in the spring of 2011 soon after the Fukushima explosions and meltdowns.

Britain, France and the United States are actively involved in the business of nuclear power, and all are closely tied to Japan's nuclear industry. Britain and France reprocess spent nuclear-fuel materials from Japan's reactors, separating uranium and plutonium from the spent fuels and returning these, and the remaining wastes, to Japan. Now these two nations are concerned that Japan's new policy direction might mean they are left holding Japan's lethal wastes.

According to media sources, even before Noda's 2040 plan was made public, Sir David Warren, the British ambassador to Japan, visited Chief Cabinet Secretary Osamu Fujimura to seek assurances that Japan intends to pick up canisters of its radioactive waste that sit waiting for shipment to Japan.

It has also been reported that the French ambassador, Christian Masset, will officially request that Japan promise to repatriate nuclear wastes.

Even France, which depends more heavily on nuclear power than any other nation, with 78.8 percent of its electricity coming from nuclear reactors, is having a change of heart.

On the same day Japan announced its new policy, French President Francois Hollande announced that France would begin to reduce nuclear-power generation, dropping to 50 percent by 2025.

But problems related to Japan's nuclear-fuel cycle don't end there.

Once wastes reach Japan, they are placed in a temporary storage facility in Aomori Prefecture, which presents Japan with another conundrum — namely, if it gets out of the nuclear-power business, what will become of its growing stockpile of high-level nuclear wastes that were supposed to be reprocessed and reused as nuclear fuel?

Noda's plan vaguely foresees maintaining the nuclear-fuel cycle, but to no purpose if nuclear-power generation is brought to an end. Having never agreed to become the final resting place for thousands of tons of deadly nuclear materials, Aomori officials are livid.

Nor has any other prefecture agreed to provide permanent storage of wastes, whether uranium or plutonium, which is not surprising given that deep underground storage remains the most commonly touted option worldwide — and subterranean Japan is rife with grinding tectonic plates, volcanic activity and shearing faults.

With ripples of worry, confusion and frustration rolling out in all directions from Tokyo, one can only wonder what the Noda administration was thinking and why they announced a plan prior to any consultation with domestic officials and foreign friends.

One of the clearest indications that Noda's 2040 plan was served half-baked is the fact that Noda's Cabinet was surprised when the U.S. government voiced serious concerns regarding Japan's tentative steps toward the zero option.
Failing to keep the U.S. informed — its closest ally and partner in nuclear-technology development — shows a startling lack of political acumen if indeed Washington got the same version of the story as the rest of us.

Here, skepticism is justified. It has been reported that U.S. officials were told the Noda plan simply suggests that Japan will pursue the zero option — but it does not mean that Japan has made a final decision to stop using nuclear power.
So let's cut the political obfuscation, Mr. Noda. Japan has been patient for 18 months and is tired of waiting. Take a stand and tell us: ***What is* Japan's plan for its energy future?**

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Double-dealing?

September 23, 2012

The endorsement that wasn't

http://www.japantimes.co.jp/text/ed20120923a1.html

The Noda Cabinet on Wednesday failed to endorse its new energy strategy announced five days before, which said that Japan will mobilize all available policy resources to achieve "zero operation" of nuclear power plants in the 2030s.

People will wonder what was the purpose of the government announcing the new strategy and suspect that it was only designed to get votes for the ruling Democratic Party of Japan in the coming Lower House election. What happened was deceptive.

The Cabinet's failure to endorse the new strategy could result in scrapping the zero-nuclear goal declared by it.

In the Cabinet decision, the new nuclear energy strategy is only treated as reference material. The decision only says that, in reference to the new strategy, the government will hold talks with local governments concerned and the international community, and will carry out future energy and environment policy while getting people's understanding and flexibly and incessantly reviewing and re-examining the strategy.

Prime Minister Yoshihiko Noda said in a TV program on Wednesday night that the goal to end Japan's reliance on nuclear power generation in the 2030s has not been changed. He also said that although four or five reactors will be online in the latter half of the 2030s in accordance with a 40-year limit on the operation of reactors, there is the possibility that these reactors may be decommissioned earlier with the spread use of renewable energy.

But given the Cabinet's failure to endorse the new strategy, his determination for the zero-nuclear goal appears suspect.

On Sept. 15, trade and industry ministry Yukio Edano said three nuclear power plants under construction will not be abandoned, hinting that they will remain online at least into the 2050s.

It is clear that the Noda Cabinet has succumbed to the pressure from local governments hosting nuclear facilities and from the United States, Britain and France, which are helping Japan with its nuclear fuel cycle.

Japan is commissioning the reprocessing of spent nuclear fuel, the main part of the cycle, to Britain and France. The new strategy also says that Japan will continue to push the nuclear fuel cycle. This contradicts the pursuit of the zero-nuclear policy and means that the government will pour a large amount of public money into projects that will not be needed.

Plutonium will also continue to pile up, causing a nuclear proliferation problem.

Chief Cabinet Secretary Osamu Fujimura said that how to implement the nuclear-zero policy will be entrusted to an advisory panel on energy policy for the trade and industry minister.

One wonders how such a panel can push nuclear-zero policy. Mr. Noda should take concrete actions to dispel suspicion that he is **double-dealing** and is not serious about ending Japan's reliance on nuclear power generation.

Don't build new reactors, says Edano

September 26, 2012

Gov't to urge power companies to withdraw plans to build nuke reactors

http://mainichi.jp/english/english/newsselect/news/20120926p2a00m0na016000c.html

The government is planning to urge power companies to voluntarily withdraw plans to build new nuclear power plants whose construction has not started, Minister of Economy, Trade and Industry Yukio Edano has revealed in an interview with the Mainichi Shimbun.

"The government's Innovative Strategy for Energy and the Environment has a certain binding force on nuclear power and the energy industry," Edano stressed during the interview on Sept. 25, referring to the government's zero-nuclear policy set to be achieved by the 2030s.

"We will examine whether the government will have power companies take voluntary responses in light of the government strategy or if any legislative measures are necessary," Edano said.

The government's energy and environment strategy clearly stipulates that "no new or additional nuclear reactors will be constructed" in accordance with the zero-nuclear policy, which seeks to halt the operations of all nuclear plants in Japan by the 2030s.

According to the Agency for Natural Resources and Energy, there are currently plans to build nine new nuclear reactors, including those in Aomori, Fukui and Shimane prefectures. Edano had earlier demonstrated his willingness to permit the continuation of three of those reactors, including the No. 3 reactor at the Shimane Nuclear Power Station.

However, the minister had not clarified how to handle the six remaining reactors whose construction is yet to be started -- including the No. 3 and No. 4 reactors at the Tsuruga Power Station in Fukui Prefecture and the No. 1 and No. 2 reactors at the Kaminoseki Nuclear Power Plant in Yamaguchi Prefecture. Utilities have already applied with the government for permission to construct reactors after obtaining approval from local municipalities.

Edano's latest remarks during the interview indicate that no new commencement of construction of nuclear reactors will effectively be permitted in order to achieve the zero-nuclear policy.

Ohma plant can be completed

September 28, 2012

J-Power to finish building Ohma nuclear plant
http://www3.nhk.or.jp/daily/english/20120928_25.html

A Japanese power company is likely to resume construction of a nuclear plant in northern Japan by the year-end.

Electric Power Development Company, also known as J-Power, started building the plant in Ohma Town, Aomori Prefecture, in 2008 with the goal of starting operation in November 2014. But the work was suspended after the nuclear accident at the Fukushima Daiichi plant in March last year.

J-Power decided to resume construction after the government compiled its new energy policy on September 14th. The new strategy allows work to continue on plants already under construction, while trying to end Japan's reliance on nuclear power by the 2030s.

Industry minister Yukio Edano visited Aomori Prefecture on September 15th. He told Governor Shingo Mimura that the Ohma plant could be completed.

J-Power plans to inform local municipalities of the decision next week.

The Ohma plant must pass a new safety standard to be drawn up by the Nuclear Regulation Authority before it can begin operation. The regulatory body was launched on September 19th.

NRA chairman Shunichi Tanaka says the company is better off resuming construction after undergoing screening based on the new standard. But he said it's the firm's decision to make, and he won't be asking it to wait.

Two other nuclear plants were already under construction before the March 11 disaster -- one in Aomori and another in Shimane, western Japan.

Should government look after nukes?

September 29, 2012

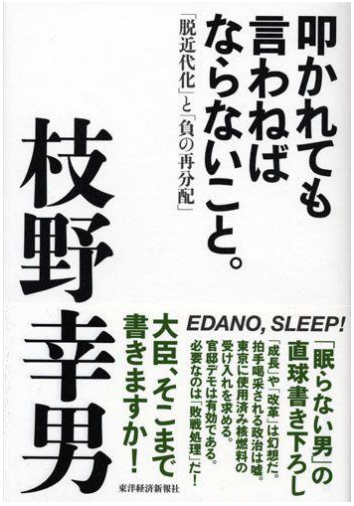
Edano's new book says government should run nuke plants

http://www.japantimes.co.jp/text/nn20120929a8.html

Kyodo

In a book published Friday, trade and industry minister Yukio Edano proposes that nuclear reactors be run by the state instead of utilities so the government can take the lead in creating a nuclear-free society.

Power of the pen: Industry minister Yukio Edano's book is titled "Tatakaretemo Iwaneba Naranai Koto ("What I Must Say Even if I Were to be Criticized)." KYODO



"Practically speaking, I see no alternative but to have nuclear plants run by the state," Edano says in his book "Tatakaretemo Iwaneba Naranai Koto" ("What I Must Say Even if I Were to be Criticized"), obtained Thursday.

Edano says in the 240-page book that atomic energy generation can't be left in the hands of the private sector, partly because of the overwhelming money required to compensate victims of major accidents.

But if nuclear power plants were managed by the state, the government would "have the unilateral power to decide on the operation of reactors and the timing of decommissioning them," Edano, who oversees the nuclear sector as economy, trade and industry minister, writes.

Edano notes that he personally hopes to "eliminate nuclear reactors as soon as possible," apparently to clarify his stance at a time when the government's new policy to phase out nuclear power by the 2030s has been amended by the Cabinet to override the deadline and give it lots of wiggle room.

His proposals call for experts to spend several years thoroughly assessing the safety level of all reactors nationwide, and urges that lowly ranked units be scrapped before they reach 40 years of operation — the period that the government set as their lifespan in the aftermath of the Fukushima nuclear crisis.

Japan would thus "move closer to zero nuclear power" generation, Edano argues.

End nukes as soon as possible

Industry Minister Edano says Japan must end nuclear use ASAP

http://japandailypress.com/industry-minister-edano-says-japan-must-end-nuclear-use-asap-3013823

By Adam Westlake / September 30, 2012 / No Comments

Taking a clear and adamant stance on the country's use of nuclear energy, Japanese Industry Minister Yukio Edano has said that nuclear power plants are too much of a risk, and they need to be shut down as quickly as possible. Edano feels that last year's Fukushima nuclear disaster, triggered by the March 11th tsunami, serves as more than enough proof that the price to pay for using nuclear power is far too high, especially for one of the world's most earthquake-prone countries. These opinions and more are shared in a book of Edano's policy views that was published on Friday.

As the government's primary spokesman during the unfolding of the Fukushima crisis, Edano feels nuclear power plants should be eliminated as soon as possible. His book is titled *Tatakaretemo Iwaneba Naranai Koto* ("Even if I get a beating, I must say this"). Like many, he thought the use of nuclear power

was a “masterpiece” of modern technology, but he has now come to the conclusion that Japan, with its population of 128 million, is not safe when that technology can succumb to natural disaster as easily as it did last year. While taking up his position whole-heartedly, he still admits that nuclear power cannot be eliminated immediately, it will take time to fight the “counteraction” and deal with the “debts” that the country’s use has created.

The other important message coming from Edano is that the monopoly in Japan’s power industry must be brought to an end. Interestingly he says that nuclear reactors should be run by the government as opposed to utilities, because the private sector cannot be trusted to work towards a nuclear-free country. He feels this would help speed up the phasing out of nuclear power, and be more beneficial for the promotion and development of renewable energies. While the Japanese government was seen as ready to adopt a long-term energy policy that would see the use of nuclear power brought to an end by the 2030s, that plan was amended by a recent Cabinet vote that gives it a much more vague deadline.

Full-scale public discussion should be launched

September 30, 2012

Gov't must iron out inconsistencies in nuclear strategy through true public discussion

http://mainichi.jp/english/english/perspectives/news/20120930p2a00m0na003000c.html

The government's Innovative Strategy for Energy and the Environment, which envisions an end to nuclear power by the 2030s, has now been compiled. However, the strategy's retention of the nuclear fuel cycle that has been a mainstay of the nation's energy policy to date has exposed inconsistencies, and it has drawn fire from both proponents and opponents of nuclear power.

The problems that the government shelved in the past as it advanced under the myth that nuclear power was safe have now erupted all at once. Rather than leaving the issue solely in the hands of nuclear power experts, politicians and bureaucrats, the government should take this opportunity to launch true, full-scale public discussion.

On Sept. 14, Prime Minister Yoshihiko Noda suggested that the government's Energy and Environment Council could revise the energy and environment strategy in the future, stating, "It's all the more irresponsible to make determined decisions when dealing with an uncertain future." The Cabinet decided against adopting the new strategy on Sept. 19, merely categorizing it as reference material. This has left its status enshrouded in uncertainty -- though it is supposed to be the backbone of the nation's energy policy.

In July and August, the government arranged "public discussion" on the nation's nuclear policy through public hearings and deliberative polling, asking residents for their opinions on the nation's future energy policy. In this discussion, public support for a zero nuclear power policy was predominant. In compiling the outcome of the discussion, State Minister for National Policy Motohisa Furukawa commented, "The public majority favors the realization of a society free from reliance on nuclear power plants."

In June the government outlined three options for the ratio of nuclear power generation to the total amount of electricity generated in 2030: zero percent, 15 percent, and 20-25 percent. For each of the options, it presented ratios of renewable energy and thermal power to total power generation, and probed the effects on the economy. Though it suggested that power costs could double under a zero nuclear power policy, many members of the public supported that option. Keio University professor Yasunori Sone, who headed the committee in charge of deliberative polling, said this suggests that people are prepared to shoulder the cost of implementing a zero-nuclear policy.

However, cost is not the only issue the public faces.

What is to become of the nuclear fuel cycle under which plutonium is extracted from spent nuclear fuel and used for fast-breeder reactors. The government decided that under a zero nuclear power option, it would directly dispose of spent nuclear fuel -- without reprocessing it. For the 15 percent and 20-25 percent options, it simply said it would handle the decision-making process in the event that either of those options was selected. In adopting such a stance, it has effectively removed the future picture of the nuclear fuel cycle from public debate.

A Cabinet Secretariat official explained that decisions on the future of the nuclear fuel cycle were not suited to public discussion, as there was a need to "carefully consider the relationship with local bodies" where nuclear fuel cycle facilities are located.

The cost of failing to hold in-depth debate on the nuclear fuel cycle surfaced during the compilation of the energy and environment strategy. A proposal from the ruling Democratic Party of Japan (DPJ) compiled ahead of the formation of the new strategy set a target of zero dependence on nuclear power plants in the 2030s.

This provoked a backlash from the Aomori Prefectural Government and other local bodies that have accepted spent nuclear fuel on the premise of reprocessing it under the nuclear fuel cycle. The bodies suggested that if the cycle were abandoned, then they would send the spent nuclear fuel back where it came from. If that were to happen, the pools for spent nuclear fuel at the nation's nuclear power plants would quickly fill up, and the operation of nuclear plants would have to be halted before the 2030s.

On the other hand, if the reprocessing of spent fuel is allowed to continue under a zero nuclear policy, then Japan's stockpiles of plutonium will grow. As plutonium can be used in nuclear weapons, this could raise concerns in international society that Japan is intending to arm itself with nuclear weapons.

Attempts to balance the ideal of a zero nuclear society with the reality of nuclear waste that has no place to go have resulted in phrases in the energy and environment strategy and the government's statements since the adoption of the strategy becoming rife with inconsistencies. While stating that it will aim for zero reliance on nuclear power plants, the government maintains that it will continue to reprocess fuel -- a process based on the premise of operating nuclear power plants. Furthermore, if the rule of strictly applying a 40-year limitation on the operation of nuclear power plants is allowed to stand together with a zero nuclear power policy, one would expect the construction of nuclear plants to be out of the question. Nevertheless, Minister of Economy Trade and Industry Yukio Edano has permitted continued construction of nuclear power facilities that power companies have already started to build.

The reason many residents have sought a society free of nuclear power is that they distrust the government in its rush to restart nuclear power plants and create a new energy policy when the safety of nuclear power plants remains uncertain.

Nuclear disaster minister Goshi Hosono has stated that the newly formed Nuclear Regulation Authority will rebuild Japan's battered nuclear safety regulations, but this rebuilding is yet to come. In that case, it was unreasonable, one could say, for the government to go deciding on a future energy policy at this stage. Still, I hold hope that widespread public knowledge about the inconsistencies will lead us in the right direction.

During my coverage of the compilation process for the new strategy from April this year, I felt uneasy seeing the large number of politicians who trumpeted support for zero dependence on nuclear power without looking at the actual situation. I, too, have hoped to see reduced dependence on nuclear power. But for this to happen, we must persistently pursue innovation in renewable energy technology and methods to handle nuclear waste.

It is the role of politicians, while promoting ideals, to look squarely at the actual situation, ask the public about the issues, and then make policy decisions. I hope that the government's current floundering will produce a preface for searching out plausible paths to a society free from nuclear power. ("As I See It" by Hiroshi Hisata, Tokyo Business News Department)

Japan must stop this "zigzagging" on energy policy

Monday, Oct. 1, 2012

THE VIEW FROM EUROPE

Flip-flop on no-nuclear energy policy bodes ill for the future of Japan

http://www.japantimes.co.jp/text/nb20121001ve.html

By JOCHEN LEGEWIE
Special to The Japan Times

On Sept. 14, the Japanese government presented to the public a new national energy strategy. This long-awaited plan included as its focal point the objective of eliminating nuclear power by the end of the 2030s. Less than a week later, however, Japan's hopes for a nuclear-free world were dashed. In the face of strong opposition from the business community, municipalities and prefectures that host nuclear reactors and fuel reprocessing plants, and from the United States, Great Britain and France, the government decided to backtrack on its initial aspirations.

The Cabinet eventually approved the new energy plan on Sept. 19, but only by dropping the core reference to the 2040 deadline in a separate document attached to override the plan. In other words, Japan has gone back to the drawing board on whether to let nuclear power stay in its energy mix.

This **zigzagging on policy** has left many in and outside Japan scratching their heads. Both proponents and opponents of nuclear energy are equally frustrated because neither group's concerns are being properly reflected by the government's wavering course. The worst long-term damage, however, is probably being caused by the shaken belief that Japan has a predictable future in energy.

The announcement of the new energy strategy on Sept. 14 was filled with contradictions and ambiguities. While aiming to close nuclear power plants by the end of the 2030s, the strategy allows work on plants already under construction to continue. It also calls for shutting down all reactors but continuing the reprocessing of spent fuel. Likewise, the goal of tripling electricity output from renewable energy sources

by 2030 sounds hollow because the government does not offer any plans for generating the funding required to do so.

In addition to these factual contradictions, members of Prime Minister Yoshihiko Noda's Cabinet have been making inconsistent remarks over the past weeks. While the government told Fukui Gov. Issei Nishikawa on Sept. 13 that it was planning to shut down the Monju fast-breeder reactor, science and technology minister Hirofumi Hirano told Nishikawa five days later that research and development activities at Monju would continue.

Chief Cabinet Secretary Osamu Fujimura even told a news conference on the morning of Sept. 17 about plans to decommission three nuclear reactors in Fukui Prefecture — only to retract the remarks later that afternoon.

On the evening of Sept. 23, Noda emphasized on TV that "abandoning nuclear power is a target that will not be undermined." However, trade minister Yukio Edano offered a clarification, admitting, "Whether we can become nuclear-free by the 2030s is not something to be achieved only by policymakers. It also depends on the will of electricity users, technological innovation, and the international environment for energy in the next one or two decades."

What remains for the time being represents a temporary victory by the formidable coalition of pronuclear interest groups. But as long as unpredictability and immature communications continue to shape energy policy and public perception at home and abroad, there will be no real winner.

Japan is in desperate need of a more serious debate on its energy future. The government should take the lead in creating a proper framework and timeline for this debate. It must bring to the table representatives from all ends of society, including the growing group of outspoken nuclear opponents.

In May, I argued here that Japan should borrow a page from the book of the German government. Right after the Fukushima disaster, the German government installed the so-called Ethics Commission, made up of famous and highly respected individuals from academia, the church and other parts of society, including a business representative, to discuss the nation's future nuclear policy.

Japan needs to develop its own approach in a political environment that lacks a history of long-term public discussion of nuclear power as Germany had, and which faces significant differences with Germany in terms of geography, geopolitics and other conditions.

But it is clear that Japan cannot afford to keep zigzagging on energy policy much longer. If it continues, the fears of both sides in the nuclear debate might come true.

On the one hand, the continued unpredictability in policy will likely make energy-intensive businesses leave Japan. It will effectively dampen any further exports of nuclear technology while preventing the development of a strong new industry around renewable energies at the same time. It will even worsen relations with the U.S. and other Western allies that want Japan to stick with nuclear power but most of all request planning security.

On the other hand, if nuclear energy stays, it might lead to another major accident in Japan and thus — combined with above — result in the worst thinkable overall scenario.

Facts and perceptions need to be taken into the equation as well. There are many ways to do so. One would be to start an annual international summit to discuss the challenges and solutions to the energy questions of today and tomorrow. The obvious annual date would be March 11, with a venue either in Fukushima or Sendai.

The Japanese government owes it to its people, and also to the international community, to take the lead in addressing nuclear and other energy issues in a proactive and sustainable way. If it did so, it might even be perceived as leading in a responsible way.

Jochen Legewie is president of German communications consultancy CNC Japan K.K. (See his blog: www.cncblogs.jp)

What is to become of the Atomic Energy Commission?

October 2, 2012

Atomic panel quits nuclear policy work
http://www3.nhk.or.jp/daily/english/20121002_19.html

A government panel in Japan is calling off work to formulate a new policy outline on nuclear energy. Drafting the outline was the Atomic Energy Commission's main duty for more than 50 years.

The commission met on Tuesday and decided to disband a conference of experts that had been reviewing the outline since 2010.

In response to last year's Fukushima nuclear accident, the government in September announced future nuclear energy policy would be decided by a ministerial conference on energy and the environment.

Commission members told the meeting that given the new energy policy, the commission's role would have to change.

Some said they regretted having to disband a conference of nuclear experts.

The Atomic Energy Commission has been formulating nuclear energy guidelines about once every 5 years since 1956. The task has been regarded as the commission's most important duty.

Observers say the commission -- a key proponent of nuclear power -- will now come under wholesale review. They say disbanding the organization is among the possible options.

The government's new energy policy calls for all resources available to be invested in efforts to realize a country free from nuclear power in the 2030s. But the policy also allows for a conditional restarting of existing nuclear plants and continued recycling of nuclear fuel.

Even ministers don't see eye to eye on govt's energy policy

October 2, 2012
New ministers trade barbs over Japan's controversial energy strategy

http://mainichi.jp/english/english/newsselect/news/20121002p2g00m0dm024000c.html

TOKYO (Kyodo) -- New Cabinet ministers on Monday traded barbs over the government's recently compiled energy strategy, which is criticized for being inconsistent because it aims to phase out nuclear power generation by the 2030s without terminating a long-standing policy to recycle spent fuel.

Science minister Makiko Tanaka, known for her outspokenness, called the strategy "very contradictory," but national policy minister Seiji Maehara hit back over her remarks, saying she may have been speaking "roughly."

Continuing the policy to reprocess spent fuel and reuse extracted plutonium and uranium as reactor fuel is seen as reflecting the government's consideration of the repercussions on local governments that host related facilities and on the United States, which has close ties with Japan over nuclear businesses.

"The policy intends to pay utmost respect to the stakeholders that have cooperated (with the fuel recycling policy) and to take time for discussion to resolve problems...so I think calling it contradictory is a bit rough," Maehara told a press conference.

By retaining Yukio Edano as the economy, trade and industry minister, who was involved in crafting the strategy, the government indicated that there is no change in its stance to seek to break away from atomic power generation in the wake of the Fukushima Daiichi nuclear power plant disaster last year.

But the pathway toward realizing that goal appears to be unclear by the government's announced intention to continue the fuel recycling program and to allow construction to continue of reactors which already received the approval of authorities.

No nukes in Kaminoseki

October 5, 2012

Edano says no to Kaminoseki nuclear plant project
http://www3.nhk.or.jp/daily/english/20121005_23.html

The head of Japan's industry ministry says it will not allow a power company to start building a nuclear plant in Yamaguchi Prefecture, western Japan.

At a news conference on Friday, Yukio Edano referred to a plan by the Chugoku Electric Power Company to build the plant in Kaminoseki Town.

He said the government's new energy policy rules out new construction of nuclear plants, and that Chugoku Electric's plan is subject to this principle.

The policy adopted last month centers on a pledge to try to end Japan's reliance on nuclear power in the 2030s.

But the government says power companies can restart ongoing plant construction that has been suspended since last year's nuclear disaster in Fukushima.

Edano also said plants that have been offline since the disaster could restart if the nation's new nuclear regulator confirms their safety.

He said that under the policy, plants deemed safe by the Nuclear Regulation Authority are to be used as an important power source.

The position appears to contradict remarks made by the authority's chief Shunichi Tanaka on Wednesday. Tanaka said that although the regulator will judge plant safety, the government and power companies should ultimately seek local consensus before deciding whether to resume plant operations.

What will happen in Yamaguchi?

October 6, 2012

Gov't not to allow new nuclear plant in Yamaguchi: Edano

http://mainichi.jp/english/english/newsselect/news/20121006p2g00m0dm014000c.html

TOKYO (Kyodo) -- The Japanese government will not allow the construction of a new nuclear power plant in Yamaguchi Prefecture, western Japan, in line with its policy of not endorsing the building of new reactors, industry minister Yukio Edano said Friday.

The construction of the nuclear complex by Chugoku Electric Power Co. in the town of Kaminoseki is "subject to the principle of not constructing new reactors," the minister of economy, trade and industry told a press conference.
Despite Edano's remarks, Chugoku Electric filed an application Friday afternoon with the Yamaguchi prefectural government to extend its license, effective for three years and due to expire midnight Saturday, to reclaim the planned construction site.

The utility's application appears to be aimed at advancing construction of the plant at a time when the government's new energy strategy has not been officially adopted.

The government of Prime Minister Yoshihiko Noda decided last month not to allow the construction of new reactors under a new energy policy that aims to end nuclear power generation in Japan in the 2030s. But the Noda Cabinet refrained from officially approving the strategy.

The prefectural government is set to examine the utility's application for around a month but is unlikely to approve extension of the license, sources close to the matter said.

Edano said he had not been informed of the request filed by Chugoku Electric.

In October 2008, Chugoku Electric secured the license from the Yamaguchi prefectural government to landfill the plant construction site in the town on the coast of the Seto Inland Sea, beginning reclamation work in October 2009.

But due to opposition from residents of an island 4 kilometers from the planned nuclear plant site, there has been little progress on construction.

The work came to a halt after the Fukushima nuclear disaster erupted in March last year, following requests from the governments of Yamaguchi Prefecture and Kaminoseki.

Nuclear plants account for 8 percent Of Chugoku Electric's total power generation, the lowest level among Japan's 10 regional utilities excluding Okinawa Electric Power Co., which does not operate a nuclear power plant.

Chugoku Electric President Tomohide Karita has expressed readiness to build the new nuclear power plant, citing the need to supply power stably and tackle climate change.

In December 2009, the utility filed a request with the central government to build two nuclear reactors at the planned Kaminoseki complex, but the state is yet to grant permission.

Utilities hold on to nuclear reactor plans despite minister's remark

http://mainichi.jp/english/english/newsselect/news/20121006p2g00m0dm049000c.html

TOKYO, (Kyodo) -- Economy, Trade and Industry Minister Yukio Edano has made it clear the government will not allow construction of the Kaminoseki Nuclear Power Station planned by Chubu Electric Power Co., underscoring its policy of prohibiting new nuclear power reactors, except those already being built.

But with the policy lacking any legal basis to stop construction, the power company does not appear to be giving up on its preparations. With a general election looming, the utility also appears to be hoping for the formation of a pro-nuclear government that could overturn the no-reactor policy.

After a Cabinet meeting Friday, Edano told reporters, "If any action is taken by Chubu Electric, I will consider a response that will account for it," a remark widely taken to mean he is determined to check any moves for pushing ahead with the construction of the Kaminoseki plant in Yamaguchi Prefecture.

Under a new energy strategy worked out in September, the government of Prime Minister Yoshihiko Noda decided to phase out nuclear power generation in the country in the 2030s and not to allow the construction of new reactors.

A total of 12 reactors are currently planned at new or existing nuclear power stations in Japan. Construction has not yet started at nine of them. They include two reactors at Kaminoseki, a new plant, and two additions at Japan Atomic Power Co.'s existing Tsuruga Power Station in Fukui Prefecture.

Meanwhile, permits were issued for the remaining three reactors in line with the law for regulations on nuclear reactors and materials, with construction of them having already started.

But work has been suspended since March last year when much of the nation's nuclear power infrastructure was halted after the Great East Japan Earthquake crippled the Fukushima Daiichi Nuclear Power Station.

The government is accommodative of allowing the resumption of construction for the three facilities -- Electric Power Development Co.'s Ohma Nuclear Power Plant in Aomori Prefecture, the third reactor at Chubu Electric's Shimane Nuclear Power Station in Shimane Prefecture, and the first reactor at Tokyo Electric Power Co.'s Higashidori Nuclear Power Station.

The prospects of work restarting appear dim at Higashidori, however, because Tokyo Electric is focusing its efforts on keeping its Fukushima Daiichi plant stable.

Despite the industry minister's remark of not allowing construction of Kaminoseki, power companies are reluctant to give up their plans. "We would like to move forward with an unflagging resolve," an official of Japan Atomic Power has said of the company's reactor plan.

Chubu Electric, meanwhile, requested an extension Friday of a reclamation permit at a site planned for the Kaminoseki plant. The utility issued a comment containing the nuanced suggestion that the government has not necessarily decided to stop the construction of the plant. "While the government is engaged in deliberations, (the request for the permit) is intended to keep the status quo for the time being," it said.

Against the backdrop of these utility officials' thinking is perhaps a lack of concrete measures by the government to terminate plans for the reactors altogether.

Issuing a permit for building a nuclear power plant and authorization of a construction schedule have been shifted to the Nuclear Regulation Authority, created in September as a unit of the Environment Ministry, in an overhaul of the government's setup for overseeing the nuclear power industry.

The authority has indicated that it will strictly assess the safety of reactors. Chairman Shunichi Tanaka said, "We stand on a position of withholding any judgment that may have policy implications," a remark suggesting there may be some room left for the government to approve construction of the nine reactors.

The government has also stopped short of solidifying its new energy strategy by issuing a Cabinet decision which would have made the strategy binding even after a government change.

Electric utilities are apparently hoping that the government would make a turnaround and approve reactor construction if the Liberal Democratic Party takes power. Many LDP lawmakers are known to be reluctant to accommodate a policy of eliminating nuclear power.

Host communities of the planned reactors, meanwhile, will likely face a financial pinch as they have been recipients of huge subsidies for the promotion of nuclear power.

The town of Kaminoseki, for instance, has written a budget of around 4.2 billion yen for fiscal 2012 that began April 1. Of that amount, roughly 1.3 billion yen is financed by nuclear subsidy payments.

In the face of imminent financial difficulty, a town official expressed hope for some other measures to be taken for the town's finances. "We have cooperated with the national program for 30 years, and we hope consideration be given to our stand."

Chief Cabinet Secretary Osamu Fujimura at a news conference Friday provided his take on Chubu Electric's request for an extension of the reclamation permit. "I took it to mean they need time to make coordination with various local stakeholders."

Nukes expansion by "fait accompli"?

October 8, 2012

Nuclear industry steamrolls on

http://www.japantimes.co.jp/text/ed20121008a1.html

The government's Sept. 14 new long-term energy policy of "mobilizing all available policy resources to reach 'zero operation' of nuclear power plants in the 2030s" contains various contradictions, including the continuation of efforts toward an operational fuel cycle that makes new nuclear fuel from spent fuel (after extracting plutonium and uranium).

Focus on this cycle likely assumes that today's nuclear power plants will continue operating. It will also result in the accumulation of surplus plutonium, an ingredient of nuclear weapons.

The 40-year limit to be imposed on the operation of a nuclear power plant under the policy is another contradiction. The day after the policy was announced, trade and industry minister Yukio Edano said that suspension of the construction of three nuclear power plants would be lifted. This means that these plants' reactors will remain online at least into the 2050s. Mr. Edano's statement soon had an effect. On Oct. 1, Electric Power Development Co. (J-Power) resumed construction of its Oma nuclear power plant in Oma, Aomori Prefecture.

This is the first case of nuclear plant construction resuming since the accident at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant. Work on the Oma plant started in May 2008, but was suspended when the massive earthquake hit the Pacific coast areas of the Tohoku region on March 11, 2011.

Given the 40-year operation rule, the resumption of the construction of the Oma plant clearly contradicts the government's policy of ending nuclear power generation in the 2030s. J-Power President Masayoshi Kitamura made it clear that completion of the Oma plant will be in the middle of 2016 at the earliest, at least 1½ years later than scheduled (November 2014).

The government should put itself on an unambiguous zero nuclear path, as desired by a majority of the public.

Recent developments, including the resumption of the construction of the Oma plant and the Noda Cabinet's failure to officially endorse the new long-term energy policy, hint at the possibility that the government and the power industry will try to continue and expand nuclear power generation by *fait accompli*.

After the Fukushima nuclear crisis, the government decided to expand the urgent protective action planning zone in the event of a severe nuclear power plant accident from the traditional 8-to-10-km radius from a nuclear power plant to a 30-km radius.

Hakodate City, within 30 km of the Ohma nuclear power plant, is against the resumption of the plant's construction and plans to file a lawsuit to stop it. The plant will be the world's first nuclear power plant that will operate solely using MOX fuel (containing a blend of plutonium and uranium).

Since the Nuclear Regulatory Commission has not yet worked out new, post-Fukushima safety standards for nuclear power plants, it must be asked why J-Power has decided to resume construction now.

Jizo as Japan's guide

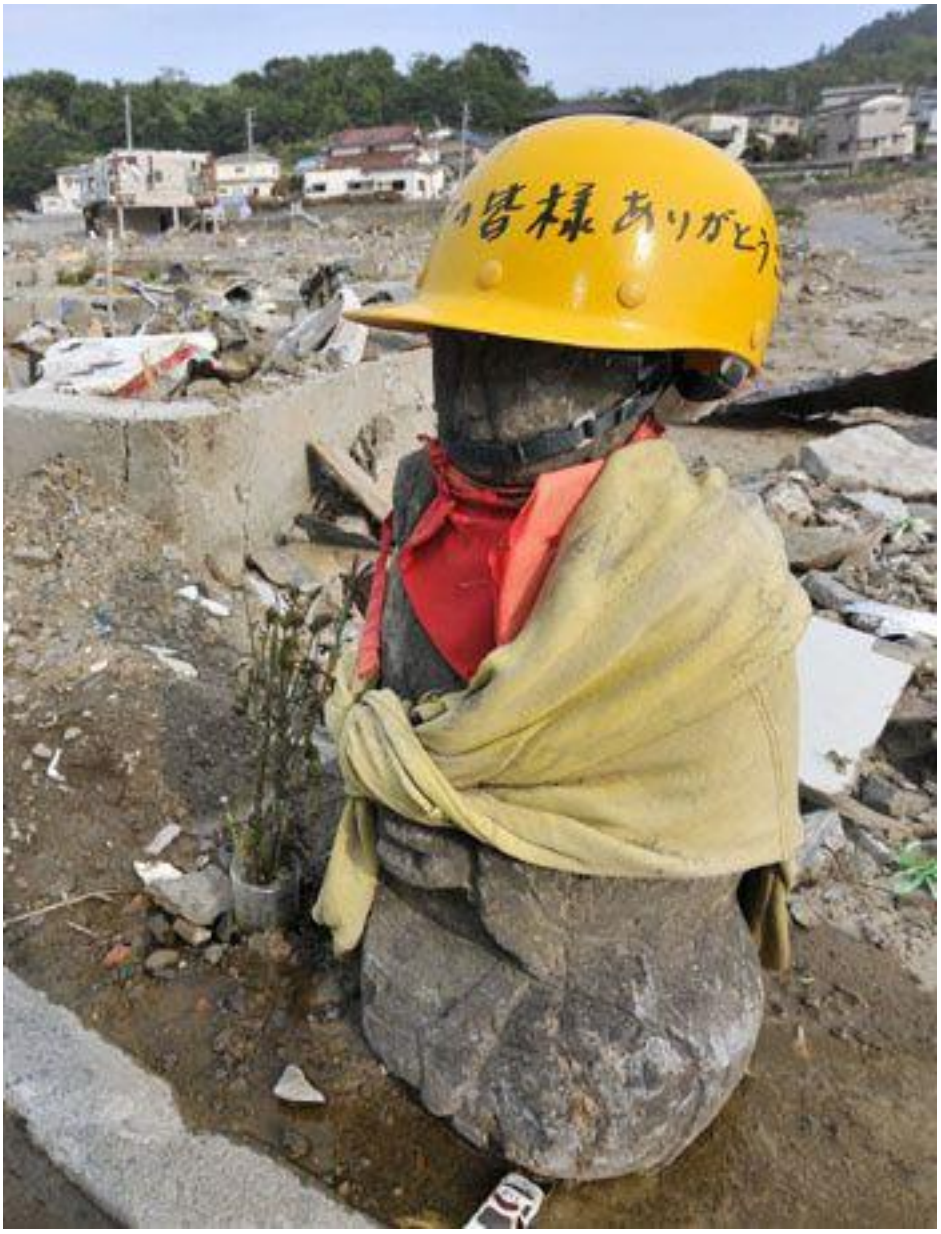
October 9, 2012

Let Inoue's antinuclear Jizo, forged in Hiroshima, guide Japan's future

http://www.japantimes.co.jp/text/fl20121009hn.html

Dear Prime Minister Yoshihiko Noda,

Man for the moment: A statue of Jizo, protector of children and travelers, stands at a roadside in the town of Onagawa, Miyagi Prefecture, three months after the March 11, 2011, disasters. A message on his helmet reads "Thank you, everyone."
KYODO



Around the time of the recent anniversaries in Hiroshima and Nagasaki, I began reading writers' accounts and treatments of the atomic bombings. I came across Hisashi Inoue's play "The Face of Jizo."

Inoue was born in Yamagata Prefecture. In some of his other works he dealt with the issue of Tohoku people who moved to Tokyo in desperate search of work.

He first got the idea to write "The Face of Jizo" in the early 1960s when he was working for NHK and was sent to Hiroshima for a summer to cover the antinuclear movement. The play did not premiere until 1994. Inoue died on April 9, 2010.

The play is about a young woman, Mitsue, who survived the Hiroshima bombing but feels conflicted and guilty that she lives while her family and friends perished. Due to this emotional state she is unable to move forward.

Her father, Takezo, was amongst those close to her who died. Takezo's ghost visits Mitsue and encourages her to move on with her life. Specifically, he urges her to let herself fall in love with Kinoshita, a young academic who expresses an interest in Mitsue. Takezo also relays to his daughter her responsibility to tell the next generation about the horrors of the bomb, so that humanity does not repeat history.

Takezo is a manifestation of Jizo, the Buddhist deity known as the protector of children. The title of the English translation alludes to a scene in which Mitsue recognizes the similarity between a Jizo statue with half its face melted away and her father's face that was burnt by the bomb. Thus, an antinuclear message runs through the story that employs a symbol advocating for the protection and wellbeing of children.

These two points bring to mind the disturbing news reports that I've been reading this summer. Namely, the reopening of schools that were not too long ago inside the designated evacuation zone around the Fukushima No. 1 nuclear plant. Children's safety should be the No. 1 priority in this situation. But instead of taking precautions, Japan is still pushing to export nuclear power in Southeast Asia, in areas critics believe are susceptible to natural disasters.
In regards to nuclear weapons, a decision has been made to revise the Atomic Energy Basic Law with an added new principle stating that nuclear power will "contribute to national security," which some claim will pave the way for the nuclear armament of Japan.

As mentioned above, Jizo is believed to look after children, and Inoue fashioned a unique antinuclear Jizo. Statues of Jizo are the most prevalent Buddhist iconography found in contemporary Japan. They are placed just about everywhere — on roadsides, mountain paths, riverbanks, seashores and, of course, inside temple precincts.

I think, Prime Minister, that these statues serve well as constant reminders for government officials and society as a whole to act responsibly and keep in mind the generations to come. Being everywhere, they cannot be avoided, just like the issues right in front of us cannot be ignored.

Japan is at a crossroads and we are all wondering which way she will choose to proceed. The other popular role of Jizo is as the guardian of travelers. Will Inoue's antinuclear Jizo be allowed to serve as Japan's guide?

JASON BARTASHIUS
Kyoto

Japan faces important challenges - Nuke phase-out "irresponsible" says Abe

October 10, 2012

Abe lambasts Noda's nuclear phaseout plan as "irresponsible"

http://mainichi.jp/english/english/newsselect/news/20121010p2g00m0dm027000c.html

TOKYO (Kyodo) -- Main opposition Liberal Democratic Party leader Shinzo Abe on Tuesday lambasted the government of Prime Minister Yoshihiko Noda for its plan to phase out the nation's nuclear power plants in the 2030s as "irresponsible."

Abe's remarks were aimed at rebuilding a close relationship with Japan's most influential business lobby, which has argued that the policy would lead to higher electricity prices and deal a serious blow to the broader economy.

"Responsible action is necessary. We'll reduce the percentage of nuclear power plants, but we don't hold the view that we'll reduce (dependency on nuclear energy) to zero," Abe told a meeting with business leaders, including Hiromasa Yonekura, chairman of the Japan Business Federation, known as Keidanren.

Yonekura in a rare move met with the newly elected opposition leader before having talks with Noda, who reshuffled his Cabinet just last week in the run-up to the next general election, which must be held by next summer.

At the outset of the meeting, Yonekura said, "Our country is facing many important challenges, such as overcoming deflation and reviewing our energy policy."

Regarding foreign policy, Yonekura said Japan's tensions with China and South Korea have been rapidly growing and that the deteriorating relations between Japan and China "have been significantly affecting" Japanese business activities.

Abe responded, "In diplomatic negotiations, it is most important to build consensus through close talks on politics and economy."

The LDP is trying to gain support from the business world ahead of the next general election. Abe vowed Tuesday to bolster the nation's flagging economy, saying, "We have to obtain a strong economy to restore Japan."

But the leading opposition party is opposed to Japan's entry into the U.S.-led Trans-Pacific Partnership free trade talks that Keidanren wants the government to join, blurring the outlook of their ties.

LDP Vice President Masahiko Komura and Secretary General Shigeru Ishiba were also present at the meeting.
Later Tuesday, Ishiba said at a press conference that Abe plans to meet the other opposition parties on Thursday and hold a meeting of all opposition leaders, as he looks to coordinate efforts to force Noda to dissolve the House of Representatives.

In August, Noda, former LDP chief Sadakazu Tanigaki and Natsuo Yamaguchi, head of the LDP's ally the New Komeito party, agreed to enact legislation for a tax hike and social security reforms in exchange for a promise from Noda to call a general election "sometime soon."

Yonekura told reporters after meeting with Abe, "Cooperation between the ruling and opposition parties is necessary for policy decisions."

Unless Noda makes good on the promise with the two main opposition parties, he could face difficulties in steering proceedings in the Diet, Yonekura said, indicating he hopes that the premier will call a general election soon.
Opposition support is required for the government to secure passage of any legislation in the current divided Diet, in which the ruling bloc lacks a majority in the House of Councillors.

Noda, however, is believed to be delaying dissolution of the more powerful lower house as long as possible, given that public support for his Cabinet has fallen to below 30 percent, due in part to his unpopular move to double the 5 percent sales tax rate by 2015.

Japanese nuke industries need foreign business desperately

October 16, 2012

Lithuanian vote against nuke plants casts shadow on Japan reactor makers' strategy

http://mainichi.jp/english/english/newsselect/news/20121016p2a00m0na013000c.html

Lithuanians have voted against building new nuclear reactors in a non-binding referendum, forcing the likely contractor for the project Hitachi as well as Japan's two other major nuclear reactor makers to reconsider their strategy in vital foreign markets.

With the Japanese government aiming for the elimination of nuclear power in this country by the 2030s, foreign customers have become essential to the survival of the nuclear technology businesses at Hitachi, Toshiba Corp. and Mitsubishi Heavy Industries.

Reacting to the Lithuanian referendum, Hitachi on Oct. 15 stated that "the anti-nuclear project result is regrettable." Hitachi and the Lithuanian government reached a provisional agreement in March this year on the construction of an Advanced Boiling Water Reactor (ABWR)-based power plant. ABWRs are revised version boiling water reactors like those at the disaster-stricken Fukushima No. 1 nuclear plant, with the changes -- including the installation of an internal coolant pump actually inside the reactor pressure vessel -- focused on improved safety.

Under the plan for its nuclear power business released in June this year, Hitachi stated it was aiming to boost foreign sales to account for some 50 percent of total sales by fiscal 2020. The plan foresaw using the successful sale to Lithuania to leverage lucrative foreign nuclear technology sales and boost Hitachi's overall sales to some 360 billion yen annually -- more than twice the figure for fiscal 2011.

This month, however, the Lithuanian reactor agreement -- which had already been approved by that country's parliament in June -- was put to a referendum in tandem with parliamentary elections. In the wake of the election, it looks most likely that a coalition of opposition parties calling for a rethink of the Hitachi deal will form the next government.

"We will do our utmost to cooperate with the new parliament as needed," a Hitachi representative stated, but should the opposition group take power, it is very possible that Lithuania could reconsider the entire reactor agreement. What's more, Lithuania is unlikely to be an isolated case. A zero-nuclear policy is gaining traction world-wide, and the ground beneath Japan's reactor makers' global sales strategy could shift significantly.

Meanwhile the nuclear unit of Toshiba, an affiliate of United States nuclear reactor maker Westinghouse Electric Co., is shooting for sales of 1 trillion yen in fiscal 2017 through deals in Turkey and other nations. Mitsubishi Heavy Industries, too, is hunting down foreign clients, partnering with France's Areva on the

development of a mid-sized 1.1 million kilowatt-capacity reactor and shooting for a plant contract in Jordan. Mitsubishi Heavy is projecting fiscal 2014 sales of 400 billion yen for its nuclear business -- 1.6 times the amount for fiscal 2010.

Hitachi, Toshiba and Mitsubishi Heavy, however, are not the only competitors in what could be a shrinking global market. South Korea, Canada and China are also bidding on the Turkish contract coveted by Toshiba, while Mitsubishi is facing a Russian challenge in Jordan. Both Toshiba and Mitsubishi Heavy are sure to be watching the Lithuanian situation carefully.

So what's the score with nuclear power?

October 17, 2012

Give nuclear power a larger role

http://www.japantimes.co.jp/text/eo20121017sf.html

By SHINJI FUKUKAWA

Roughly a year and a half after the Great East Japan Earthquake, the Japanese government at a Cabinet meeting on Sept. 19 adopted its basic policy on new energy and environment strategies crafted as a response to the Fukushima No. 1 Nuclear Power Plant accident. The government had initially intended to give Cabinet endorsement to the "Innovative Energy and Environment Strategy" adopted earlier by Cabinet ministers concerned, which called for ending nuclear power plant operations by the end of 2030s.

Faced with strong objections from business circles, certain Western governments and local governments hosting nuclear plants, however, the Noda Cabinet ended up issuing a vague statement saying that, on the basis of the strategy, it will hold "responsible discussions with local governments concerned and the international society and, while seeking public understanding, carry out (the strategy) with flexibility, constant examination and review." In the eyes of people, the conclusion appeared to reflect the government's wavering position on the issue.

Still, Prime Minister Yoshihiko Noda emphasized that he has not deviated from the policy of nuclear phaseout by the end of 2030s, and his Democratic Party of Japan will likely stick to that position to maximize its chances in the next general election, to be held "in the near future."

I have several doubts about the plan itself. In the first place, the plan fails to take into account changes in the global energy structure. In fact, the Fukushima nuclear accident raised strong doubts about Japan's previous policy course, which attempted to resolve the problems of energy shortage and global warming through the expanded use of nuclear energy. Following the Fukushima accident, Germany, for example, made a decision to phase out nuclear power generation by 2022.

The International Energy Agency (IEA), however, predicts that the world's energy demand will grow by about one-third from the current level over the 2010-2035 period. It points to the need to ensure an adequate energy supply through an appropriate mix of natural gas, atomic power and renewable sources to cope with an estimated increase in demand for oil as automobile usage rises in emerging economic powers such as China and India.

In the United States and Canada, efforts to exploit vast shale oil and shale gas deposits are mounting. Some people suggest the U.S. will become a key energy supplier, which in turn would help it achieve an economic revival. Despite the presence of these resources, the U.S., given the global energy outlook, has not changed its policy of maintaining nuclear power generation. France at one point considered reducing its dependence on nuclear power, but in recent years has deepened its technological confidence in nuclear energy. China, South Korea and Taiwan, for their part, are stepping up efforts to improve safety of nuclear power as a key pillar of a low-cost energy supply.

The world's energy structure is thus moving in a direction different from what is being envisioned by the Japanese government. Under such circumstances, it seems obvious that Japanese industries will be at a disadvantage in the global economic competition.

Second, the plan gives no consideration to the need for an optimum structure of energy supply. Nobody disputes the idea of raising the nation's reliance on renewable energy sources, but the problem is that renewable sources cost more than fossil fuels and nuclear power, and are less stable in terms of output because they will be subject to changes in natural conditions.

To compensate for these problems, development of new technologies will be needed, such as more powerful batteries or the smart city. This will require huge investments and a long period of development. Even if more efficiency is achieved in energy use, fossil fuel prices will remain high due to finite resources.

The government, the Diet, the private sector and Tokyo Electric Power Co. have so far tried to determine the causes of the Fukushima plant accident, but their analyses have not been able to fully expose what actually triggered the disasters. Still, because there is extensive international cooperation on nuclear safety taking place, it is possible that Japan's nuclear power plants will be able to operate safely. Therefore, it is possible to create an optimally varied energy structure. Its wordings aside, the energy plan of the government and the DPJ takes an essentially conservative position.

Third, the government has taken a populist approach in the process of formulating the policy. In the process, the government created three scenarios — in which Japan's reliance on nuclear power in 2030 will be either zero percent, 15 percent or 20-25 percent — and solicited opinions from the public. In a debate-style opinion survey held as part of the effort, 46.7 percent of the people polled favored the "zero" scenario, 15.4 percent picked the "15 percent" course and 13 percent favored the "20-25 percent" choice. The result suggested that much of the general public rejected the dependence on nuclear power due to safety concerns.

A country's energy policy is built on multiple components and should therefore have flexibility. If those in power sound out public opinion solely on nuclear energy, which is just one component of the policy, and on the basis on that make a decision on the energy policy as a whole, their very existence as politicians would be called into question.

Energy policy constitutes the basis of economic management, industrial activities and stable living conditions. The new policy of the government and the ruling party could weaken Japan's industrial competitiveness, lower its growth potential, increase unemployment and raise the cost of living. My hope is that the government's plan will be put to a serious review in the next Lower House election.

Shinji Fukukawa, formerly vice minister of the Ministry of International Trade and Industry (now the Ministry of Economy, Trade and Industry) and president of Dentsu Research Institute, is senior advisor for the Global Industrial and Social Progress Research Institute in Tokyo.

Passing the buck on nuclear power

http://www.japantimes.co.jp/text/ed20121017a1.html

The government's irresponsible attitude toward nuclear power generation is becoming clear. It seems that the government does not want to pursue concrete steps to reduce and eventually end the nation's reliance on nuclear power despite its new long-term energy policy under which it is supposed to utilize all the available policy resources to achieve "zero operation" of nuclear power plants in the 2030s. This attitude is exemplified by its readiness to accept the resumption of the suspended construction of new nuclear power plants. Because a 40-year operation limit will be imposed on nuclear power plants, the resumption of the construction of those plants means that they will remain online at least into the 2050s.

On the other hand, it seems that the government does not want to be involved in any political decisions concerning the restart of existing nuclear power plants, which in the future will have to pass the new post-Fukushima safety standards that are being drawn up by the newly established Nuclear Regulatory Authority. The NRA is expected to finish writing the new safety standards, which will subject even existing nuclear power plants to the latest technological progress, by July 2013.

At present only two of Japan's 50 nuclear power reactors are online. Clearly the government does not want to make decisions that will anger the majority of citizens who want Japan to phase out nuclear power. There is the possibility that even while the government refrains from making any concrete decisions in either direction, the power industry will restart nuclear power plants one after another. **This will be a typical example of faits accomplis being achieved in the absence of responsible actions by the government.**

NRA Chairman Shunichi Tanaka has made it clear that the job of the NRA is only to determine whether individual nuclear power plants meet the safety standards and that a decision on whether to approve the restart of particular nuclear power plants on the basis of such factors as supply and demand of electricity and economic considerations should be made by power companies owning nuclear power plants or by a government ministry or agency in charge of energy policy. He apparently fears that the NRA will be exposed to political pressure, including from the power industry, if it has to make a decision related to the restart of specific nuclear power plants.

In response to Mr. Tanaka's statement, Chief Cabinet Secretary Osamu Fujimura reiterated a provision in the new long-term energy policy that nuclear power plants whose safety is confirmed will be utilized as an important source of electricity for the time being. He also said that a ministerial conference like the one held in restarting the Oi reactors in Fukui Prefecture will not be held in the future to approve the restart of a particular nuclear power plant.

Given the government's attitude, it is very likely that nuclear power plants will be restarted only if they pass the NRA's scrutiny and power companies get approval from local governments concerned. The central government's current policy of passing the buck will only deepen the public's suspicion over its nuclear power policy.

Nuclear uncertainty - A Video

http://www3.nhk.or.jp/nhkworld/english/movie/feature201210191615.html

municipalitites « confused and frustrated » by Gov't lack of clear criteria/measures

Japan refuses to make nuclear weapons illegal

October 19, 2012

Japan will not join initiative put before U.N. to make nuclear weapons illegal

http://www.japantimes.co.jp/text/nn20121019a6.html

Kyodo

Japan will not join an initiative led by 16 countries at the United Nations to make atomic weapons illegal, out of concern it would affect Tokyo's security arrangement under the U.S. nuclear umbrella, government sources said Thursday.

The 16 nations drafted a statement for submission to the First Committee of the U.N. General Assembly that calls on all states to "intensify their efforts to outlaw nuclear weapons and achieve a world free of nuclear weapons," and asked Japan to endorse it earlier this week.

The 16 countries include Austria, Chile, Costa Rica, Denmark, Holy See, Egypt, Indonesia, Ireland, Malaysia, Mexico, New Zealand, Nigeria, Norway, the Philippines, South Africa and Switzerland.

Japan, the only country to have ever come under nuclear attack, isn't backing the initiative because the delegitimizing of atomic weapons would contradict its reliance on the extended U.S. nuclear deterrence, the sources said.

The National Defense Program Guidelines, which were last updated in 2010, say that "as long as nuclear weapons exist, the extended deterrence provided by the United States, with nuclear deterrent as a vital element, will be indispensable."

In the draft joint statement on the humanitarian dimension of nuclear disarmament, a copy of which was obtained by Kyodo News, the 16 countries said they are "deeply concerned about the humanitarian consequences that any use of nuclear weapons would have."

Referring to "the horrific consequences" of the use of nuclear arsenals, made clear by the suffering caused by the U.S. atomic bombings of Hiroshima and Nagasaki in 1945, the 16-nation group said the only way to guarantee that such weapons are never used again is "the total, irreversible and verifiable elimination of nuclear weapons."

As members of NATO, Norway and Denmark are also under the U.S. nuclear umbrella.

At a preparatory committee meeting in Vienna for the Nuclear Nonproliferation Treaty Review Conference this spring, the 16 nations issued a similar statement. But they did not request Japan's support for the document at that time, according to the sources.

Blame it all on complacency and corruption?

October 23, 2012

The case for nuclear power

http://www.japantimes.co.jp/text/eo20121023gc.html

By GREGORY CLARK

The Fukushima No. 1 nuclear plant disaster has made Japan reconsider the role of nuclear power in its future. But for some reason we hear little about the non-disaster at the nearby Onagawa nuclear plant. What did not happen at Onagawa during the March 11, 2011, earthquake and tsunami events could be much more relevant to Japan's nuclear power future than what happened at Fukushima.

The ocean-facing Onagawa plant was considerably closer to the earthquake epicenter off the Tohoku coast than was the Fukushima plant — 130 km versus 180 km. Earthquake and tsunami destruction in the area was far worse; the nearby town of Onagawa and city of Ishinomaki had over 4,800 people killed or missing. But the plant and its three reactors came through virtually unscathed; it even provided refuge for those fleeing the destruction in surrounding villages.

Onagawa survived thanks to basic commonsense. Its 14.7 meter sea wall was designed to protect it from the worst anticipated tsunami. Its strong foundations allowed it to survive a one-meter earthquake-caused site subsidence; a subsequent IAEA inspection group was amazed at the lack of structural damage. Enough of its various electricity power sources survived to allow it to pump in the water needed to put all its reactors into cold shutdown. Somehow this plant operated by the regional Sendai-based Tohoku Electric company was able to survive better than the Fukushima No. 1 plant run by the elitist Tokyo Electric Power Co.

Tepco's failings have already been listed in the several reports on the 3/11 disaster, in particular its arbitrary dismissal of a tsunami danger warning made only four years before the event. Some also like to blame earthquake damage. But the Onagawa plant survived the same earthquake. So too did the Fukushima No. 2 plant; Japanese engineers now have the skills to make nuclear plants reasonably earthquake proof.

Tepco's ability to brush off tsunami warnings has to be blamed on the bureaucratic complacency and *amakudari* corruption that seems to affect most large business and government organs in Japan, especially when they are based in Tokyo. All of Tepco's vice presidents and many of its other top people over recent years have been amakudari implants from government ministries, with little knowledge of nuclear power.

Media studies on Onagawa's survival give much of the credit for Onagawa's survival to the late Yanosuke Hirai, a former Tohoku Electric vice president. He had checked past tsunami records and forced through the decision to build the sea wall higher than originally planned. Earlier he had saved a large Niigata thermal plant built on soft ground from destruction in the powerful 1964 earthquake there, by insisting the plant be built on caisson foundations.

Interviews with former subordinates show a man with a strict sense of responsibility who realized that bureaucratic regulations alone would not guarantee safety. He resembled Kotaku Wamura, the former mayor of the small Tohoku fishing port of Fudai, who, remembering the damage from previous tsunami, battled bureaucratic and cost-cutting opposition to build the 15.5 meter seawall and floodgate. Fudai alone was saved from the destruction that wiped out all other fishing ports in the area.

Meanwhile what had been going on at Tepco? Despite the record of very destructive tsunamis along the Tohoku coast for centuries and even in recent years, the Fukushima No. 1 plant had been placed near sea level, protected only by a 5.7 meter seawall. The engineer involved has revealed that Tepco had decided it could save construction costs that way.

Hirai pointed out that nuclear plant construction should not be left to the electric companies. Inevitably they would compromise safety by trying to cut costs. Today people call for increased regulation and government control. But that is unlikely to improve things. In Japan's collectivist society it is too easy for the regulators to collude with the people they are supposed to regulate. A tight exclusivist nexus develops and is impervious to criticism. Besides, and as Hirai pointed out, regulators tend to concentrate on rules rather than contingencies.

If Japan decides to stay with nuclear power — and the arguments in favor are strong — then it should study how France goes about selecting and training the people for its very successful government-controlled Electricite de France nuclear-power subsidiary. True, France has the advantage of a better educated and rounded elite. But the key to EDF's success is its autonomy; its status comes not from its balance sheet or bureaucratic power but from its ability safely to service 75 percent of France's electricity needs. It even manages to service Italy and Germany, which are rejecting nuclear power.

Rejecting nuclear power means Japan will miss some of the technological and safety advances that nuclear power-committed societies like France and China will enjoy. But that is not all. Scientists agree that hydrogen fusion is the safe power source of the future. In the International Thermonuclear

Experimental Reactor committee set up to decide location for the first experimental fusion plant Japan has already lost out to France. And now in the wake of the Fukushima disaster a Japanese advisory panel has called on the government to cut funding for the international project altogether. Japan's current nuclear power allergy is understandable. But does it really need to drop out of the race to fusion power?

Gregory Clark served on the Japan subcommittee for the ITER nuclear fusion project. For a Japanese translation of this article, visit www.gregoryclark.net

A world free of nuclear weapons?

October 23, 2012

Japan shies away from 16-nation plan to outlaw atomic weapons

http://www.japantimes.co.jp/text/nn20121023a5.html

Kyodo

The government on Monday said it will not join an initiative launched by 16 members of the United Nations calling for efforts to outlaw nuclear weapons because it would affect Japan's security alliance with the United States.

A statement drafted by countries including Switzerland and Norway seeking efforts to outlaw nuclear weapons is slated to be submitted to the First Committee of the U.N. General Assembly in New York as early as Monday.

"We have decided to refrain from participating" in the initiative, Senior Vice Foreign Minister Kazuya Shinba told a news conference, adding that it "isn't necessarily consistent with our country's national security policy."

A senior Foreign Ministry official said it is "indispensible to ensure deterrence under Japan-U.S. security arrangements, including (that provided by) nuclear weapons, if you take Japan's security environment into account."

The draft statement, a copy of which was obtained by Kyodo News, calls on all states to "intensify their efforts to outlaw nuclear weapons and achieve a world free of nuclear weapons."

Nukes a "n"cessary evil"?

October 23, 2012
JAL Chairman Inamori backs nuclear energy as necessary evil

http://mainichi.jp/english/english/newsselect/news/20121023p2a00m0na006000c.htm

Kazuo Inamori, chairman emeritus of Japan Airlines Co. (JAL), says a society free of nuclear power is ideal, but Japan needs to rely on nuclear plants for the time being to maintain and improve its high-level lifestyle.

Despite a great desire and hope that Japan should end nuclear power generation in the 2030s, Inamori said nuclear power is a "necessary evil" for the country, where in the past much nuclear data and problems such as nuclear waste have been hidden from the public.

Inamori, 80, who founded Kyocera Corp. and also helped establish KDDI Corp., said he has championed solar energy but has found that solar energy is unlikely to become a major player in domestic power production.

"Unfortunately and sadly, nuclear energy is a necessary evil that we must deal with," he told an Oct. 23 news conference at the Foreign Correspondents' Club of Japan (FCCJ). The chairman added that with regard to nuclear power, which has come under public scrutiny in the wake of the disaster at the Fukushima No. 1 nuclear plant, "everything should be disclosed to the public honestly."

One of Japan's most prominent business leaders, Inamori also elaborated at the news conference on how he and his JAL team revived the former national flag carrier after assuming the chairmanship in January 2010. JAL has been successful in rehabilitating itself though such factors as Inamori's services without remuneration and the establishment of a management philosophy to change the bureaucratic nature of the airline's leadership structure. The welfare of employees has also been prioritized as JAL has emerged from its collapse in 2010 to be relisted on the Tokyo Stock Exchange in September this year.

Inamori further stated that Kyocera's philosophy is a good fit in China, where the ceramics maker has three factories and several thousand employees. None of the employees joined recent anti-Japan protests over the Senkaku Islands dispute, he added. (By Shiro Yoneyama, Staff Writer)

Do you have doubts?

October 23, 2012

Source: Financial Times
http://www.ft.com/intl/cms/s/0/1fc5fe9a-1916-11e2-af4e-00144feabdc0.html#axzz2ADgEsWBa

Doubts cast over Japan nuclear phase-out

By Jonathan Soble in Tokyo
October 23, 2012 2:26 pm

It has only been a month since Japan declared that it would close down its nuclear industry by the end of the 2030s, but already a contentious plan to complete several partially built reactors is sowing doubts about the government's commitment to the radical policy shift.

The facilities – stretching from the northern tip to the southwestern part of the country – were approved years before the triple meltdown in Fukushima in March last year, but construction had been frozen following the disaster. The decision over their fate is seen as a test of just how serious Japan is about abolishing an industry that had been the source of 30 per cent of its electricity.

In the weeks since the nuclear phase-out was announced, Yukio Edano, industry minister, has said three approved but unfinished reactors are exempt from a central provision of the phase-out policy, under which no new plants will be built. Electric Power Development, the utility that owns one of the facilities, responded by saying it plans to resume work this year, with an eye to beginning electricity production some time after 2014.

Iida Tetsunari, a leading anti-nuclear activist, called the decision "insincere politics" that was "clearly against the principle" of ending nuclear power. The Mainichi newspaper, a national daily, said: "Many people must surely feel as though they've been tricked by a fox."

Some sceptics had already dismissed the phase-out announcement as empty pre-election rhetoric. The target date was vague, and within days the cabinet of Yoshihiko Noda, prime minister, backtracked over implementation. Under pressure from pro-nuclear business groups, it resolved to act "flexibly" and with "constant verification and revision" – hedges that might keep the nuclear industry in business indefinitely.

It remains unclear exactly how many new reactors might be completed in practice. One of the three approved units, at Higashidori nuclear station, located on the remote northern tip of Japan's main island, is owned by Tokyo Electric Power, the disgraced and financially crippled operator of the Fukushima plant.

Construction is only about 10 per cent completed, and Tepco's problems make prospects for a resumption dim, according to government officials and analysts.

Electric Power Development's facility, in the village of Oma not far from Higashidori, is about 40 per cent finished, while the most advanced, Chugoku Electric's Shimane plant in southwestern Japan, is more than 90 per cent built and was supposed to have started operating this year.

Chugoku has not revealed its plans for the facility, but has been consulting local politicians over restarting work.

In theory, it is possible to reconcile finishing the plants with the gradual phase-out envisioned by the new energy policy. Japan has 50 reactors already in service, and they are to be used while the country develops alternative energy sources such as solar and wind power. Supporters of the partially built plants argue that they will contain the latest, safest technology, and scrapping them now would mean writing off the tens of billions of yen already sunk into construction.

However, Kenichi Oshima, a nuclear policy expert at Ritsumeikan University, says uncertainties about the future cost of operating nuclear plants in Japan weaken the economic case for more atomic power. "There will be more costs for safety upgrades, and no one knows what kind of insurance system is going to be put in place. These things will make a big difference to generating costs."

Since it takes about 40 years for a reactor to recoup its initial building costs, switching off the new plants in the 2030s, around two decades before the end of their normal operating lifespans, would mean accepting major investment losses – something a future government might be unwilling or unable to impose on utilities. "Basically, building these reactors would mean reversing the nuclear phase-out," Mr Oshima says.

Allowing Oma and Shimane to go ahead could also open the door to more plants being built. Nine other reactors were in various stages of planning before Fukushima, and while the government has said they will not be constructed, some pro-nuclear local leaders have continued to push.

The governor of Fukui prefecture, a western area with a big nuclear industry, has recently stepped up lobbying for two planned reactors in his jurisdiction that had been close to receiving final approval before the accident. Higashidori's village council has appealed for construction on its reactor to resume over fears for the local economy.

The phase-out plan could recede even further if Mr Noda's Democratic party of Japan is ousted in an election early next year, which polls suggest is likely. The opposition Liberal Democrats nurtured the nuclear industry for decades when they were in power, and are more sceptical towards renewable energy.

The main roadblock to building could come from other local governments. Towns and villages that host nuclear plants receive generous state subsidies and tend to support the industry, even after Fukushima, but their unsubsidised neighbours are often less keen.

In northern Japan, the mayor of Hakodate city, located across a narrow strait from Oma on the island of Hokkaido, has threatened to sue to prevent construction from resuming. On a visit to Tokyo to complain to the government this week, he told reporters: "The decision to permit construction is based on a pre-Fukushima safety myth."

Why Japan shouldn't drop nukes

October 24, 2012

The case for nuclear power

http://www.japantimes.co.jp/text/eo20121023gc.html

By GREGORY CLARK

The Fukushima No. 1 nuclear plant disaster has made Japan reconsider the role of nuclear power in its future. But for some reason we hear little about the non-disaster at the nearby Onagawa nuclear plant. What did not happen at Onagawa during the March 11, 2011, earthquake and tsunami events could be much more relevant to Japan's nuclear power future than what happened at Fukushima.

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If Japan decides to stay with nuclear power — and the arguments in favor are strong — then it should study how France goes about selecting and training the people for its very successful government-controlled Electricite de France nuclear-power subsidiary. True, France has the advantage of a better educated and rounded elite. But the key to EDF's success is its autonomy; its status comes not from its balance sheet or bureaucratic power but from its ability safely to service 75 percent of France's electricity needs. It even manages to service Italy and Germany, which are rejecting nuclear power.

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Gregory Clark served on the Japan subcommittee for the ITER nuclear fusion project. For a Japanese translation of this article, visit www.gregoryclark.net

Did you say inconsistent?

October 26, 2012

Gov't hits deadlock over energy plan as experts cite inconsistencies in nuclear stance

http://mainichi.jp/english/english/newsselect/news/20121026p2a00m0na015000c.html

The government's efforts to draw up a new basic energy plan in the wake of the crisis at the tsunami-hit Fukushima No. 1 Nuclear Power Plant have come to a deadlock.

Economy, Trade and Industry Minister Yukio Edano is eager to complete the plan by the end of this year to make it an important point of contention during the upcoming House of Representatives election. However, an experts' panel on energy has refused to deliberate on the plan, saying the government's policy is so unclear that they cannot discuss it.

The work to draw up the new energy plan remains up in the air as lawmakers from the ruling Democratic Party of Japan (DPJ) are split between those seeking to eliminate nuclear power by the 2030s and those promoting nuclear energy.

The government was to draw up the basic energy plan based on its Innovative Strategy for Energy and the Environment, which was worked out in September and proposed the shutdown of all nuclear plants in the 2030s.

However, the Fundamental Issues Subcommittee of the Advisory Committee for Natural Resources and Energy pointed out on Sept. 18 that there were inconsistencies in the strategy. Specifically, the subcommittee recognized the government's intention to approve the operations of nuclear plants already under construction while at the same time seeking to get rid of nuclear power stations by the 2030s as problematic.

Akio Mimura, chairman of the subcommittee, declared that it would not deliberate on the new basic energy plan until the inconsistencies were eliminated. "The government's strategy lacks consistency. Its goal is vague," he said. Since then, the panel has not held a meeting.

The Innovative Strategy for Energy and the Environment is equivocal as it appeals to both pro- and anti-nuclear power legislators within the ruling party.

Edano had emphasized that the strategy is consistent, but has failed to provide a convincing explanation to Mimura.

Still, Edano, who wants to make the zero nuclear plant policy a major campaign issue at the next general election, has told his aides that he wants to make sure that the basic energy plan will be completed within this year.

"I'd like you to coordinate views among party members on the basic plan and pressure the panel to open deliberations," he recently told DPJ policymakers, but the policymakers did not take any action.

A DPJ legislator said he believes DPJ Policy Research Committee Chairman Goshi Hosono blocked the move.

"Hosono is skeptical of eliminating all nuclear plants because it could have negative impacts on the economy. So he apparently didn't negotiate with panel members to open deliberations," the legislator said.

Edano told a news conference on Oct. 19 that he will convene the subcommittee in the near future to deliberate on the basic plan. However, even if such a meeting is held, there is no prospect that discussions on the details of the plan will progress.

One of the panel members reacted coolly to the move.

"The party appears to be trying to incorporate a 'zero nuclear plant policy' into the basic plan as a kind of catch phrase for its election campaign. But it's impossible to work out the details of something that's unclear," the member said.
Speculation is spreading within the government that Mimura intends to boycott any panel meeting until the largest opposition Liberal Democratic Party regains control of the government following the next lower house election and the government resumes its pro-nuclear power policy. (By Susumu Maruyama and Yoshinori Ogura, Tokyo Business News Department)

Read "Fresh Currents", wherever you live

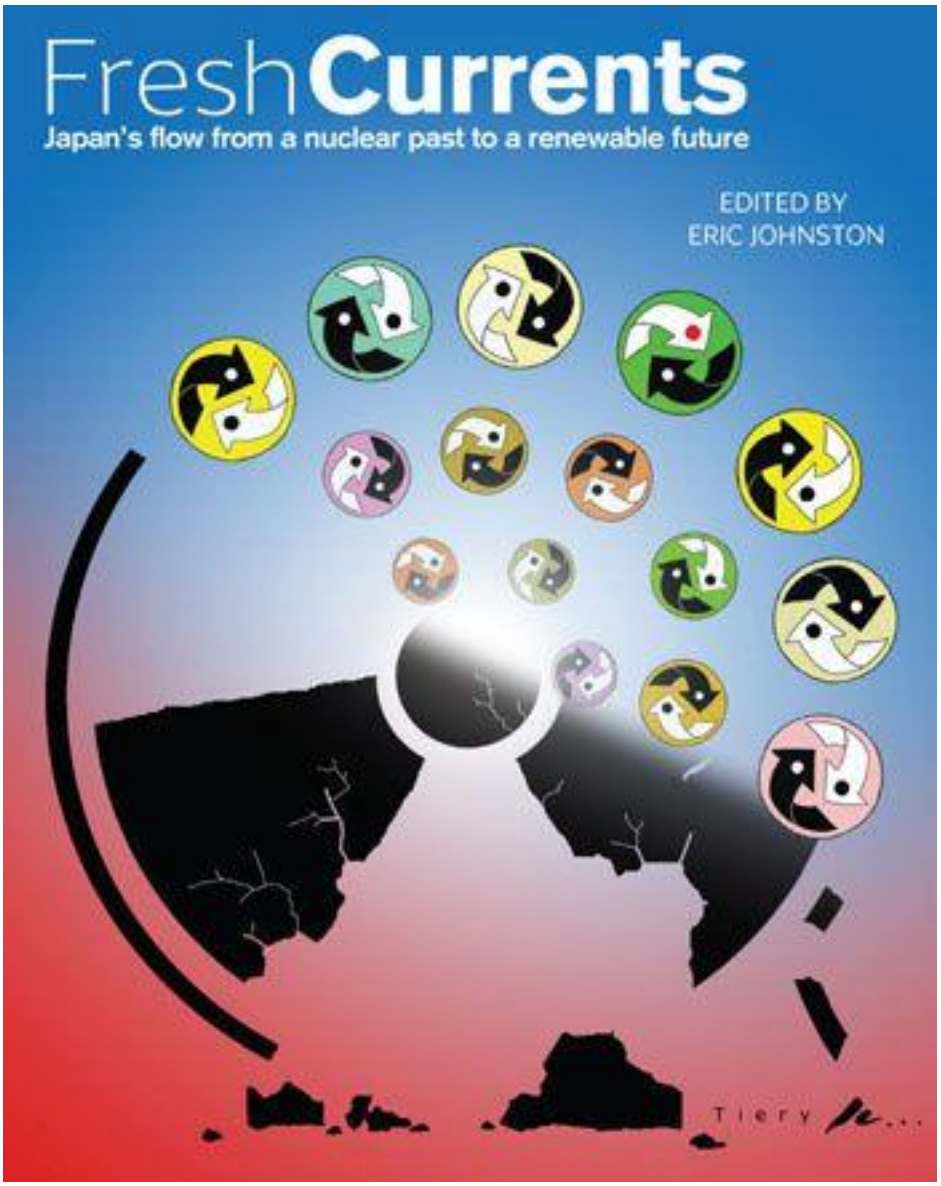
October 28, 2012

'Fresh Currents' charts the way to, and from, Fukushima

By STEPHEN HESSE
http://www.japantimes.co.jp/text/fe20121028sh.html

This month's column is about a book that is very much more than just a book: It is a work of art, a labor of love and a realizable dream of a better future for Japan. But I'm getting ahead of myself ...

Labor of love: This work, whose cogent words are accompanied by beautiful visuals, presents in the clearest of terms a realizable, much-improved future for Japan. It is the fruit of a Kyoto Journal team effort by more than a dozen volunteer writers and others. COVER DESIGN BY TIERY LE...



A fortnight ago, on Oct. 12, Tokyo Electric Power Company's internal-reform task force admitted that the ongoing disaster triggered by the March 11, 2011, Great East Japan Earthquake at the Fukushima No. 1 nuclear power plant it operates was avoidable and that necessary "preparations were not made in advance."

Sadly, human error, acts of nature, and combinations of the two will always be to blame for tragedies that leave us pondering, "Why? "What if?" "If only ..."

In the lyrical wisdom of Elvis Costello, as a track title on his 1979 album "Armed Forces" cautions, "Accidents Will Happen."

Given this immutable truth, Japan has limited options regarding its energy future: To accept the status quo and the cronyism that taints its government-industry relations, leaving energy policy in the hands of those who prioritize political gain; or to pursue national energy security that puts a priority on safety and on sharing the costs and benefits, financial and technological, across all of the nation's regions and residents.

In a nutshell, Japan can either remain nuclear, with all the dangers that portends for these islands perched on the Pacific Rim of Fire — or it can pursue policies that foster and reward dramatic increases in energy conservation and efficiency and the development of alternative energies that are safe and widely decentralized.

Japan's feed-in tariff (FIT) system for renewable energy sources adopted in July is a step in the right direction, at last offering competitive compensation to those who invest in and develop alternative-energy sources. But it needs to be buttressed with a comprehensive framework of incentives that stimulate research and long-term investment.

Kyoto University Professor Shinya Yamanaka's recent award of the Nobel Prize in Physiology or Medicine confirms that world-class researchers are hard at work in Japan — but cutting-edge science isn't cheap. Japan must provide far more financial support for university research. In addition, it is essential that it puts in place long-term policies that allow corporations to invest with confidence in R&D, knowing their commitments will pay off.

In fact, if Japan can manage to muster the political will to act, this nation already has the options and ideas it needs, many of them laid out in that new book to which I so fulsomely referred, which is both a compilation of policy insights and suggested viable solutions to the energy fix Japan is in.

"Fresh Currents: Japan's Flow From a Nuclear Past to a Renewable Future" is a visual and intellectual smorgasbord, a compilation of eye-opening articles, insightful interviews, useful charts and graphs — and stunning artwork and photographs.

The book is a Kyoto Journal team effort by more than a dozen volunteer contributors, mostly foreigners, under the similarly voluntary editorial eye of long-standing JT writer and reporter Eric Johnston. I call it a labor of love because both the writing and the wonderful visuals make it clear that those involved care as much about this nation as anyone.

Perhaps the best place to begin is the back cover of the book, which carries a quote from Indian environmental activist Vandana Shiva. Her words capture the essence of why "Fresh Currents" is so timely and essential:

"Fukushima has raised, once again, the perennial questions about human fallibility and human frailty, about hubris and man's arrogance in thinking he can control nature. The earthquakes, the tsunami, the meltdown(s) at Japan's nuclear power plant are nature's reminders of her power. ... Alternatives to nuclear energy are a thousand times more abundant and a million times less risky. To push nuclear plants after Fukushima is pure insanity."

"Fresh Currents" began taking shape soon after 3/11 and has been financed with donations collected via an indiegogo.com fundraising campaign last summer.

As Kyoto Journal Editor John Einarsen explains, "The myth that nuclear power can deliver us from the long-term hazards of fossil fuels has been shattered. Renewable energy, long dismissed as impractical, is being given serious reconsideration. Japan can and must take advantage of this opportunity to rethink and refocus its energy strategies. Doing so, Japan will set an example for the world to follow."

Following an introduction by Johnston, "Fresh Currents" is divided into two sections: "How We Got Here" and "The Way Forward."

"Even as Japan's nuclear-power industry trumpeted the end of the need to develop further energy sources," Johnston writes, "others in Japan, and around the world, were still asking: Is there a better tool to generate electricity, one that is cheaper, more easily accessible and safer? Might that energy be in the form of solar, or wind, or geothermal, mini-hydro or biomass? Or some other energy source we humans just haven't yet been able to imagine? In short, is there another, better way to build a secure energy future?"

Readers of the book will not be surprised to find that the answers to these questions are resoundingly affirmative, but this is almost beside the point.

"Fresh Currents" is a captivating work because it tells the story of Japan's energy journey — past, present and future — through the eyes of some of Japan's most observant writers, thinkers and activists.

Each section of the book opens with several pages titled "Facts & Figures" that offer pause for thought. Here are some examples:

- Amount of plutonium Japan has in storage internationally: more than 35 tons.
- Number of simple nuclear warheads 35 tons of plutonium could arm: 5,000.
- Japan's current installed nuclear-generation capacity: 46.15 gigawatts (GW).
- Japan's potential offshore wind-energy capacity: 1,600 GW.

The first essay in the collection, also by Johnston, looks back at the history of nuclear power in Japan, from Hiroshima to Fukushima. This, however, is not the version you will find in ministry-approved textbooks.

"Less than a decade after World War II ended in August 1945, Japan was moving forward with plans to harness nuclear power for its growing electricity needs," Johnston's opening paragraph states. It continues: "Despite the horrors of the atomic bombings of Hiroshima and Nagasaki, a well-coordinated propaganda campaign that played on people's hopes for a better life — and their fear of losing it all for want of electricity — would lead Japan, one of the world's most quake-prone countries, to build over 50 nuclear power plants. How this happened is a tale of secret wartime efforts by Japanese nuclear scientists, a right-wing nationalist who would dominate Japanese politics for nearly half a century, a media tycoon who worked with the CIA, a flamboyant pilot with a talent for self-promotion, Japan's most popular — and corrupt — postwar prime minister, and the collective hubris of what became known as the nuclear power village."

So, from the start of "Fresh Currents," there's a clear warning to readers that truth is indeed as strange as fiction.
Freelance writer and frequent JT contributor David McNeill then plunges into the present with a passionate and moving piece on the people of Tohoku and their efforts to endure adversities that few of us can even imagine.

"Can Tohoku recover?" asks McNeill, noting that the region may even mirror whether Japan can set itself back on its feet.

"Inevitably, the question leads to an even more fundamental one: What sort of country does Japan want to be? The nation's epic industrialization drive seems to have run out of steam. Its dream of energy self-sufficiency lies in ruins. Its population is aging and declining. Japan's squabbling political leadership seems powerless to stop the nation's slide down the economic league tables. By 2050, Japan may no longer even be considered a developed nation," he observes without hesitation.

Soon after, Eriko Arita, a JT staff writer, takes a disquieting look at Japanese media restraint with regard to criticism of the nuclear-power industry, touching on her own experience while working at national broadcaster NHK of its "self-restraint" regarding criticism of nuclear power in Japan.

Other highlights include an interview with Aileen Mioko Smith, one of Japan's most respected and experienced antinuclear activists, and a transcript of comments made in Tokyo at the Foreign

Correspondents' Club of Japan by freelance journalist Tomohiko Suzuki, who has written about links between laborers at nuclear power plants and the yakuza.

On the bright side, freelance writer and frequent JT contributor Winifred Bird is there with an upbeat story on the potential for decentralizing Japan's energy supply through a move toward local generation and consumption.

As well, landscape artist and Kyoto Journal contributing editor Brian Williams shares encouraging research in a piece titled "The Promise of Alternative Energy," which draws on the work of Dr. Mark Z. Jacobson and Dr. Mark A. Delucchi, of Stanford University and the University of California, Davis, respectively.

"By 2030, Jacobson and Delucchi envision wind fulfilling 50 percent of global energy demands ... solar accounting for 40 percent, geothermal and hydroelectric making up 8 percent, and waves and tidal sources providing the remaining 2 percent," notes Williams.

"Fresh Currents" also includes a guide to Japan's new FIT system (Johnson); an article on dams and less damaging alternatives (Jane Singer, an associate professor in the Graduate School of Global Environmental Studies at Kyoto University); a piece on the potential for smart grids in Japan (Richard B. Dasher, executive director of the Center for Integrated Systems at Stanford); and an introduction to the engaging environmental activism of a Buddhist priest (Jonathan Watts, an Asia-specialist journalist and writer).

Even if you don't live in Japan, "Fresh Currents" has something profound to offer. As the Kyoto Journal's Einarsen notes, "The writings in 'Fresh Currents' explore Japan's path forward from Fukushima to a renewable energy future — and why this is important, wherever you live."

In short, "Fresh Currents" is more than a book: It is a piece of living history that crystallizes the threshold upon which we stand today.

"Fresh Currents" can be downloaded free. It is also available from good bookstores, priced ¥2,000. For more details, including news updates, visit: www.freshcurrents.org. Stephen Hesse is a professor in the Law Faculty of Chuo University. He can be reached at stevehesse@hotmail.com.

What future for Japan ?... And for us

from Kyoto Journal

Fukushima has raised, once again, the perennial questions about human fallibility and human frailty, about hubris and man's arrogance in thinking he can control nature. The earthquakes, the tsunami, the meltdown at Japan's nuclear power plant are nature's reminders of her power… Alternatives to nuclear energy are a thousand times more abundant and a million times less risky. To push nuclear plants after Fukushima is pure insanity.

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Introducing Fresh Currents

<image: http://download.freshcurrents.org/images/fresh-currents-cover.jpg>

Download your complimentary copy of Fresh Currents:

Download PDF, 7.1 MB.

Living only 60 kilometers from the Oi nuclear power plants (reopened in June amidst growing protests across the country), we felt compelled to contribute something to the growing chorus of voices calling for a sustainable energy future. *Fresh Currents* was put together from a network of writers associated with Kyoto Journal, an NPO based in Kyoto that has been publishing in print and digitally for over 25 years.

Please enjoy your copy of *Fresh Currents*. We welcome your feedback.

— The Editors

What is really going on with the Japanese energy policy?

Tuesday, Oct. 30, 2012

Vox populi: People stage a rally calling for the abolition of nuclear power in July at Tokyo's Hibiya Park. SATOKO KAWASAKI

FYI

ZERO NUKE POLICY

Behind the no-nuclear option

New energy policy seen as political fig leaf, given option for reversal

By MASAMI ITO
Staff writer

The triple-meltdown crisis that began last year at the Fukushima No. 1 power plant jarred the public out of its complacent attitude toward nuclear power and every other assurance made by the government and Japan Inc.

Suddenly, thousands of people were fleeing their homes in the fallout zones, possibly never to return again, as everything from fish to meat to rice and water joined the list of contamination threats.

Overnight, the public developed a collective voice. Housewives, professors, students, salarymen, seniors from all walks of life stood up to demand an end to Japan's dependence on atomic power, and its dangers.

People came from across the country to participate in rallies each Friday night outside the prime minister's office to raise this chorus.

Then finally last month, Prime Minister Yoshihiko Noda and his Democratic Party of Japan-led government announced the nation would embark on a quest for alternative, green, sustainable forms of energy and rid Japan of nuclear power by the 2030s.

But the new policy, besides not being etched in stone, has drawn criticism for being ambiguous, unrealistic, a quick kowtow for votes — and a way to keep the door back to nuclear power ajar.

What are the key points of the new energy strategy?

The government adopted the "Innovative Strategy for Energy and the Environment" on Sept. 14 to learn from the Fukushima crisis and fundamentally change the nation's course away from atomic power.

The main pillar would be the complete shutdown of all reactors by the 2030s. To achieve this, the government laid out three major goals: to limit the working life of reactors to 40 years, to only restart reactors that have been given stamped as safe by the new Nuclear Regulation Authority, and to ban the construction of new nuclear plants.

The government pledged to cover the nation's energy needs by diversifying its sources and tripling its use of renewable power by 2030, advancing the use of thermal power generation, and securing a steady supply of inexpensive fossil fuels. It also vowed to slash electricity consumption to 100 billion kwh in 2030 from 1.1 trillion kwh in 2010 and promote energy-saving measures to the entire public.

What prompted this zero-nuclear goal?

Public opinion.

The government was initially reluctant to renounce atomic energy, which before Fukushima was the source of about 30 percent of the nation's electricity, because of the difficulty of winding down its vast investment in it.

There is also strong resistance from the business community because of the extra costs associated with alternative energy and concerns that the shift would damage Japan Inc.'s competitiveness.

The business community and the government remain deeply invested in nuclear power.

But the overwhelming public opposition prevailed.

Over the summer, the government collected public comments on three possible scenarios for nuclear energy use by 2030 — zero percent, 15 percent, or 20 to 25 percent.

Although experts noted that opinionated people were the most inclined to respond to the polls, about 90 percent of the some 89,000 responses chose the zero percent option.

"I think the government is still reluctant to get rid of nuclear power completely, but it was forced to listen to the public because of the unprecedented number of responses," said Hideyuki Ban, codirector of the antinuclear Citizens' Nuclear Information Center. "The people's strong voices and action pushed the government to include the word zero."

The DPJ hopes the hedged proposal will win over voters in the next Lower House election to boost its bleak prospects.

What will happen to reactors under construction?

The government plans to let three reactors in the midst of construction to be completed.

They are reactor 3 at the plant in Matsue, Shimane Prefecture, a reactor at the plant in Oma, Aomori Prefecture, and reactor 1 at the plant in Higashidori, Aomori Prefecture.

The Shimane reactor is 93.6 percent finished, the Oma unit 37.6 percent and the Higashidori reactor 9.7 percent, but work on each was halted after March 11. Earlier this month, the Oma reactor became the first to resume construction.

If the government truly aims to end nuclear power, why is the atomic fuel-recycling program continuing?

This continuation cuts to the heart of the ambiguity, experts say. The new strategy clearly states that the reprocessing of spent nuclear fuel will proceed.

The recycling extracts uranium and plutonium from spent fuel for reuse as a hybrid fuel in reactors. If all the reactors are done away with, Japan will have an large plutonium stockpile sitting around with nothing to do.

"It is a complete contradiction. If Japan is going to get rid of nuclear power, it doesn't need to recycle spent fuel anymore," Ban of CNIC said.

Other experts see the continuation of recycling as a way to placate the communities that host the facilities and who now worry that their government subsidy spigot will suddenly be shut off.

This is particularly true in regard to Aomori Prefecture, where communities hosting reprocessing facilities have lashed out at what they call an abrupt about-face by the government. They stand to lose vast state funds if the fuel cycle is terminated.

Could the no-nuclear goal be reneged on in the future?

Yes. The Cabinet failed to officially endorse the new strategy, which means that future governments won't be obliged to uphold it.

The Cabinet instead adopted some kind of a rider statement that said the government would hold discussions with regional governments and the "international community" on the new energy policy "by constantly reviewing and re-examining policies with flexibility."

The conservative Liberal Democratic Party, the largest opposition force, has already stated it will drop Noda's no-nuclear goal. The LDP was the main promoter of nuclear power during its decades-long reign in

the postwar period and the prime provider of its seed funds. It is now aiming to return to power in the next Lower House election.

When that election is held, nuclear power will be one of the top issues, according to the DPJ's Seiji Maehara, minister in charge of national strategy. "I am aware that the LDP has a different opinion and I believe (nuclear power) will be one of the major issues in the next general election," he said in a recent interview with The Japan Times and other media.

"I think it is important to let the people choose for themselves," he said, reminding voters that they should keep the parties' positions in mind.

Why is the United States concerned about the new goal?

One reason is that if Japan drops nuclear power but continues to extract plutonium from fuel, it will raise proliferation fears, which Washington is strongly concerned about.

Japan was allowed to introduce commercial atomic power in line with a bilateral accord with the U.S. The accord, revised in 1988, also stipulates that the U.S. give advance consent to allow the reprocessing of spent fuel and the extraction of plutonium at the Rokkasho facility in Aomori Prefecture.

Media reports suggest that Washington pressured Tokyo into fudging the Cabinet's official endorsement of the no-nuclear goal to provide some wiggle room in the policy.

It also wants Japan to continue importing its nuclear technology in light of the decades-long ban it placed on new nuclear power plant construction after the Three Mile Island incident in 1979, said Ban of CNIC.

"The U.S. doesn't want Japan to stop using atomic energy. If Japan withdraws, America's export plans could fall through," Ban said. "Japan's new strategy could negatively affect the U.S."

How will the new policy affect Japan's vow to cut greenhouse gas emissions by 25 percent?

In 2009, then Prime Minister Yukio Hatoyama pledged at the U.N. General Assembly that Japan would reduce greenhouse gas emissions by 25 percent from 1990 levels by 2020.

Fukushima, and the public outcry, derailed this plan, which at the time was still based on the ever-expanding nuclear power program in Japan, which it wanted to cover 50 percent of its energy needs.

In speech in October, Noda effectively retracted the 25 percent pledge.

"Our country will devote maximum power to creating an energy-saving society and expanding reusable energy.
"But at the same time, despite such efforts, it will be difficult to control the amount of carbon dioxide emissions that we had planned to cover through atomic energy," Noda said.

The Weekly FYI appears Tuesdays. Readers are encouraged to send ideas, questions and opinions to hodobu@japantimes.co.jp

Of the inhumanity of nuclear weapons

November 7, 2012

Hiroshima mayor seeks explanation from gov't over anti-nuke statement snub

http://mainichi.jp/english/english/newsselect/news/20121107p2a00m0na002000c.html

Hiroshima Mayor Kazumi Matsui visited the Ministry of Foreign Affairs on Nov. 6 and submitted a document to Foreign Minister Koichiro Gemba seeking an explanation as to why the government did not agree to a recent statement by 34 countries to work toward outlawing nuclear weapons.

Matsui believes that the declaration matches Hiroshima's goal of eliminating nuclear weapons. Meanwhile, Nagasaki Mayor Tomihisa Taue had earlier asked the government to sign the document.

The statement was jointly released on Oct. 22 at the United Nations General Assembly First Committee by countries including Switzerland, Norway and Thailand. It denounced nuclear weapons as inhumane and held that, "All states must intensify their efforts to outlaw nuclear weapons and achieve a world free of nuclear weapons."

According to the Hiroshima Municipal Government, Mitsuru Kitano, head of the Foreign Ministry's Disarmament, Non-proliferation and Science Department, who received the document from Matsui, said, "We have no objection over the inhumanity of nuclear weapons," but also said, "However, at this stage we cannot agree to the contents of the statement."

Taue wrote, "As the site of an atomic bombing, we feel it is very unfortunate that our country, which was on the receiving end of nuclear weapons, is not among those agreeing to the statement. From the view of nuclear weapons' inhumanity, Japan should lead a new approach to a world free of them."

Nuke debate next elections's most explosive issue

November 6, 2012

uesday, Nov. 6, 2012

Nuke policy to drive next election

http://www.japantimes.co.jp/text/nn20121106f3.html

Jiji

The biggest issue in the next Lower House election will be whether Japan aims to stop using nuclear power, former national policy minister Satoshi Arai said in a recent interview.

The Liberal Democratic Party, the top opposition force, "is starting to say that zero dependence on nuclear power is unrealistic," said Arai, former chairman of the ruling Democratic Party of Japan's project team working to bring the Fukushima nuclear crisis under control.

The administration of Prime Minister Yoshihiko Noda has put forward a strategy aimed at reducing reliance on nuclear energy to zero in the 2030s, although his Cabinet failed to endorse the strategy.

If the LDP — which promoted nuclear power during its postwar reign of nearly five decades — returns to power, the zero policy will be scrapped, Arai said.

Because the LDP has backed Noda's increase in the consumption tax, that is not expected to be a major issue in the general election. However, Arai said, the debate over scrapping or continuing the use of nuclear power will be the election's most explosive issue.

Arai lamented the Noda administration's failure to adopt the zero-nuclear strategy at a Cabinet meeting, saying this has given a negative impression about its commitment to reducing the country's dependence on nuclear power to zero in the 2030s.

Arai said the biggest discrepancy in the national nuclear policy lies in the way the country pushed ahead with atomic power without completely developing the nuclear fuel cycle program.

"Without the nuclear fuel cycle, there will be no place for spent nuclear fuel," Arai said, noting that capacity for storing the fuel at most nuclear plants will be exceeded in five to six years.

Asked who should make the decision to resume operations at halted reactors, Arai said the newly established Nuclear Regulation Authority should initially judge the safety of individual reactors after they draw up evacuation plans for accidents.

The authority should make decisions from the technical and safety standpoints, Arai said, but "the final decisions should be taken by political leaders, who reflect public opinion."

A new life for a 50-year old science fiction book

November 9, 2012

Yoroku: An alternative view of nuclear-equipped humanity

http://mainichi.jp/graph/2012/11/09/20121109p2a00m0na002000c/001.html

In the novel "Utsukushii Hoshi," by Yukio Mishima, four members of an affluent family who see a flying saucer come to believe they are aliens from different planets. Amid the Cold War between East and West, the family members, hiding their backgrounds, launch a peace campaign to prevent nuclear war breaking out between the United States and the Soviet Union.

The science fiction novel, published by Shincho Bunko, came out exactly 50 years ago. This year, it has reportedly started to sell again, thanks to the efforts of a major bookstore in Tokyo. In January, the bookstore created an advertising panel for the book, picking up on the novel's reference to radioactive materials, cesium, half-lives and other terms connected with warnings about the dangers of nuclear testing. This sparked the interest of people whose awareness of such issues has been heightened by the Fukushima nuclear accident.

Later, the publisher prepared a paper advertising wrapper for the book, exclaiming, among various phrases, that "Mishima foresaw a Japan intimidated by radiation!" Officials also prepared store advertising slogans, and the novel started steadily registering sales from around this spring, leading to new editions.

In the novel, a second group besides the family whose members say they are aliens appears, and a fierce argument is waged over the future of humanity. Is it permissible for humans to continue living? What is civilization? The aliens' view of mankind is fairly objective.

The uneasiness that emerges through the turn of events trickles through to current times, in which mankind has acquired nuclear energy. The weighty question of whether humans are worthy to use nuclear energy continues to reverberate.

Since the Great East Japan Earthquake and tsunami, people have at least started to think about their daily way of life in fundamental terms. At times, there may be significance in thinking about the future of the world and in humanity in the same way an alien outside this world might see the situation. ("Yoroku," a front-page column in the Mainichi Shimbun)

Japan & the nuclear arms issue

November 11, 2012

Nuclear arms abolition is impossible: Osaka Mayor Hashimoto

http://mainichi.jp/english/english/newsselect/news/20121111p2g00m0dm002000c.html

HIROSHIMA (Kyodo) -- Outspoken Osaka Mayor Toru Hashimoto said Saturday in Hiroshima, attacked with an atomic bomb in 1945, that it is impossible to abolish nuclear weapons and that Japan is "peace-addicted."

"It would impossible, given the current international political situation" to abolish nuclear weapons, Hashimoto, also head of Nippon Ishin no Kai (Japan Restoration Party), said. "Japan is a little bit peace-addicted. Who can abolish nuclear weapons even if Japan is eager to achieve it?"

He was visiting the city as part of campaigning for his party, which is seeking to form a "third force" to take on the ruling Democratic Party of Japan and main opposition Liberal Democratic Party in the run-up to the next lower house election in cooperation with hawkish former Tokyo Gov. Shintaro Ishihara.

Hashimoto also indicated to reporters that he would accept the entry of nuclear weapons into Japan, currently banned under the country's "three non-nuclear principles," saying, "It could be possible as Japan is protected under the nuclear power of the United States."

If nuclear weapons are actually being brought in, "we need to open it up to the public for debate," he said.
The three principles prohibit Japan from possessing, producing or introducing any nuclear arms into its territory.
"We basically need to adhere to the principles, but we should not lie about the entry of nuclear arms in terms of security," Hashimoto said.

Earlier this month, Hashimoto said his party would not allow Japan to possess nuclear arms, while accepting debate about it.

TEPCO's customers to be able to choose their source of energy

November 10, 2012

TEPCO customers to have choice of renewable energy: president

http://mainichi.jp/english/english/newsselect/news/20121110p2a00m0na011000c.html

Tokyo Electric Power Co. (TEPCO) customers will have a choice of paying for renewable energy or power from conventional sources, TEPCO President Naomi Hirose told the Mainichi Shimbun during a Nov. 9 interview.

Under the new pricing system, customers who want to support renewable energy will be able to opt to buy electricity from such sources starting in fiscal 2014, when the utility's Higashi Izu wind power station in Shizuoka Prefecture with a total output of some 18,000 kilowatts goes online.

It is the first time for a major power company in Japan to introduce such a pricing system aimed at promoting renewable energy. Because renewable energy generation costs up to four times more than thermal and other conventional energy, power bills will be heftier for its consumers. The utility also plans to use the proceeds for renewable energy investment.

"Even if the power rate is higher, I believe there will be customers who want to buy renewable energy," Hirose said, referring to rising calls for renewable power in the wake of the disaster at TEPCO's Fukushima No. 1 nuclear plant.

As renewable power output is limited, TEPCO will initially sell renewable energy only to corporations and organizations, not to households. If the number of clients who prefer renewable energy increases, the utility will apply the system to households as well by adding wind and megasolar plant capacity.

TEPCO is also considering purchasing electricity generated at megasolar plants developed by trade and other companies and selling it to regular households. The move is likely to lure new entrants to the renewable energy market.

According to the Ministry of Economy, Trade and Industry, the United States and Germany have similar systems giving customers the choice of purchasing renewable energy, leading to the expansion of renewable power sources in those countries.

In anticipation of criticism that it is unfair for those against nuclear power to be forced to pay heftier bills, TEPCO will likely be urged to reduce renewable energy costs.

Hiroshima Mayor vs Osaka Mayor Hashimoto

November 14, 2012

Hiroshima mayor complains about Hashimoto's remark on nuclear arms

http://mainichi.jp/english/english/newsselect/news/20121114p2g00m0dm085000c.html

HIROSHIMA (Kyodo) -- Hiroshima Mayor Kazumi Matsui on Wednesday complained about Osaka Mayor Toru Hashimoto's recent remark that it is practically impossible to eliminate nuclear weapons.

"The remark may be by a person who has not understood the realities of the atomic bomb catastrophe," Matsui told a news conference. "If he knows the realities, it would make a difference."

Hashimoto, who has attracted media attention by launching a new political party called Nippon Ishin no Kai, made the remark in the atom-bombed city of Hiroshima on Tuesday, coming under fire from Hiroshima Prefecture Gov. Hidehiko Yuzaki.

Matsui told the press conference that politicians including U.S. President Barack Obama have been calling for eliminating nuclear weapons.

The demand for elimination represents "Hiroshima's deep-rooted, important wish emerging from its real experiences," he said. "I want to take various opportunities to urge Hashimoto to look at the realities of the atomic bomb catastrophe."

In his complaint about Hashimoto's comment on Saturday, Gov. Yuzaki called on Hashimoto to improve his knowledge.

Hashimoto reacted to Yuzaki's complaint in a brief meeting with reporters Wednesday in Osaka, asking Hiroshima Prefecture and city to explain how they would become political players in dealing with the nuclear powers.
"Nothing will change simply with the assertion to eliminate nuclear weapons," he said.

Kepco's worries

November 16, 2012

Reactors vital to Kansai area this winter, Kepco claims

By KAZUAKI NAGATA
Staff writer
http://www.japantimes.co.jp/text/nn20121116f2.html

What would happen if the two working reactors at the Oi power plant — Japan's only reactors brought back online since the Fukushima meltdowns last year — are shut down because of a suspected active fault under their critical equipment?

According to Kansai Electric Power Co., the Kansai region would suffer severe electricity shortages this winter because demand is projected to far exceed the utility's capacity to generate power through other means.

Kepco estimates that the peak demand this February will be 25.37 million kw, while the firm now has a maximum supply capacity of 26.42 million kw — including the Oi reactors.

Without the Oi plant, the capacity drops to 21.96 million kw, or 13.4 percent under its capacity to meet peak demand, Kepco says, because it would lose 2.36 million kw from the two Oi reactors and 2.1 million kw from pumped-storage hydroelectric stations that are charged by electricity from the Oi plant during off-peak nighttime hours.

A pumped-storage hydroelectric plant generates electricity by letting pumped water in a higher reservoir rush through a turbine into another, lower reservoir.

The water is pumped mainly by using nuclear power at night when power demand is low.

Some experts, however, question Kepco's estimates for its supply capacity, saying power purchased from other firms would let it tide over any shortfalls.

Hideaki Matsui, a senior energy expert at the Japan Research Institute, is one such expert.

Matsui said Kepco could get more electricity from independent power producers around Kansai as well as regional utilities elsewhere in Japan. He also pointed out that Kepco's supply could be increased by postponing regular inspections of some its thermal power units.

Kepco's estimates include getting about 4.6 million kw from other sources, including independent power producers and firms with in-house generators. The estimates, however, do not include help from fellow regional utilities.

A Kepco spokesman said depending on the situation, the utility could buy more power from independent producers and will also ask other utilities if they can spare some power.

On Oct. 30, Kepco told the government that if five other utilities in western and central Japan helped out to the point where their own reserves fell to around 3 percent, Kepco would only be 1.7 percent under peak demand.

Kepco also said the No. 3 unit at its Kainan thermal power plant is scheduled for a regular checkup starting Jan. 11, but this might be postponed if the Oi reactors are turned off.

Kepco has already postponed regular checks of some of its thermal units amid the nuclear moratorium.

An uncertain future for all energy plans

November 16, 2012

Energy measures left up in the air
http://www3.nhk.or.jp/daily/english/20121116_45.html

Japan's economic policy is not the only thing that is facing an uncertain future. So are plans for energy.

In September, the government mapped out new energy measures. They included the termination of nuclear power generation by the 2030's.

The government was also planning to come up by year end with a framework for introducing renewable and other forms of alternative energy.

Final decisions on these matters are made at meetings of the National Policy Minister, the Economy, Trade and Industry Minister and by other cabinet officials.

But it's now unclear whether such meetings will be held by the end of the year.

In addition, debate on the country's comprehensive basic energy plan has been shelved. The plan was expected to address future electricity needs.

DPJ to pursue elimination of nukes, says Noda

November 17, 2012

Noda vows to take steps to boost economy, eliminate nuclear plants

http://mainichi.jp/english/english/newsselect/news/20121117p2g00m0dm001000c.html

TOKYO (Kyodo) -- Prime Minister Yoshihiko Noda said Friday that his Democratic Party of Japan will continue to take measures to boost the economy and pursue policies to eliminate all nuclear power plants in the country by the 2030s.
Noda, who dissolved the House of Representatives the same day, also promised that his party will move forward talks on free trade pacts, including the U.S.-led Trans-Pacific Partnership, "while protecting what we should protect."

Speaking at a press conference, the prime minister said he dissolved the lower house for a general election on Dec. 16 to fulfill a promise to the main opposition Liberal Democratic Party and its ally the New Komeito party.

In August, Noda, then LDP chief Sadakazu Tanigaki and New Komeito head Natsuo Yamaguchi agreed on a deal to enact legislation to double the 5 percent sales tax rate by 2015, the prime minister's key policy goal, in exchange for a promise from Noda to call a general election "sometime soon."

Vowing to overcome the country's prolonged deflation and prop up the economy, Noda said the government will work closely with the Bank of Japan.

Noda also criticized recent remarks by LDP chief Shinzo Abe on the BOJ's monetary policy, saying they could undermine the central bank's independence.

On Thursday, Abe expressed hope that the BOJ would set its key policy interest rate below zero, urging the bank to stimulate lending even by keeping the interest rate below zero.

Japan's national security linked with nuclear power

Dossier 11

November 19, 2012

Nuclear Power and Japan's National Security
http://www.yomiuri.co.jp/adv/wol/dy/opinion/society_121119.htm

Tetsuo Arima
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On May 7, 1957, one and a half months before making a visit to the U.S., Prime Minister Nobusuke Kishi presented his theory on the constitutionality of nuclear arms as a means of self-defense before the House of Councilors Cabinet Committee, as follows:

Nobusuke Kishi: The various weapons that are used under the term “nuclear weapons”… are considered unconstitutional simply by virtue of the fact that they are called “nuclear weapons”… However, that is not necessarily the case… The spirit of our Constitution is, ultimately, self-defense, and so it stands to reason that equipping ourselves with one of the powers included under the right of self-defense is permissible

under our current interpretation of the Constitution. (From the website "Search System of the Minutes of the Proceedings of the National Diet" [Kokkai Kaigiroku Kensaku Shisutemu])

Why did Kishi make such an assertion at this point in time? It was because the purpose of his visit to the U.S. was to pave the way for the revision of the Japan-U.S. Security Treaty (hereafter referred to as "Security Treaty").

The Security Treaty, which had been signed at the same time as the San Francisco Peace Treaty, was just as disadvantageous for Japan as the unequal treaties at the end of the Tokugawa era. Japan had been forced to accept demands to put an end to the Allied occupation.

Despite the fact that U.S. forces were not under any obligation to defend Japan, the treaty allowed them to station troops anywhere they liked and did not place any restrictions on them, even with regard to bringing nuclear weapons into the country. In addition, the treaty had no expiration date and could not be annulled by the Japanese side.

Kishi wanted to revise the treaty to make it more equitable. Under the revision, Japan would provide the U.S. with a number of military bases, while the U.S. would withdraw most of its ground forces from Japan. The U.S. would not be allowed to bring in nuclear weapons that could entangle Japan in a nuclear war. The treaty would be set to expire ten years after the date of the revision, and the two countries would be able to renegotiate and renew the treaty every ten years.

The problem with Kishi's proposed revision was that a considerable portion of the U.S. ground troops would be withdrawn, leaving Japan almost entirely defenseless and vulnerable to threats from China and the Soviet Union. These two countries had formed an alliance in 1950, and the Soviet Union posed a special threat due to its possession of nuclear weapons.

Kishi thus asserted that nuclear armament was permissible for the purpose of self-defense, even under the existing Constitution. Indeed, the revision Kishi had planned would not have been feasible had he not made this assertion.

The U.S. was deeply shocked by Kishi's speech on the constitutionality of nuclear arms. In fact, the CIA launched a full-scale investigation of Japan's nuclear-arms capability after Kishi returned to Japan. The following quote summarizes the findings of a CIA intelligence report dated July 26, 1957:

One capable U.S. government official believes that if Japan succeeds in using the uranium recent reports say it has been storing as fuel for a nuclear reactor, it will be able to produce nuclear weapons by 1967 without the assistance of other countries. The Japanese are making every effort to remove any impediment (meaning report of Japan's uranium stockpile, author's notes are parenthesized hereinafter) standing in their way. The Japanese government has been rapidly advancing domestic and international programs in order to secure a sufficient amount of uranium to pursue a major nuclear power program free of the restrictions imposed by the U.S. and the U.K. on their use of nuclear byproducts (such as plutonium) related to the export of nuclear fuel from those countries.

(…)

If the Japanese receive an unlimited supply of nuclear fuel and successfully produce their own nuclear

power plants, they will obtain nuclear material (plutonium) that can be used for nuclear weapons. If the nuclear reactor they use is a British Calder Hall type reactor or a reactor that uses natural uranium, it will provide them with a massive supply of nuclear material. (From a U.S. State Department document in the U.S. National Archives II)

Matsutaro Shoriki, then Chairman of the Atomic Energy Commission (as well as Chairman of the National Public Safety Commission) under the Kishi administration, had been pushing forward plans to install a Calder Hall nuclear power plant from Britain, despite the opposition of the U.S. government. Thus, Kishi's theory on nuclear arms for self-defense was not just a castle in the air.

The U.S. government was forced to make a choice between accepting the revision of the Security Treaty or allowing Japan to develop nuclear arms. They chose the former option. After the passage of several other events, the Security Treaty was revised in 1960.

Japan's first nuclear power plant, the Tokai Power Station, began operation in 1966. Once the plant was producing about 50 kilograms of plutonium per year, the U.S. put pressure on Japan to join the Nuclear Non-Proliferation Treaty (NPT) in order to limit Japan's nuclear-arms capability. The Japanese Prime Minister at that time, Eisaku Sato, ordered researchers to examine whether Japan should join the treaty or continue developing its nuclear arms. (Sources documenting this history include a classified document of the Cabinet Intelligence and Research Office, *Basic Research on Japan's Nuclear Policy* [Nihon no Kakuseisaku ni kansuru Kisoteki Kenkyu])

As a result, Japan decided to stop developing nuclear arms for the time being and continue receiving nuclear fuel from the U.S., working to meet the country's burgeoning electricity demands and achieve economic prosperity through the generation of nuclear power. Japan signed the NPT in 1970, although the ratification of the treaty in the National Diet dragged on for years afterward to the irritation of the U.S. government. Japan officially joined the treaty in 1974, after it had regained possession of Okinawa and renewed diplomatic relations with China.

Japan's national security is thus intimately bound up with nuclear power. Nuclear power generation has provided Japan with more than just electricity. In a post-3.11 Japan, we need to identify the ways in which these two factors are interconnected and think about how we can improve the relationship between them.

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Professor Arima specializes in television studies and media history. His major publications include *Nippon Television and the CIA: The Discovery of the "Shoriki File"* [Nippon Terebi to CIA: Hakkutsu Sareta "Shoriki Fairu"] (Shinchosha Publishing), *Nuclear Power, Shoriki and the CIA: The Underground History of the Showa Era Revealed by Classified Documents* [Genpatsu / Shoriki / CIA: Kimitsu Bunsho de Yomu Showa Rimenshi] (Shincho Shinsho), *Nuclear Power and Nuclear Bombs: The Secret Struggle among Japan,*

the U.S. and Britain over Nuclear Arms [Genpatsu to Genbaku: “Nichi / Bei / Ei” Kakubuso no Anto] (Bunshun Shinsho)

Ishihara on the "simulation" of nuclear arms as a deterrent

November 20, 2012

Nuclear 'simulation' swagger is coupled with sympathy for Tibetans, call for defense buildup

Ishihara rattles saber against China

By NATSUKO FUKUE
Staff writer
http://www.japantimes.co.jp/text/nn20121120x3.html

Shintaro Ishihara, the new head of Nippon Ishin no Kai (Japan Restoration Party), remained true to his China-hawk form Tuesday by saying Japan should "simulate" possessing nuclear arms as a deterrent to Beijing.

Ishihara's remark during a news conference at the Foreign Correspondents' Club of Japan in Tokyo, is likely to ruffle feathers both at home and abroad, especially amid the territorial row with China over the Senkaku Islands.
"It's high time Japan made simulations of possessing nuclear arms," Ishihara said. "That would become a form of deterrent" against China's possible military encroachment.

The 80-year-old former Tokyo governor also said the defense budget should be increased while dealing with China in a "calm but resolute manner."

"We need to say no to China when necessary because I don't want Japan to be like Tibet, which has fallen under Chinese power," said Ishihara, who coauthored the best-selling essay "The Japan That Can Say No" in 1989 with late Sony cofounder Akio Morita. The book urges Japan to become more assertive in international affairs.

"I feel so sorry for the Tibetan people," he said.

Ishihara repeatedly referred to China as "Shina," the name often associated with Japan's military occupation during the war, instead of "Chugoku," the Japanese word for the country.

"Shina is not a negative word. And for Japanese, Chugoku means Hiroshima and Okayama" — the Chugoku region in western Honshu, he said.

Ishihara asserted that most Japanese agree with him that Japan should deal with China in a calm but assertive manner when conflict arises.

The platform of Nippon Ishin no Kai, which was founded by Osaka Mayor Toru Hashimoto, states the party will urge China to agree to bring the Senkaku dispute to the International Court of Justice for a ruling on which country has sovereignty over the rocky islets long held by Japan.

Ishihara said defense spending, now limited to 1 percent of the national budget, should be boosted.
"I think the skills of the Japanese military industry are high," he said, voicing his personal view. "Why not boost the ability of (the nation's) self-defense?"

Ishihara said he basically supports the U.S.-led Trans-Pacific Partnership free-trade talks but then added "he cannot forgive" the U.S. promotion of genetically modified food. The TPP is opposed by farmers who fear it would lead to a flood of cheap, imported produce after tariff barriers are removed.

He said the government should not rush to abandon nuclear power and instead calculate how the economy would fare without such energy. "Hashimoto and I agree that we should do such calculations," he said.

Hashimoto had advocated abandoning nuclear power by the 2030s and had earlier said his party would pursue this goal. But in consideration of Ishihara's stance, he did not include this in the joint statement issued Saturday when his party absorbed Ishihara's four-day-old group.

Ishihara: Japan should consider nuclear arms
http://www3.nhk.or.jp/daily/english/20121120_31.html
Shintaro Ishihara, the leader of a newly formed opposition party, says Japan should study the procedures and impacts of possessing nuclear arms, in case the country decides to acquire such weapons.

The former Tokyo governor, who recently took the helm of the Japan Restoration Party, was speaking to

foreign correspondents in Tokyo on Tuesday.

Ishihara said countries that lack nuclear arms have only a very weak voice in today's world. He said that, in his personal view, Japan should simulate cases in which it possesses nuclear weapons, and this would work as a deterrent.

He said the question of whether or not the country should go nuclear can be decided after that.

Ishihara also referred to the proposed trans-Pacific free trade agreement.

He said that, in principle, he supports Japan's joining the negotiations.

He added, however, said that it is dangerous to fully liberalize trade, since some items, such as genetically modified foods, should not be allowed to enter the Japanese market. He said the United States is trying to sell such foods to Japan

Anti-nuke advocates unite!

November 21, 2012

Anti-nuclear power advocates aim for Diet majority
http://www3.nhk.or.jp/daily/english/20121121_38.html

Politicians advocating an end to nuclear power generation in Japan have agreed to join forces to aim for a combined majority in the Lower House election next month.

About 20 lawmakers from People's Life First, the Social Democratic Party, the Democratic Party and others met in the Diet building on Wednesday.

They were joined by about 60 members of citizens' groups campaigning against nuclear power.

People's Life First Acting President Kenji Yamaoka said at the meeting that while 7 in 10 people in Japan oppose nuclear power, 7 in 10 Diet members support it.

Yamaoka said that what politicians are doing is worlds apart from people's wishes.

He called on voters to vote for candidates advocating an end to nuclear power so that like-minded lawmakers will win a majority in the chamber and possibly form a coalition government.

All political parties must show their hand clearly

November 23, 2012

Editorial: Parties must show voting public concrete vision for Japan's energy future

http://mainichi.jp/english/english/perspectives/news/20121123p2a00m0na012000c.html

With the future of Japanese society resting largely on whether or not nuclear power is abandoned, nuclear and energy policy is a major point of controversy in the upcoming general election.

Even now, 20 months after the outbreak of the disaster at the Fukushima No. 1 nuclear plant operated by Tokyo Electric Power Co. (TEPCO), at least 160,000 people are living as evacuees. Workers at the site continue their efforts to bring the crisis under control**, with no end in sight.** Decontamination of areas tainted by radiation is far from completion, and **low-level radiation exposure among residents is a constant concern.**

Building additional nuclear reactors is out of the question, now that the potential for such massive disasters has become obvious. Even if we approve the reactivation of existing reactors for the time being -- given that they clear strict risk evaluations -- the only choice for Japan, now that it's clear how much the dangers posed by seismic activity had been underestimated, is to start shutting reactors down.

It is our hope that each party will propose responsible energy policies that take this reality into consideration.

The ruling Democratic Party of Japan (DPJ) says the goal of phasing out nuclear power by the 2030s will be incorporated into its manifesto. However, the party's declaration lacks persuasiveness as it has thus far failed to reveal a clear roadmap toward achieving that goal. Some doubt the party's sincerity after the Noda Cabinet chose not to endorse the policy.

We have continued to propose that each nuclear reactor should be assessed and ranked for decommissioning priority based on set criteria. We want to see a schedule for phasing out nuclear power that includes the implementation of such methods. This is a task that should be carried out not just by the DPJ but also by other parties, such as New Komeito, that are calling for the elimination of nuclear power.

Meanwhile, the Liberal Democratic Party (LDP) says in its campaign platform that it will decide on an optimal combination of energy sources for Japan within the next 10 years. This represents a mere postponement of a real decision, and does not show whether the party is aiming for the abandonment of nuclear power or continued adherence to old policy.

The ongoing nuclear disaster broke out against a backdrop of loose safety regulations and the dominance of the "nuclear village" -- referring to the cozy ties between pro-nuclear politicians, bureaucrats, academics and industry -- and the LDP bears some responsibility for allowing it all to go unchecked. With that in mind, the party should demonstrate a clear stand on nuclear energy.

The Japan Restoration Party has backed off its original anti-nuclear stance, and now pledges to "create rules, including safety standards." It's only natural that voters view the party as having sacrificed its nuclear policy in order to join hands with pro-nuclear advocate and former Tokyo Gov. Shintaro Ishihara. Is there any reason voters should put their support behind such flip-flopping?

Whether the decision is made to abolish nuclear power or to keep it, many pending issues remain.

One is the problem of spent nuclear fuel. The DPJ has contradicted itself by calling for a zero-nuclear policy on the one hand, while on the other making clear its intention to continue the reprocessing of spent nuclear fuel. This is likely an attempt by the party to avoid stepping on the toes of municipalities hosting nuclear facilities and the U.S., with whom Japan's relationship comes deeply laced with security issues.
It's not yet clear how the DPJ will incorporate its stance on the nuclear fuel cycle into its campaign manifesto, but it must stick to a clear anti- or pro-nuclear position. Other parties, such as the LDP, should also offer specific party lines in order to allow for a reexamination of policies that were heretofore in place as a result of real decisions being postponed.

Another major issue in the election will be how each party positions the national government's responsibility for nuclear power.

First, there is the question of additional assistance for the rehabilitation of TEPCO. The utility, which under current law is required to take sole responsibility for the payment of disaster damages, has requested additional financial assistance from the government, saying that compensation amounts are too heavy for one private company to bear.

If TEPCO cannot cover the cost of damages through its efforts alone, the national government -- which bears responsibility for having promoted nuclear power as a national policy -- must shoulder some of the burden. The national government footing some of the cost, however, means that the Japanese public is footing the cost. As such, the public will not approve of an easy bailout. We want to hear each party's views on the national government's share of responsibility that incorporate what has been learned from past nuclear policy.

We must also take a close look at parties' attitudes toward electric power system reform, considering how much of an impact it would have on people's lives.

In order to reduce Japan's dependence on nuclear power, alternative sources of energy must be secured. High hopes have been pinned on renewable energy sources such as solar and wind power in the mid to long term. However, until the use of such power sources becomes widespread, we must rely mainly on thermal power generation, which comes with high fuel costs.

Both renewable and thermal energy will result in mounting costs. If those costs are directly tacked on to electricity costs, not only will it increase the burden on household finances, there's a chance it could hurt the competitive edge of Japanese manufacturing in the international market.

To keep power costs low, it is essential to implement reforms that encourage new companies to enter the electricity business and promote competition among utility giants.

The DPJ administration has announced its plans to work toward the liberalization of electricity retail sales, including power for private households, and the separation of generation from distribution. It's a valuable policy line that would promote competition. Meanwhile, it's unclear if the LDP, which in the past opposed liberalized retail sales of electricity, is prepared to implement reform.

Nuclear and energy policy are directly linked to issues such as the stable supply of power, burden of cost and energy security, and have a great impact on the lives of Japanese citizens. Are the various parties aspiring to a shift toward a low-energy society, or a return to life before the nuclear disaster? They must reveal the future they envision and the steps to get there for the public to decide for themselves.

Nuke policy important even for Tokyo election

November 22, 2012

Nuclear policy splits parties into 2 camps for candidates in Tokyo governor race

http://mainichi.jp/english/english/newsselect/news/20121122p2a00m0na009000c.html

The country's future nuclear policy is forcing political parties to back either of two key candidates in the Dec. 16 Tokyo gubernatorial election -- Tokyo Vice Gov. Naoki Inose and Kenji Utsunomiya, former president of the Japan Federation of Bar Associations.

While nine people have declared their candidacies for the top post of Japan's capital, most political parties are throwing their weight behind either Inose, 66, or Utsunomiya, 65. The People's Life First (PLF) party, headed by conservative politician Ichiro Ozawa, the Japanese Communist Party (JCP) and the Social Democratic Party (SDP) have decided to support Utsunomiya, while the main opposition Liberal Democratic Party (LDP), New Komeito, the Japan Restoration Party (JRP) and Your Party are backing Inose. Because of the ongoing whirlwind political realignment ahead of the Dec. 16 general election, it was not easy to clearly see each party's nuclear policy. But with the official campaign for the Tokyo gubernatorial election set to kick off within a week, each political party's nuclear policy has become clear.

The three parties backing Utsunomiya have separately pledged to phase out nuclear power within specific timeframes. The four political parties supporting Inose, on the other hand, have not made such specific policy commitments. The ruling Democratic Party of Japan (DPJ) is likely to allow its members and supporters to vote freely for any of the candidates.

According to sources familiar with the issue, there were arguments within the PLF against its decision to join hands with the JCP and the SDP in supporting Utsunomiya. But after the merger between the JRP and the Sunrise Party, which were far apart over nuclear policy, Ozawa himself was quoted as saying, "Under the current political situation in which 'third force' parties are forging an unprincipled alliance, it is complete nonsense that anti-nuclear groups are at odds with one another."

The Tokyo Seikatsusha Network, an affiliate of a consumer group, and the political organization Green Party, as well as other groups that advocate zero-nuclear policy, are beginning to join forces to back Utsunomiya. Akihiro Hatsushika, who left the DPJ to join Green Wind, a new political party launched on Nov. 15, is said to be planning to attend a ceremony to open Utsunomiya's campaign office on Nov. 22.

When Inose declared his candidacy for the Tokyo gubernatorial race at a news conference on Nov. 21, he did not make his position clear over nuclear policy although he stressed the need to promote the use of renewable energy. An LDP lower house lawmaker from Tokyo said, "Nuclear policy does not fit in as an issue for the gubernatorial election in Tokyo where there are no nuclear plants."

Toshiaki Eto, a professor at Yamanashi Gakuin University, said, "It is a significant move in which political parties go beyond ideological differences to get together and cooperate on important policies. Energy policy has been an important policy issue for elections since the Great East Japan Earthquake." He added, "Conversely, it could become a message from the Tokyo gubernatorial election to the House of Representative election that 'the nuclear issue is important.'"

Japan must diversify energy sources

November 24, 2012

ENERGY SEMINAR

For energy security, Japan urged to diversify sources

http://www.japantimes.co.jp/text/nb20121124d2.html

By TAKASHI KITAZUME
Staff writer

Japan needs not only to maintain a diverse energy mix — including nuclear power — but also diversify the ways of securing imported fuel in the face of the changing global supply-demand structure, a former executive director of the International Energy Agency said at a recent seminar in Tokyo.

The Democratic Party of Japan-led government's plan to seek a phaseout in nuclear power lacks the perspectives of energy security for the country and fails to address international concerns such as the possible impact of a Mideast turmoil on oil supply, or the effects of rapidly growing energy consumption in countries like China and India, said Nobuo Tanaka, currently an associate at the government-affiliated Institute of Energy Economics.

Tanaka was speaking at a seminar on energy security organized by the Keizai Koho Center on Oct. 30.

In the wake of the triple meltdowns at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant, which followed the massive earthquake and tsunami on March 11, 2011, all but two of Japan's nuclear reactors remain shut down. Prime Minister Yoshihiko Noda's Cabinet announced a plan in September to seek to phase out nuclear power generation by the end of the 2030s.

Without nuclear power, Japan will inevitably have to import more oil, natural gas and coal in addition to increasing power generation through renewable sources such as solar and wind, Tanaka said. This will cause a triple problem of rising costs, reduced security and greater emission of greenhouse gases, he noted.

Japan's nuclear disaster has prompted Germany to reverse its position and announce a phaseout of its nuclear power generation by 2022. One way for Germany to achieve that would be importing more

natural gas, but it is also connected to neighboring countries through regional power grids, which would enable the country to buy electricity, for example, produced at nuclear power plants in France, Tanaka pointed out.

Germany turned from a net energy exporter to a net importer in March last year, but European countries maintain a collective security system in energy supply through a regionwide power grid network as well as gas pipelines, he said. Japan, for its part, does not even have a nationwide network of power lines and its still divided by the 50 hertz/60 hertz differences in eastern and western Japan, he noted.

Crude oil prices are not expected to come down in the future with the rising demand from emerging powers, Tanaka said. Meanwhile, if a crisis emerges over Iran's nuclear program and Tehran blocks crude supplies through the Straits of Hormuz, the current oil stockpiles by IEA members will be able to supply global demand for only two or three months, he said.

In case the crude oil prices should spike to double the current level, Japan is estimated to quickly lose its current account surplus and the deficit could run as high as ¥12 trillion if its nuclear plants remain shut down, Tanaka said.

Expectations are high for increases in natural gas supplies worldwide with the shale gas revolution in the United States and development of unconventional types of gas in other countries, but Tanaka said that the market will not ease substantially because there will also be huge demand particularly in countries like China.

Meanwhile, export capacity of Southeast Asian countries, including Indonesia, Malaysia and Brunei, which have long been major suppliers of liquefied natural gas (LNG) to Japan, is forecast to decline as these rapidly growing countries need to supply rising consumption at home, he said.

Japan will need to diversify its sources of natural gas imports, including the purchase of shale gas from the U.S. as well buying more from Russia by building gas pipelines, he said. Russia today accounts for 9 percent of natural gas and 4-5 percent of oil that Japan imports, and increasing imports from Russia will also help Japan reduce its dependence on supplies from the Middle East, he noted.

Meanwhile, another speaker at the seminar, Robert Dujarric, director of the Institute of Contemporary Asian Studies at Temple University's Japan Campus in Tokyo, urged Japan to set a goal of minimizing demand for fossil fuels as sources of its energy supply from security viewpoints, given the geopolitical risks involving many of the world's oil producers.

A logical course for Japan would be to invest more in research and development on efficiency in renewable and non-traditional energy sources, Dujarric said. "Energy is a challenge for Japan but it is also an enormous opportunity for Japan" to develop a path for "thriving in a lower fossil fuel environment" with its energy-efficiency technologies, he said.

On the other hand, a zero-nuclear policy will lead to higher fossil fuel prices by pushing up demand for oil and gas as alternative energy sources, along with exacerbating the global warming problems, he said.

The need for a diverse mix in energy supply as the foundation of energy security was also echoed by Akihiro Sawa, an executive senior fellow with the 21st Century Public Policy Institute, who spoke at another seminar on energy issues organized by the Keizai Koho Center on Nov. 5.

Japan was heavily dependent on oil imports as a fuel for its electricity generation when it was hit by the First Oil Crisis in 1973. After its economy was severely affected by the supply disruptions and sharp increase in oil prices, the nation responded by diversifying its sources of power generation more to nuclear and natural gas, Sawa pointed out.

Even with the huge investments, it took decades for the share of nuclear energy in Japan to reach the roughly 30 percent it had before the Fukushima crisis, gradually reducing the reliance on oil, he said.

While the zero-nuclear scenario assumes a sharp increase in the share of renewable energy, it would similarly take decades for renewable sources — whose research has indeed been continued since the days of the 1970s oil crises without much success in terms of securing a substantial volume of power generation — to make up for the gap left by ending nuclear power, Sawa noted.

Japan's current basic energy plan, which was set in 2010 by the same DPJ-led government then under Prime Minister Yukio Hatoyama, called for increasing the share of nuclear power to 53 percent and that of renewables to 19 percent by 2030.

This plan, created for the purpose of achieving Hatoyama's call for reducing Japan's greenhouse gas emissions by 25 percent from the 1990 levels by 2020, in itself was problematic in that relying more than half of Japan's power supply on a single source — nuclear — would result in severe nationwide supply disruptions in case problems emerge in nuclear reactors, just as the oil supply was disrupted during the 1970s oil crises, he said.

New no-nukes party?

November 26, 2012
Shiga governor mulls new no-nuclear party

Move might rally others unwilling to bend on 'third force' objectives

http://www.japantimes.co.jp/text/nn20121126x1.html

Kyodo

OTSU, Shiga Pref. — Shiga Gov. Yukiko Kada is considering founding a new political party with the key goal of phasing out nuclear power, sources said Monday.

Although Kada didn't make it official when she met the press in Otsu in the afternoon, her reported move to create a new party ahead of the Dec. 16 Lower House poll quickly drew attention from other small parties that aren't fitting into the major "third force" that has been evolving around Nippon Ishin no Kai (Japan Restoration Party) led by ex-Tokyo Gov. Shintaro Ishihara and Osaka Mayor Toru Hashimoto.

Ichiro Ozawa, the ex-Democratic Party of Japan kingmaker who now heads Kokumin no Seikatsu ga Daiichi (People's Life First), is reportedly trying to sound out Kada about forming a new force by merging his party and other small forces that oppose restarting any reactors and are against the sales tax hike and Japan's participation in the Trans-Pacific Partnership free-trade accord.

Ozawa left the option open Monday for a possible tieup with Kada's planned party, telling reporters, "If she launches a new party and calls for an alliance, we will decide on our moves based on the policy of the new party."

Another small party led by Nagoya Mayor Takashi Kawamura and veteran lawmaker Shizuka Kamei is also considering teaming up with Kada, separate sources said. The Kawamura-Kamei force is also antinuclear, antitax and anti-TPP.

Shiga Prefecture could be easily tainted by radioactive fallout if any of the several reactors in neighboring Fukui are hit by meltdown, thus Kada's move just about a week before the start of official campaigning for the Dec. 16 Lower House poll adds a new twist to the equation.

The sources said Kada hopes to call on legislators and others who back her goals to join her party and to run it without relinquishing the governorship.

Ozawa's and Kawamura's parties are also reportedly eyeing a tieup and want the Green Wind Party that was formed this month by defectors from the ruling coalition, including Kuniko Tanioka, to join. By making all these moves, small parties hope to differentiate themselves from Nippon Ishin, which is pushing increasingly conservative policies now that Ishihara is at the helm.

Anti-nuclear parties seek unity before election
http://www3.nhk.or.jp/daily/english/20121126_24.html

Anti-nuclear minority parties in Japan are seeking to unite for next month's Lower House election. Some of them are looking to an anti-nuclear governor to head a new party that would assemble all like-minded forces.

Three parties in the opposition bloc, including People's Life First, are considering seeking the cooperation of Governor Yukiko Kada from Shiga Prefecture.

Kada argues that nuclear policies should be the focal issue in the upcoming election, because it is the first election after the nuclear accident at the Fukushima Daiichi plant. Sources close to her say she is willing to work on a campaign against nuclear power.

Some within these minority parties say they should join a new party if she forms one.

Japan to keep to its pledge regarding greenhouse gas reduction

November 27, 2012
Japan won't retract pledge to cut greenhouse gas emissions by 25%
http://mainichi.jp/english/english/newsselect/news/20121127p2a00m0na001000c.html

DOHA, Qatar -- Japan has decided not to retract its international pledge to cut its greenhouse gas emissions by 25 percent from 1990 levels by 2020, as the 18th session of the United Nations Climate Change Conference (COP18) kicked off here in the Qatari capital on Nov. 26.

Japan will make a formal decision at a committee meeting of its Cabinet members concerned on Nov. 27. Although the Doha climate conference is set to discuss a new global deal to replace the Kyoto Protocol, Japan could weaken its influence in the upcoming negotiations by keeping the unattainable target intact.

The Doha conference on the U.N. Framework Convention on Climate Change is gearing up for final talks on measures to combat global warming in a second commitment period of the Kyoto Protocol as its first commitment period expires before the end of this year.

Abdullah bin Hamad al-Attiyah, chairman of the Qatari Administrative Control and Transparency Authority, who presides over the Doha climate conference, urged delegates from around the world to strive to reduce the effects of global warming and ensure the safety of future generations.

In 2009 -- before the outbreak of the Fukushima nuclear crisis -- then Prime Minister Yukio Hatoyama made an international pledge on behalf of the Japanese government to cut the country's greenhouse gas emissions by 25 percent from 1990 levels by 2020. That pledge was made on the assumption that more nuclear reactors would be built in the country in the future. But because of the disaster at the Fukushima No. 1 Nuclear Power Plant, Japan's emissions target has become increasingly difficult to achieve.

In September, the government drew up the "Innovative Strategy for Energy and the Environment" aimed at phasing out nuclear power by the 2030s. But the government postponed its decision on the ratio of nuclear power in relation to the country's total power generation for 2020. The Ministry of the Environment had planned to thrash out a new greenhouse gas emissions target by the end of this year, but it became unclear whether a new target could be set anytime soon because Prime Minister Yoshihiko Noda dissolved the House of Representatives earlier this month for a snap election set for Dec. 16.

Furthermore, the government said in its strategy that it would aim at reducing greenhouse gas emissions by an estimated 5 to 9 percent from 1990 levels by 2020. According to these figures, Japan won't be able to reduce greenhouse gas emissions by 25 percent from 1990 levels even if it buys emissions credits from other countries.
Noda said in October that it would be difficult to achieve the target.

However, the government has no plans to withdraw its international pledge, saying it will carefully consider the matter while keeping in mind the possible impact on international negotiations. A government official said, "If we were to announce a plan to lower the target, we would take nothing but a huge bashing. There is no merit in doing that." Nevertheless, the government has not come up with specific measures to achieve the target.

Hashimoto - Disappointing on nuke policy

November 27, 2012

Voters' choice: Fukushima town crowd disappointed by Hashimoto's weak anti-nuclear stance

Toru Hashimoto gives an outdoor talk in Aizuwakamatsu, Fukushima Prefecture, on Nov. 27. (Mainichi)
拡大写真
http://mainichi.jp/english/english/newsselect/news/20121127p2a00m0na009000c.html

FUKUSHIMA -- Japan Restoration Party (JRP) acting leader Toru Hashimoto gave an election campaign speech on the streets of Aizuwakamatsu, Fukushima Prefecture, on Nov. 27 for the first time since the outbreak of the Fukushima nuclear disaster, eliciting hope from voters in his ability to get things done, but disappointment over his party's apparent retreat from its strong anti-nuclear stance following its merger with the short-lived Sunrise Party.

Among the onlookers who turned up to listen to Hashimoto as light snow fell in the area was a 72-year-old farmer from the Fukushima Prefecture town of Aizubange.

"I want an end to nuclear power plants, so I came to listen to his nuclear power plant policies," the 72-year-old said in front of the JRP's campaign office at the foot of Iimori Hill in Aizuwakamatsu. However, referring to the hill's history as the scene where members of the Byakkotai teenage samurai unit committed suicide during the Boshin War of 1868-69 that played a part in the restoration of Imperial rule, he added, "I've got mixed feelings about 'Restoration' (in the party's name) in a place watched over by the Byakkotai."

The JRP office announced that about 800 people turned up to hear Hashimoto, but to reporters, the number appeared to be between about 200 and 300.

Hashimoto attracted the attention of residents at the start of his 17-minute speech by stating, "We don't see Aizu as an opponent" -- an apparent reference to the region's history of victimization over the course of the Meiji Restoration. He went on to address criticism in the media that his party had stopped trumpeting a "zero nuclear" policy since its merger with former Tokyo Gov. Shintaro Ishihara's Sunrise Party.

"Our way of thinking hasn't changed one bit," he said, adding, "None of the other parties have provided concrete plans."
However, some residents remained cautious.

"He's a good speaker, but what he says doesn't differ that much from other politicians," said a 72-year-old woman from Aizuwakamatsu who turned up. Commenting on the party's anti-nuclear policies, she added, "It's probably all for the election."

A total of 2,850 people who evacuated from the Fukushima Prefecture town of Okuma following the outbreak of the disaster at the Fukushima No. 1 Nuclear Power Plant now live in Aizuwakamatsu. One 60-year-old evacuee who listened to Hashimoto's speech commented, "It's a shame he didn't get down to the details (of the nuclear issue) in his overview. I wanted him to provide a numerical target for eliminating nuclear power plants. He didn't touch on how to deal with Fukushima -- which could be due to the gap

between his enthusiasm for major cities and for regional areas. He was stressing his ability to get things done. I'll have to wait a bit to see how that turns out, but I hope he does well."
Another woman in her 60s who lives in a temporary housing complex about 1 kilometer away from where Hashimoto spoke commented, "I'm worried about cuts to welfare and so on. The flip side of his ability to get things done is the fear of not knowing what he'll do. I want to calmly assess the situation," she said.

On Nov. 26, Hashimoto spoke for over an hour at a hotel in the city, but it was only during the last six minutes of his talk that he touched on the JRP's nuclear policies. Though the talk was dubbed a "town meeting," there was no chance for participants to ask questions.

The debate on nukes

November 29, 2012
Editorial: In-depth discussions needed on nuclear power
http://mainichi.jp/english/english/perspectives/news/20121129p2a00m0na010000c.html

The founding of a party opposing nuclear power is likely to fuel further debate on whether Japan should rely on such an energy source.

Shiga Gov. Yukiko Kada has founded the Japan Future Party on an anti-nuclear power platform and a few other small parties, including the People's Life First Party, led by political kingpin Ichiro Ozawa, are set to join the new group.

Since a departure from dependence on nuclear power is the core of the Japan Future Party's platform, key points of contention during the campaign for the upcoming House of Representatives election have become clearer. All political parties should boldly respond to the challenge by the new party and actively debate the issue of nuclear power and Japan's future energy policy.

The integration of anti-nuclear power forces, triggered by the establishment of the Japan Future Party, came all of a sudden as attention had been focused primarily on the moves of the Japan Restoration Party (JRP) among parties aiming to form a third political force.

The People's Life First Party, which has nearly 50 legislators, promptly decided to disband itself to amalgamate with the new party, while members of the now defunct Genzei Nippon (Tax Cut Japan), which had initially sought to join hands with former Tokyo Gov. and now JRP leader Shintaro Ishihara and his allies, are set to team up with Kada.

One cannot help but wonder about the role of political parties as disbanding and integration continue prior to the Dec. 16 general election.

Still, the significance of the new party making the issue of nuclear power the most important point of contention and fielding candidates in the lower house race should not be underestimated.

Kada explained that she set up the new party to represent voters who want to end Japan's reliance on nuclear power, saying, "There's no other political party that such voters can cast their ballots for."

The direction of Japan's energy policy should be the focal point at issue during the lower house race, considering lessons learned from the Fukushima nuclear disaster.

Therefore, voters will strictly scrutinize the new party's specific plan to achieve "departure from dependence on nuclear power" and its feasibility. Kada said the new party will aim to shut down all nuclear power stations in Japan by 2022. This is more thorough than the DPJ's goal of ending Japan's reliance on atomic power by the 2030s.

In order to wipe away suspicions that the merger is aimed solely at attracting votes, the Japan Future Party needs to work out standards for reactivating idled nuclear reactors and show how to solve problems involving the nuclear fuel cycle project, as well as a road map toward the introduction of renewable energy and prospects for the costs of future power generation.

It goes without saying that the new party must also show the entire picture for its diplomatic and domestic policies. A group that opposes the consumption tax increase and Japan's participation in the Trans-Pacific Partnership (TPP) will merge with the Japan Future Party, but if the new party only opposes government policies, it cannot fulfill its responsibilities as a political party.

Ozawa, a former DPJ leader, reportedly played a key role in founding the Japan Future Party. Since Kada intends to stay on as Shiga governor, whether the party can prevent a two-tier power structure will be called into question. The party also needs to show who will be its candidate for prime minister and the government framework it pursues.

It is highly likely that the third political force separate to the two main parties will be split basically into the Japan Future Party, the JRP and Your Party. These parties should show clear direction so that they can play a key role in political realignment and actively compete in the campaign for the lower house election.

Debate over nukes only just starting

November 29, 2012

Parties battling over nuclear policy

http://www3.nhk.or.jp/daily/english/20121129_11.html

Japan's political parties are stepping up debate over the country's nuclear policy in the run-up to next month's Lower House election.

Shiga Prefectural Governor Yukiko Kada launched a new anti-nuclear party on Wednesday. She is joined by 49 lawmakers from the opposition People's Life First party.

Kada told reporters that her party aims to phase out nuclear power by 2022, by creating a program to improve energy efficiency and to separate power generation from power distribution.

The ruling Democratic Party has pledged efforts to achieve zero reliance on nuclear power in the 2030s, and that it would allow only reactors confirmed safe by the Nuclear Regulation Authority to restart.

The opposition Communist and Social Democratic Parties want all nuclear plants shut down.

The main opposition Liberal Democratic Party has pledged to establish the best energy mix for Japan within 10 years. It says it would be irresponsible to decide now whether to eliminate nuclear power, considering its impact on people's lives and the economy.

The LDP also says it will decide within 3 years whether to restart the country's nuclear reactors.

Among the so-called third force movement, the Japan Restoration Party, whose leader is former Tokyo governor Shintaro Ishihara, advocates zero reliance on nuclear power, and calls for cutting off power grids from existing power companies to encourage participation of new distributors.

Your Party wants full liberalization of the power industry, which it claims would result in the shutdown of all nuclear plants in the 2020s.

The deputy head of the Japan Restoration Party, Toru Hashimoto, has voiced skepticism about the nuclear phase-out policy of Kada's new party.

Hashimoto said the new party's claims are largely the same as his party's, but Japanese politicians today cannot achieve what they've said.

Editorial: In-depth discussions needed on nuclear power

http://mainichi.jp/english/english/perspectives/news/20121129p2a00m0na010000c.html

The founding of a party opposing nuclear power is likely to fuel further debate on whether Japan should rely on such an energy source.

Shiga Gov. Yukiko Kada has founded the Japan Future Party on an anti-nuclear power platform and a few other small parties, including the People's Life First Party, led by political kingpin Ichiro Ozawa, are set to join the new group.

Since a departure from dependence on nuclear power is the core of the Japan Future Party's platform, key points of contention during the campaign for the upcoming House of Representatives election have become clearer. All political parties should boldly respond to the challenge by the new party and actively debate the issue of nuclear power and Japan's future energy policy.

The integration of anti-nuclear power forces, triggered by the establishment of the Japan Future Party, came all of a sudden as attention had been focused primarily on the moves of the Japan Restoration Party (JRP) among parties aiming to form a third political force.

The People's Life First Party, which has nearly 50 legislators, promptly decided to disband itself to amalgamate with the new party, while members of the now defunct Genzei Nippon (Tax Cut Japan), which had initially sought to join hands with former Tokyo Gov. and now JRP leader Shintaro Ishihara and his allies, are set to team up with Kada.

One cannot help but wonder about the role of political parties as disbanding and integration continue prior to the Dec. 16 general election.

Still, the significance of the new party making the issue of nuclear power the most important point of contention and fielding candidates in the lower house race should not be underestimated.

Kada explained that she set up the new party to represent voters who want to end Japan's reliance on nuclear power, saying, "There's no other political party that such voters can cast their ballots for."

The direction of Japan's energy policy should be the focal point at issue during the lower house race, considering lessons learned from the Fukushima nuclear disaster.

Therefore, voters will strictly scrutinize the new party's specific plan to achieve "departure from dependence on nuclear power" and its feasibility. Kada said the new party will aim to shut down all nuclear power stations in Japan by 2022. This is more thorough than the DPJ's goal of ending Japan's reliance on atomic power by the 2030s.

In order to wipe away suspicions that the merger is aimed solely at attracting votes, the Japan Future Party needs to work out standards for reactivating idled nuclear reactors and show how to solve problems involving the nuclear fuel cycle project, as well as a road map toward the introduction of renewable energy and prospects for the costs of future power generation.

It goes without saying that the new party must also show the entire picture for its diplomatic and domestic policies. A group that opposes the consumption tax increase and Japan's participation in the Trans-Pacific Partnership (TPP) will merge with the Japan Future Party, but if the new party only opposes government policies, it cannot fulfill its responsibilities as a political party.

Ozawa, a former DPJ leader, reportedly played a key role in founding the Japan Future Party. Since Kada intends to stay on as Shiga governor, whether the party can prevent a two-tier power structure will be called into question. The party also needs to show who will be its candidate for prime minister and the government framework it pursues.

It is highly likely that the third political force separate to the two main parties will be split basically into the Japan Future Party, the JRP and Your Party. These parties should show clear direction so that they can play a key role in political realignment and actively compete in the campaign for the lower house election.

Elections and nukes

November 30, 2012

Poll platform revised to pursue new Constitution

Nippon Ishin qualifies nuclear phaseout goal

http://www.japantimes.co.jp/text/nn20121130a1.html

By NATSUKO FUKUE
Staff writer
Nippon Ishin no Kai (Japan Restoration Party), the "third force" emerging as a serious challenger to the political status quo, unveiled a watered-down version of its election platform Thursday devoid of a definitive road map for phasing out nuclear power.

Instead, the party merely stated in a separate document that nuclear power plants are to "fade out by the 2030s" — the same goal that Prime Minister Noda's Democratic Party of Japan has included on its platform.

When Nippon Ishin founder and Osaya Mayor Toru Hashimoto agreed to merge parties with pronuclear former Tokyo Gov. Shintaro Ishihara's short-lived party in late November, Nippon Ishin's nuclear phaseout clause disappeared, prompting speculation the omission would become permanent.

The platform released Thursday also contains a provision for drafting a new Constitution — apparently a concession from Hashimoto, now the party's deputy leader, to the more experienced Ishihara, the unabashed nationalist responsible for escalating the Senkaku dispute with China and Taiwan.

When asked why his party won't present a clear-cut time frame for eliminating nuclear power, Hashimoto said it would take several years to come up with a detailed road map.

"The bureaucrats are the ones who would map out a road map," Hashimoto told a news conference. "Politicians are the ones who show" which direction policies should take, he said, implying that setting a time frame wasn't his party's responsibility.

Ishihara has said the amount of energy the economy actually needs must be calculated before making such a decision. Hashimoto expounded on that.

"Ever since the accident (at the Fukushima No. 1 plant) happened, we have had to re-examine" our energy policy, but "what matters most is whether we can actually realize (a nuclear phaseout)," he said.

The move came a day after Shiga Gov. Yukiko Kada officially formed Nippon Mirai no To (Japan Future Party) and said its primary aim will be to phase out nuclear power by 2022.

Nippon Ishin's diluted platform states it will aim to create a nation not reliant on nuclear power, set stricter safety standards and promote the liberalization of the electricity market.

It also says it will promote participation in the Trans-Pacific Partnership free-trade talks but oppose them "if it would be against the national interest."

TPP entry is also a DPJ goal.

Nippon Ishin also pledged to draft a new Constitution and ease restrictions on arms use by Self-Defense Forces personnel during peacekeeping missions.

SDF personnel are allowed under the Peacekeeping Operation Law to use weapons only in legitimate self-defense situations. They are forbidden from using arms, for instance, to rescue fellow citizens or counter attacks on other countries' troops.

Before merging with Ishihara's party, Nippon Ishin advocated halving the size of the Lower House to 480 members and limiting their responsibilities to such fields as diplomacy, but Thursday's platform softened that goal to a reduction of 30 to 50 percent.

It also proposed a rule change for the Upper House that would lift the ban on councilors concurrently holding Diet and local government posts — a change that would allow Hashimoto, for instance, to run in the Upper House election next summer while still being Osaka's mayor.

Highlights of the party's platform

Nippon Ishin no Kai (Japan Restoration Party) will:

Create a Japan-initiated Constitution, as the current one was imposed by the United States after World War II.

Raise the consumption tax to 11 percent and make it a local tax.

Participate in negotiations for the Trans-Pacific Partnership but leave open the possibility of withdrawing if the free-trade pact goes against Japan's interests.

Set a monetary policy agreement between the government and the Bank of Japan as part of price-stabilizing measures.

Scrap the rule that bans governors and mayors from doubling as Upper House lawmakers.

Ban politicians from accepting corporate donations while promoting a system to encourage individuals to contribute.

Party leaders debate nuclear energy

http://www3.nhk.or.jp/daily/english/20121130_11.html The leaders of 10 Japanese political parties took part in an online TV debate on Thursday. They exchanged opinions on nuclear energy policies in the run-up to next month's general election.

Prime Minister Yoshihiko Noda, the head of the governing Democratic Party, said Japan obtained nearly 30 percent of its energy from nuclear power before last year's March 11th disaster. He said it will be impossible to achieve zero dependency immediately or even in 10 years.

The head of the main opposition Liberal Democratic Party, Shinzo Abe, said stable and low cost power supplies helped Japan to achieve high economic growth.

Abe said the decision on whether to restart nuclear reactors that are now offline should be made in the next 3 years. He said he wants to study the optimal balance of energy sources for the country over the next 10 years.

Yukiko Kada, who leads the newly launched Tomorrow Party, said her party wants to end the use of nuclear power in 10 years. She said she will promote the development of renewable energy sources, and work on energy-saving measures for the entire country.

The New Komeito party's Natsuo Yamaguchi said existing nuclear plants should undergo thorough safety inspections. He said the public's approval will be needed to restart nuclear reactors.

Kazuo Shii of the Japanese Communist Party said his party will make the immediate end of nuclear power a reality.

Yoshimi Watanabe of Your Party said increasing competition in the power industry through drastic deregulation should prompt utilities to give up nuclear power, resulting in zero nuclear dependency in the 2020s.

The Social Democratic Party's Mizuho Fukushima said she hopes to win public support to end nuclear power generation. She said her party will oppose the restarting of nuclear reactors.

Muneo Suzuki of New Party DAICHI said his party will work to end the use of nuclear power. He said constructing natural gas pipelines from Russia and building storage facilities in Hokkaido can provide ample energy sources for Japan.

Yasuo Tanaka of New Party Nippon said thermal and hydraulic power generation can cover Japan's energy needs.
Shozaburo Jimi of the People's New Party said nuclear reactors whose safety has been confirmed by the

Nuclear Regulation Authority should be allowed to resume operations.

The leaders of the Restoration Party and the New Renaissance Party did not participate in the debate.

The Restoration Party says it will promote the separation of electricity generation and distribution along with other measures to reduce Japan's dependency on nuclear energy.

The New Renaissance Party says it wants to develop renewable energy sources, and will end nuclear power generation in the near future.

Mitsubishi-Hitachi collaboration

MHI, Hitachi to mull tie-up over nuclear business
http://www3.nhk.or.jp/daily/english/20121130_18.html

Two major Japanese plant makers, Mitsubishi Heavy Industries and Hitachi, are considering expanding their collaboration amid heating competition in emerging markets.

On Thursday, the 2 companies announced a plan to launch a thermal power joint venture in January 2014. Mitsubishi Heavy Industries or MHI will own 65 percent of the new company, Hitachi will own the rest.

In the news conference, the heads of 2 makers referred to further collaboration. MHI President Hideaki Omiya said he wants to have a tie-up in nuclear plant business after the issue is settled over reactivation of domestic nuclear plants that are now offline.

Hitachi President Hiroaki Nakanishi echoed that they will explore for the best way for collaboration.

The 2 makers are already collaborating in hydropower, railway and other infrastructure businesses mostly in emerging markets.

Ishihara's party in trouble

December 3, 2012

ELECTION 2012

Ishihara nuke flip-flop puts party in crisis

http://www.japantimes.co.jp/text/nn20121203a3.html

By ERIC JOHNSTON
Staff writer

OSAKA — With the kickoff of the Dec. 16 Lower House election campaign just one day away, Nippon Ishin no Kai (Japan Restoration Party) is in chaos after party leader Shintaro Ishihara declared Friday that he would revise a promise to abolish nuclear power by the 2030s.

The former Tokyo governor's declaration is adding to a growing sense in and outside the party that the decision to merge with Osaka Mayor Toru Hashimoto's party was a mistake.

At a debate involving 11 party leaders Friday, Ishihara surprised everyone when he said he would revise its promise to phase out nuclear power.

The staunchly pronuclear Ishihara has long had differences on this issue with party founder Toru Hashimoto, who pushed for abandoning atomic power by the 2030s before joining forces with Ishihara last month.

Nippon Ishin's No. 3 man, Ichiro Matsui, said in Osaka later Friday that the party's manifesto would not be revised.
"The manifesto was announced in front of everybody, including Ishihara and Hashimoto. It's the decision of Nippon Ishin no Kai," Matsui said, even as he admitted that parts of it were not fully explained to Ishihara.

Other parties lost no time in attacking Nippon Ishin. "Changing your basic policy every day like it's a daily lunch special is, from the viewpoint of other political parties, a problem. It's not something that will be accepted because it's Ishihara," said Jun Azumi, deputy secretary general of the Democratic Party of Japan.

Finally, Hashimoto responded to Ishihara's statement Sunday by saying the party "aimed" to see nuclear power abolished by the 2030s, but that there would be no revision to the manifesto wording.

He also conceded that if stringent safety conditions were met it would be possible to restart the existing nuclear reactors.

"If the world's highest safety standards are in place, along with a system to check the reactors, and a method of disposing of spent nuclear fuel is established, a restart is possible," Hashimoto said on a TV program Sunday.

But perhaps worse for Nippon Ishin than the nuclear tussle is the growing number of people calling on Hashimoto, publicly and privately, to lead the party back to its roots by cutting ties with Ishihara.

Former trade minister Shigeaki Koga, formerly a close adviser to Hashimoto, spoke for many in the party when he said on his Twitter account that Hashimoto needs to admit he shouldn't have joined forces with Ishihara and his allies.

What place for nuclear power?

December 2, 2012

Party leaders butt heads over N-power vision / Discussions draw out key differences in campaign pledges over future of nuclear energy dependence

Hiroshi Yumoto and Osamu Kawakami / Yomiuri Shimbun Staff Writers

http://www.yomiuri.co.jp/dy/national/T121201003190.htm

Heads of 11 political parties staged heated discussions Friday on key issues facing the House of Representatives election, including nuclear power generation and negotiations on the Trans-Pacific Partnership framework.

The debate was held at the Japan National Press Club in Chiyoda Ward, Tokyo, and came against the backdrop of a looming lower house election this month.

Regarding the place of nuclear power in the country's future energy policy, most parties called for "abolition" of nuclear power, "graduation from" nuclear power or "denuclearization" in their campaign pledges.

Major policy statements by heads of 4 political parties at Nov. 30 debate

	Prime Minister Yoshihiko Noda (DPJ head)	LDP President Shinzo Abe	Nippon Ishin no Kai head Shintaro Ishihara	Nippon Mirai no To head Yuichi Kato
Nuclear power/energy issues	As for [the party's] future direction, we decided in a Cabinet meeting to fully utilize policy resources toward the goal of ending use of nuclear power in the 2030s. We'll steadily move toward implementing that decision.	We'll build a society that does not depend on nuclear power, but a responsible political party does not speak lightly about reducing it to zero.	It's [only] a sort of desire if [people talk about] such things as keeping a certain percentage [of nuclear power] or completely ending [its use] without thinking about how energy should be allocated. We'll consider whether we should weed out nuclear power through trials simulating [the country's future energy composition].	We'll "graduate from" nuclear power, which contaminates the Earth and deprives people of their homes. We'll aim for graduation in 10 years.
Economic and fiscal policies	We'll set the price increase target at 1% for the time being. We'll sow the seeds of high-growth fields such as medical services and agriculture, forestry and fisheries industries instead of pork-barrel projects.	We'll set the inflation target at 2% in place of the Bank of Japan's conventional monetary easing policies. We aim at ending deflation, correcting the yen's strength and setting up growth strategies.	[The Tokyo metropolitan government] has managed to reconstruct its fiscal condition as a result of introducing external auditing.	Our basic policy will be to expand domestic demand. We'll enhance women's ability to work and make use of their sensitivity and ideas.
Trans-Pacific Partnership agreement	Japan will become a greater trading nation. The stance on protecting national interests will be key in [discussing] the TPP.	We'll analyze the issue while making related announcements. We'll deal with the issue while closely examining whether it will be possible to overcome [the condition] of abolishing all tariffs without any exceptions.	"Made no comments. [At the Foreign Correspondents' Club of Japan on Nov. 20, Ishihara said: "We're basically for [the TPP]. We've not opposed to free trade. However, there are some fields that are unacceptable."	We're opposed to opening [the market] without limits. We can't help but be cautious about [opening certain fields] that could impinge upon our social systems, such as medical and insurance services.

However, the Liberal Democratic Party stopped short of clearly pledging to end nuclear power dependence. "If you take this problem seriously, you shouldn't mince words," LDP President Shinzo Abe said sarcastically about other parties' stances to halt nuclear power.

He then flatly rejected the argument that the country should use such renewable energy sources as solar and wind power in place of nuclear. "We can't rely on renewable energies that haven't been developed yet," Abe said.

What makes the LDP's campaign pledge unique is the emphasis on "responsibility for people's livelihood," so as not to cause undue suffering to society due to power shortages and other problems while aiming at realizing a society and economy not dependent on nuclear power.

Specifically, the LDP campaign pledge stated the party would determine whether to resume operation of all nuclear reactors in the country within three years; and establish a sustainable "best mix of power sources" within 10 years.

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Noda: Listen to society

But Prime Minister Yoshihiko Noda, leader of the ruling Democratic Party of Japan, outright rejected Abe's remarks as being out of touch with society's wishes.

"The public is determined to end nuclear power dependence and the operation of nuclear reactors. We should sincerely accept [such a sentiment] and promote feasible policies and measures [toward that

end]," Noda said. The DPJ states in its manifesto for the upcoming lower house election that it aims to achieve "zero nuclear power generation" in the 2030s.

Meanwhile, Noda said there is no option but to continue a nuclear fuel reprocessing program. "We need technology and human resources to decommission nuclear plants," he said.

However, if the government touts a policy of denuclearization, it will be difficult to attract human resources for nuclear power-related research, observers said.

Nippon Mirai no To (Japan future party) advocates the country "graduate from" nuclear power generation, with an eye toward eventually abolishing all nuclear power plants.

However, the stances of both the DPJ and Nippon Mirai no To both leave the path to the future ambiguous.
"To begin with, we must 'graduate from' nuclear power generation, which contaminates the Earth and deprives people of their homes," Mirai no To leader Yukiko Kada said.

The party said it aims to abolish nuclear power generation within 10 years. Kada cited reducing the total power consumption as a concrete measure toward zero nuclear power dependence. Household electricity consumption has doubled in the past 20 years.

On this basis, Kada said the party will make efforts to develop renewable energy and make more efficient use of fossil fuels.

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Intraparty division exposed

During the discussions, Nippon Ishin no Kai (Japan Restoration Party) revealed intraparty disagreement over nuclear policy.

In its platform, the party states as a policy example that "existing nuclear plants would fade out by the 2030s." However, Ishin no Kai leader Shintaro Ishihara launched into his view about maintaining them, saying, "Abolishing all nuclear plants is a sort of desire."

When asked about the term "fade out," he said, "What do you mean by 'fade out?'" then added: "That's not true. I had the pledge corrected."

As Ishin no Kai acting leader Toru Hashimoto has already said he favors denuclearization, the party used the term "fade out" to paper over differences between Ishihara and Hashimoto, the party's poster boys, according to observers.

Ishin no Kai Secretary General Ichiro Matsui denied Ishihara's remark that the term "fade out" had been "corrected."
"The party's leader and acting leader confirmed [the term] together and announced the party's platform. It was the party's decision," Matsui told reporters Friday in Osaka.

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Abe TPP stance unclear

In Friday's debate between political party leaders, both Noda and Abe failed to clarify their parties' stances on the Trans-Pacific Partnership free trade issue, probably because both parties have conflicting internal opinions.

"Will [the LDP] step on the gas or put on the brake?" Noda asked rhetorically about the issue. "I can't see [the party's stance]. Please give me a clear answer."

Noda pressed Abe hard to clarify the LDP's stance on participation in the TPP talks.

Abe hit back, saying: "Eliminating tariffs without exceptions is tantamount to saying we must give up our tariff autonomy. Why wasn't there any prior coordination [between Tokyo and Washington]? Because the DPJ-led administration has ruined the relationship of trust in the Japan-U.S. alliance."

Abe insisted that if the Japan-U.S. alliance had been firm, the government could have made prior arrangements with the U.S. side to ensure exceptions in farm and other products concerning the elimination of tariffs.

However, Abe's rebuttal only gave the impression he was evading Noda's question.

Noda, for his part, also backed away from earlier expressions of determination to participate in the TPP talks and sounded more in line with the DPJ's campaign pledges, which use the expression "the

government will determine" whether Japan will participate in the TPP talks. During Friday's debate, Noda did not deviate from the party's manifesto.

Meanwhile, Kada clearly showed her opposition to Japan's participation in the TPP talks. "We must be cautious about the TPP, which could have an unwelcome impact on Japan's social systems, which have created peace of mind among the people about such things as the medical and insurance systems," Kada said.

Some observers believe Kada made the statement out of consideration for the anti-TPP stance of former DPJ leader Ichiro Ozawa, who is expected to join Kada's party by disbanding his own People's Life First party.

Ishihara did not refer to the TPP issue in the debate. Hashimoto supports TPP participation, but Ishihara has been cautious about the issue. Some observers said Ishihara did not refer to the issue in the debate because his views on the issue differ from those of Hashimoto.

It won't be easy to eliminate nukes

December 3, 2012

Nuclear power issue no easy nut to crack, but parties must have solid plan to try

http://mainichi.jp/english/english/perspectives/news/20121203p2a00m0na012000c.html

Depending on how the public's views change in the days leading up to the House of Representatives election, the newly formed Tomorrow Party of Japan (TPJ) and Japan Restoration Party (JRP) could come away with a significant number of seats and even participate in the next administration.

The TPJ is slamming on the gas toward the abandonment of nuclear power, while the JRP has stepped on the brakes. They appear to be heading in opposite directions, but they've taken a similar approach in bringing in ready-made leaders for battle.

Putting aside how long it will take, it does not look like it will be easy for either party to eliminate nuclear power. The party leaders' public image and smooth talk alone will not be enough to surmount the three massive obstacles of Aomori Prefecture, Britain and the United States.

Like the TPJ and JRP, the Democratic Party of Japan (DPJ) initially set off with a mishmash membership, and while imperfect, united and took on the challenge of eliminating nuclear power. It was, however, struck down by the following three obstacles.

First, there was Aomori Prefecture, where the nation's only facilities capable of reprocessing spent nuclear fuel generated by nuclear power plants are located. If Japan were to adopt a national policy toward eliminating nuclear power, Aomori Prefecture said it would no longer accept spent nuclear fuel inside its borders.

Why not? If spent nuclear fuel continued to be transported to Aomori even as fuel reprocessing became unnecessary due to the abandonment of nuclear power, Aomori would turn into a nuclear waste disposal site. Hence, Aomori made it clear it would not accept spent nuclear fuel if the country institutes a denuclearization plan. If that were to happen, however, municipalities hosting nuclear power plants would face the problem of turning into nuclear waste disposal sites themselves.

Because there was nowhere to put dangerous waste, leaders turned a blind eye to the problems and risks and continued running a shoestring operation. The DPJ was unable to change this perilous structure.

Britain was another obstacle that the DPJ faced. Japan commissions Britain and France to reprocess spent nuclear fuel. The high-level radioactive waste generated is set to be transported to an interim disposal site in Aomori Prefecture starting at the end of this year. If a non-nuclear policy were adopted and Aomori refused to take in any nuclear waste, ships carrying the nuclear waste would not be able to leave Britain.

This urgent state of affairs was precisely why the Noda administration was forced on Sept. 19 to announce the contradictory policy of continuing spent fuel reprocessing even as it aimed for zero nuclear power. According to inside sources, Cabinet members only realized this quandary a couple weeks prior to the decision.

Finally, there was protest against continued nuclear fuel reprocessing from the U.S., which is extremely sensitive to nuclear proliferation. If not to use in nuclear reactors, what, it asked Japan, could the purpose of plutonium generated through spent fuel reprocessing be, besides the production of nuclear weapons? I don't know whether the U.S. argued that a non-nuclear-but-continued-reprocessing policy taken by Japan would undermine the united front against Iran and North Korea, but in any case, it has urged Japan to continue operating its nuclear reactors.

The above three factors resulted in the Noda administration's toning down of its zero nuclear policy. The administration was able to present its vision on the future of renewable energy and an economic revitalization strategy, but failed to get at the root destabilizing domestic and foreign industries and military foundations. And it's questionable whether the TPJ or JRP will be able to accomplish what the DPJ has failed to do.

There is little ambiguity in the TPJ's arguments. However, the public has just witnessed how a once-fresh DPJ administration failed to live up to its heartfelt vows.

Meanwhile, as the JRP has broadened its appeal, its arguments have become cloudier. Acting party leader Toru Hashimoto has called for the abandonment of nuclear policy, while party leader Shintaro Ishihara has called a zero nuclear policy "absurd." How much more muddled can a party line get?

To be fair, collaboration between the Liberal Democratic Party (LDP) and New Komeito also has its inconsistencies, and not only in its views toward the establishment of a national military. The LDP has not addressed nuclear power at all, while New Komeito is calling for its abandonment.

Regardless of who takes the reins of government, it will not be easy to carry out reforms that shake Japan's industrial foundations and the international management of nuclear materials. It's not a matter that can be dealt with by closing one's eyes to the fundamental issues and worrying about electricity costs. This is an election in which we must come to understand the seriousness of the problem of nuclear waste. (By Takao Yamada, Expert Senior Writer)

Phasing-out nukes just a "springboard for discussion"?

December 3, 2012

Nuclear power phase-out is not a campaign promise: Hashimoto

http://mainichi.jp/english/english/newsselect/news/20121203p2a00m0na016000c.html

Osaka Mayor Toru Hashimoto said Dec. 2 that phasing out nuclear power by the 2030s is a springboard for discussion and is not a campaign promise of the Japan Restoration Party (JRP) for the Dec. 16 general election.

Appearing on private TV programs, Hashimoto, deputy chief of the JRP, also said his party will approve the restarts of idled nuclear reactors if these reactors meet safety standards and other conditions.

The JRP spelled out a nuclear phase-out by the 2030s as one of its policy examples incorporated in documents attached to an election campaign platform the party released Nov. 29.

But during a debate with 10 other party leaders on Nov. 30, JRP leader and former Tokyo Gov. Shintaro Ishihara took issue with the nuclear phase-out and said he will change it.

Hashimoto, appearing on a TV Asahi news program, stressed the importance of the election campaign platform and said politicians are not tasked with setting a target year for abandoning nuclear power. He added that a time frame and a road map should be set by bureaucrats and experts.

During a Fuji TV news program, Hashimoto said it will be possible to restart nuclear reactors if Japan draws up safety standards of the highest level in the world, puts a strict checking system in place and decides on ways to handle spent nuclear fuel.

What are they saying exactly?

December 3, 2012

Third force' leaves nuclear issue unclear / Mirai no To, Ishin no Kai party executives contradict themselves, one another in policy statements

The Yomiuri Shimbun

http://www.yomiuri.co.jp/dy/national/T121202003699.htm

Statements by Nippon Mirai no To head Yukiko Kada over restart of nuclear reactors

April 6	"I don't understand why [the central government] is in a hurry to reactivate" reactors. (To reporters at the Shiga prefectural government office)
June 6	"The restart of nuclear reactors should be limited to times when power supplies are tight." (In the "renewed proposal for nuclear policies for national understanding," released jointly with Kyoto governor)
Nov. 27	"[Japan] will lose its dignity as a nation if it promotes nuclear policies merely for the sake of economic efficiency, and ignores its heavy responsibility for the Fukushima accident." (At a press conference to announce the party's launch)
Nov. 28	"We'll bring the number [of reactors] to zero as soon as possible. We envisage [realizing this goal] in 10 years, or by 2022." (In a TBS program)
Dec. 1	"We'll [approve the reactivation of reactors] when the Nuclear Regulation Authority guarantees their safety and the government insists reactivation is necessary." (In a YTV program)
	"There are a number of extremely difficult conditions for [allowing] the restart of reactors, just like passing a thread through the eye of a needle. It's so difficult, and there is no need to do that." (To reporters in Tokyo)

Statements by Nippon Mirai no To (Japan future party) and Nippon Ishin no Kai (Japan Restoration Party) on nuclear energy have sown confusion, exposing the policy ambiguities of "third force" parties hurriedly put together ahead of the House of Representatives election.

Campaigning for the lower house election is set to officially kick off Tuesday, to be followed by voting on Dec. 16.

The day before announcing the party's campaign pledges Sunday, Nippon Mirai no To head Yukiko Kada made a controversial statement suggesting the party would approve the restart of nuclear reactors but later corrected the comment.

The party's campaign pledges called for completely decommissioning nuclear reactors within 10 years and freezing the consumption tax hike law.

Yet on a YTV program that aired Saturday morning, Kada suggested conditionally approving the restart of nuclear reactors.

She said the party would approve reactivation if safety were ensured and the government insisted reactivation was necessary, assuming that the Nuclear Regulation Authority set new safety standards.

But she corrected her statement later the same day, saying it had been misleading.

"There are a number of extremely difficult conditions to [allow the restart of reactors], just like passing a thread through the eye of a needle," she said. "It's very difficult, and there's no need to do it [restart reactors]."

After Kada's comments had been reported by the media, a number of messages were posted on Mirai no To websites.
"I want the party to promise us not to allow reactivation," one message said. "If you make this point ambiguous, it will make it difficult for us to see the difference from other parties."

Another one said: "Don't approve reactivation. Without that pledge, the party will no longer be Mirai no To."
If Nippon Mirai no To's image as a pro-denuclearization party dwindles, it will undoubtedly diminish the party's strength.
Kada corrected her statement by announcing the party's opposition to reactivation. In addition, she pledged to halt the operation of reactors Nos. 3 and 4 of Kansai Electric Power Co.'s Oi nuclear power plant. "If we are in power, we will suspend the reactors to ensure safety," she said.

Yet it cannot be denied that Kada's stance on nuclear power still remains unclear. Immediately after the YTV program, she told reporters, "There are many problems, such as ensuring a stable energy supply," implying the possibility of reactivation.

Mirai no To was launched under the banner of denuclearization. Its members include members of People's Life First, the party founded by Ichiro Ozawa, and another party touting tax cuts while opposing the Trans-Pacific Partnership framework and the use of nuclear energy.

The party was established by Shizuka Kamei, a former state minister in charge of financial and postal affairs, and former Agriculture, Forestry and Fisheries Minister Masahiko Yamada and others.

Mirai no To deputy head Yuko Mori, who is close to Ozawa, said Saturday: "Our party's policy on nuclear power is almost identical to [that of] People's Life First. It will never be possible for us to approve reactivation."

Such inconsistent remarks among party executives have led observers to point out that party members have failed to sufficiently reconcile their policies.

Nippon Ishin no Kai also is losing its way regarding the same issue.

At a debate among party leaders at the Japan National Press Club on Friday, Ishin no Kai head Shintaro Ishihara indicated that nuclear reactors were necessary. He also expressed his intention to review the party's lower house election campaign pledge on nuclear power, which stipulates that existing nuclear reactors will be phased out by the 2030s.

On Saturday, however, party Secretary General Ichiro Matsui denied plans to review the pledge to reporters in Kyoto.
Prime Minister Yoshihiko Noda, who heads the ruling Democratic Party of Japan, was critical of the confusion within Ishin no Kai.

"Their policies and philosophies were hurriedly created, so they have to use different points to appeal to voters every day," Noda said in his street speech in Sapporo on Saturday. "Be careful not to be deceived by such confusing statements."

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Mirai launch initiated by Ozawa

Meanwhile, it came to light that Ozawa was actually the one who initiated the launch of Nippon Mirai no To, though he will not officially join until later.

On Saturday, Kada held talks with Ozawa in Tokyo with reporters in attendance.

As to the party's launch, Kada said that it first began when Iwate Gov. Takuya Tasso asked her to meet Ozawa at the end of September. "I didn't imagine at all [launching a new party]," she said.

When Kada asked Ozawa why he approached her, Ozawa replied: "I always thought you had potential."
When asked by reporters if she decided to form the party because she had been invited to by Ozawa, Kada said, "Yes."
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Yamada named deputy head

Nippon Mirai no To decided Saturday to appoint Tetsunari Iida, a special adviser to the Osaka prefectural and city governments, as acting head of the party.

Former agriculture minister Yamada and former lower house member Tomoko Abe were appointed as deputy heads, in addition to Mori.

Ozawa and Kamei did not take executive posts.

Future of nukes a key point in coming election

December 5, 2012

Fukushima key stumping ground as campaign starts

Kyodo
http://www.japantimes.co.jp/text/nn20121205a1.html

The fate of the nation's nuclear power program, its long-struggling economy, the sales tax hike, and recent strained ties with China and South Korea will be key points for voters to consider in the Dec. 16 Lower House election, for which official campaigning started Tuesday.

Opinion polls suggest the election will bring an end to the Democratic Party of Japan's three-year rule and see the Liberal Democratic Party, which the DPJ ousted in the 2009 election, re-emerge as the strongest force, albeit without a majority.

With 12 parties vying for the 480 Lower House seats, the focus has turned to the role unaffiliated voters will play in determining the outcome of the poll and what kind of ruling coalition will be subsequently formed.

The 12 parties range from the right to the left, some vowing to end nuclear power, or merely suggesting this as a vague long-term goal. Their platforms also include pledges to shore up an economy mired in deflation, and boost relations with China and South Korea that have soured over isle disputes, or else boost Japan's military, via a change in the Constitution, to deal with any perceived threats to its territory.

Defense policy has gained greater focus in the election since North Korea announced plans to launch a rocket midmonth.

The general election will be the first one since 2009, when the DPJ, now headed by Prime Minister Yoshihiko Noda, in a landslide win ended over 50 years of almost continuous LDP rule.

Locations in Fukushima Prefecture, which continues to deal with the fallout from the Fukushima No. 1 nuclear plant disaster and mass social upheaval, were visited by various party leaders starting their campaigns.

"The question in this Lower House election is whether we can move forward with what we should do or whether we turn back the clock to the old politics," Noda said in a stump speech in front of JR Iwaki Station in the prefecture, alluding to the LDP, which ushered in Japan's nuclear power program and the past regulators the industry developed cozy ties with.
The city is located 40 km south of the plant, which suffered three reactor-core meltdowns in March 2011.

Election boards nationwide acknowledged 1,294 people who filed their candidacies to vie for the 300 single-seat constituencies.

The LDP, headed by ex-Prime Minister Shinzo Abe, was still considered the front-runner in a weekend telephone poll carried out by Kyodo News, with a support rate of 18.4 percent.

If the LDP regains power in the first general election since the quake-tsunami disaster hit last year, the hawkish Abe will presumably become the seventh prime minister in six years. He was the first of the previous six with a short-lived stint.
"It is the LDP that will protect the beautiful land" of Japan, Abe said in the city of Fukushima in front of several hundred people. "We are aiming to regain power."

The poll showed 41.5 percent of voters have yet to decide which party to support, indicating their ballots will largely affect whether the LDP can form a coalition government only with its pacifist ally, New Komeito, which is backed by the major lay Buddhist organization Soka Gakkai, or have to find other partners.

The fledgling "third forces" — Nippon Ishin no Kai (Japan Restoration Party) and Nippon Mirai no To (Tomorrow Party of Japan) — have thus drawn attention.

Nippon Ishin was founded in September by Osaka Mayor Toru Hashimoto and is now headed by outspoken former Tokyo Gov. Shintaro Ishihara, 80.

Hashimoto, who made a speech with Ishihara, said, "It is not a pipe dream to change the shape of the nation."

Nippon Mirai was formed last week by Shiga Gov. Yukiko Kada, who opposes nuclear power. The party quickly joined forces with Kokumin no Seikatsu ga Daiichi (People's Life First) headed by ex-DPJ don Ichiro Ozawa and other small parties.

"We are aiming for a society that will not depend on nuclear power," Kada said in the village of Iitate, Fukushima Prefecture, which is located outside the no-entry zone but was ordered by the government to evacuate all residents immediately after the meltdown crisis started during high levels of radioactive fallout.

UN adopts Japan-led initiative

December 4, 2012

UN General Assembly adopts non-nuclear resolution
http://www3.nhk.or.jp/daily/english/20121204_09.html

The UN General Assembly has adopted a resolution calling for the abolition of nuclear arms. The document also urges North Korea to halt its nuclear development.

The resolution was co-sponsored by 99 countries, with Japan taking the initiative.

In a vote on Monday, the resolution was backed by a strong majority of 174 nations, including nuclear powers --- the United States, Britain, France and Russia.

North Korea was the only dissenter, while 13 nations abstained, including China and Iran.

The resolution urges UN member states to take effective steps to achieve a world without nuclear arms, and to uphold the Nuclear Non-Proliferation Treaty.

It also stresses the importance of placing sanctions on North Korea for what is widely perceived as a failed missile launch in April, in breach of UN Security Council resolutions.

The resolution strongly urges the North to abolish all nuclear-related arms and halt its nuclear development.

The move comes as North Korea has announced another plan to launch what it calls a satellite-carrying rocket later this month.

Japan's UN representative says it is significant that the international community has urged the North to abandon its nuclear and missile programs, and to adhere to past resolutions.

The difficult road to nuclear phase-out

December 4, 2012

Road to zero-nuclear Japan a rocky one

http://mainichi.jp/english/english/newsselect/news/20121204p2a00m0na034000c.html

On Sept. 14 this year, the administration of Prime Minister Yoshihiko Noda decided on an energy and environmental strategy that would see the last nuclear reactor in Japan shut down in the 2030s. The very next day, however, Minister of Economy, Trade and Industry Yukio Edano was in Aomori Prefecture, assuring Gov. Shingo Mimura that construction of J-Power's Oma nuclear power plant near Honshu's northern tip would be allowed to continue.

If the Oma plant, now about 40 percent finished, runs for its full 40-year projected lifespan, it won't be shut down for good until the 2050s -- a timeframe obviously inconsistent with the Sept. 24 decision.

Five days later, the government put that decision on ice, with the Cabinet opting instead to "implement a flexible energy policy while carrying out constant verification and review of the issue," as the single-page policy declaration read. The Noda administration's retreat from a true zero-nuclear policy was swift indeed.

The turning point actually came on Sept. 2, when the prime minister met with nearly his entire Cabinet at his official residence. Arrayed on the table in front of the ministers were documents detailing the obstacles to a non-nuclear Japan. Chief among them were the nuclear fuel cycle program, based in Aomori Prefecture and including the Oma plant, and cooperation with the United States on nuclear technology issues.

"So the public mood has pushed the issue this far," one person who attended the meeting later commented. "Well, now we have all the facts in front of us, and at least we know how difficult this really is." Someone from Noda's inner circle added, "Our projections were too optimistic. If someone called us too slow to understand what's involved here, they wouldn't be wrong."

The prospect of high electricity prices and the continued hollowing out of domestic industry certainly weighed on the ministers' minds that day, but **it was fuel reprocessing and a stern admonition from the United States that changed the Noda administration's course on nuclear power.**

At the beginning of September, before the energy and environment policy announcement, U.S. Ambassador to Japan John Roos visited Chief Cabinet Secretary Osamu Fujimura at the prime minister's office. The American diplomat was there to deliver a message from U.S. Secretary of Energy Steven Chu, a telegram that called on the Japanese government to make a "prudent" decision on nuclear energy. The language of the message was restrained, but its aim was clear.

Secretary Chu visited Japan in March this year, and during a meal with Motohisa Furukawa, then Minister of State for National Policy and chair of the government's energy and environment committee, he told Furukawa that the U.S. was concerned about what effect Japan's next steps would have on the energy policy of its neighbors.

If Japan did move to denuclearize, the price of oil and gas would likely spike and prompt Russia, China and other regional powers to beef up their nuclear power programs. Nuclear power development in North America and Europe, meanwhile, had been on a downward trend since before the Fukushima nuclear disaster. What worries Chu **is the prospect of Russia and China becoming the world leaders in nuclear technology** and hobbling the efforts of the U.S., Japan and Europe to create an international system to manage that technology.

According to a senior Foreign Ministry official, the creation of an international system to manage nuclear technology and materials "is a core U.S. policy, which would crumble if Japan withdrew its cooperation. The impact on the Japan-U.S. relationship would far outstrip the recent trouble over the U.S. military's deployment of MV-22 Osprey aircraft."

In 1970, Japan's first commercial light-water reactor went online, supplying power to the Kansai region. The No. 1 reactor at the Tsuruga nuclear plant was designed and built by U.S. engineering giant General Electric. In the intervening 42 years, GE's nuclear reactor business has been absorbed by Hitachi, while another major U.S. reactor maker, Westinghouse, has been brought under the Toshiba umbrella. **In other words, the U.S. nuclear technology business is dependent on Japan, making Chu nervous about Japan dropping nuclear power even as it continues in the U.S.**

It's not just Japan's greatest foreign ally that's crying foul, however. Aomori Prefecture, with its host of nuclear facilities including the Rokkasho Reprocessing Plant -- the lynchpin of Japan's nuclear fuel cycle project -- was incensed at the proposal to abandon nuclear power, believing that the prefecture would end up a radioactive waste dump for the entire country as the nuclear industry wound down.

The nuclear fuel cycle program was initiated to create a more efficient nuclear industry by reprocessing spent fuel rods from Japan's nuclear plants into mixed-oxide fuel -- a combination of plutonium and various oxides of uranium -- for use in both conventional and specially designed reactors. Though not quite recycling, it did promise to reuse much of Japan's spent fuel.

The project has yet to get off the ground, as malfunctions and other problems have so far caused 19 delays at the Rokkasho plant, which cost more than 2 trillion yen to build but has yet to go into full operation. This "dream energy source," with its promise of yet more fuel drawn from expended fuel burning in super-efficient fast-breeder reactors, has so far been just that: a dream.

While the fuel "cycle" is already failing to live up to its very name, an end to nuclear power would instantly transform all the spent uranium already within Aomori's borders waiting to be reprocessed into miracle fuel into plain old nuclear waste. Much of that spent fuel is even now sitting in pools at the Rokkasho plant, and the Aomori Prefectural government has promised to send it back to the power stations from where it came should Japan go zero-nuclear.

Should the prefecture go through with its threat, the spent fuel pools at the power stations would fill to overflowing, and nuclear power generation would have to stop.

Additionally, Japan's reprocessing efforts -- both at home and that contracted out to plants in France and Britain -- have yielded 45 metric tons of plutonium, enough to build 4,000 Nagasaki-sized atomic bombs. Japan's anti-nuclear weapons stance cleared the way for the United States to recognize Japan's fuel reprocessing operation in the Japan-U.S. Nuclear Cooperation Agreement -- the only such instance in all the U.S's nuclear technology treaties.

However the agreement will come up for revision in 2018, and negotiations for its successor must begin within the next two years. There is no chance that the U.S., a hardline anti-proliferation nation, would allow a country to hold massive quantities of plutonium for no specific purpose.

If reprocessing stops, Japan will have to bury its spent fuel underground. Finding a disposal site, however, will be a Herculean task. National discussion on the issue would be a must, but in a government-backed public opinion study on energy and environmental strategy in June this year, the topic was excluded from consideration.

The result of all this is that the Democratic Party of Japan (DPJ)-led administration pledged to end nuclear power in Japan by the 2030s, but also to keep the reprocessing program going. According to one source involved in the formation of the government position, this apparently contradictory policy came about because "we'd decided we would have a strategy ready by September, and there was no time for debate."

What answers do the 12 parties contesting the Dec. 16 election have for these problems?

The DPJ election manifesto states, "We will re-evaluate the status of nuclear power from the point of view of necessity. On direct nuclear waste disposal (underground in Japan), we will take responsibility for the issue and express our direction." The largest opposition Liberal Democratic Party (LDP) manifesto says that "discussions will be held on basic energy policy, and we will examine the future of the issue with all seriousness."

The newly-minted Tomorrow Party of Japan (TPJ), meanwhile, is calling for an immediate halt to reprocessing, and favors a "dry storage" option -- encasing the spent fuel in metal and storing it in a cool place -- for used fuel rods. The Japan Restoration Party (JRP) -- also facing its first national election -- has a "spent nuclear fuel" entry in its manifesto, but no concrete policy proposals.

On the overall issue of nuclear power, all the parties except for the LDP, JRP, People's New Party and New Renaissance Party have pledged to eliminate nuclear power at some point. If one or some of these anti-nuclear parties form the next government, they will be faced with the same extreme pressures that presented such a barrier to the Noda administration's initial zero nuclear pledge.

Making sure that the end to nuclear power does not become just another election slogan to be disposed of after the votes are counted will test voters' powers of observation.

3,6% more CO2 than in the 1990s

December 7, 2012

Carbon emissions up 3.9% amid reactor halt

http://www.japantimes.co.jp/text/nn20121207n1.html

Bloomberg, Jiji

Japan's greenhouse gas emissions for the year that ended March 31 rose 3.9 percent from the year before on increased use of fossil fuels by power utilities after the Fukushima meltdowns effectively led to the shutdown of all but two atomic reactors.

Excluding carbon credits earned by offsetting greenhouse gas output overseas, emissions increased to 1.307 billion metric tons in the 12 months, or 3.6 percent higher than 1990 levels, according to Environment Ministry figures released Wednesday.

Under Kyoto Protocol targets set in 1997, Japan committed to cut its greenhouse gases by 6 percent from 1990 in the period from 2008 to 2012, when the accord's first term expires. The ministry's announcement came as talks involving envoys from more than 190 countries in Doha on future cuts in emissions appear headed for stalemate.

The ministry said that taking into account the absorption of carbon dioxide by forests and carbon credits earned, Japan cut emissions by an average of 9.2 percent from 2008 to 2011.

"It is not impossible to achieve the goal" of a 6 percent reduction, Kentaro Doi, a ministry official in charge of climate change, said at a press briefing in Tokyo.

However, nuclear plants — which emit virtually no greenhouse gases — provided about 30 percent of Japan's electricity before Fukushima No. 1 power station experienced three reactor core meltdowns in March 2011. The government subsequently shut down all 50 of the nation's commercial reactors for safety checks, and only restarted two. The public has meanwhile staged mass demonstrations against restarts.

As a result, the country's nine utilities that rely on atomic energy were forced to turn to power plants fired by gas, oil and coal to keep the world's third-largest economy running. The companies are facing a bill of around ¥6.8 trillion for fuel this fiscal year, almost double that in the 12 months before the Fukushima disaster started.

Also Wednesday, the National Institute for Environmental Studies said it has calculated more accurate estimates for global carbon dioxide emissions and removal by using observation data from the Ibuki satellite.

Data collected by the satellite contributed to improving the accuracy of estimates for areas with few ground-based observatories, the institute said. The government-affiliated entity plans to boost the accuracy of its estimates further and utilize them for policymaking on global warming.

The latest estimates covered emissions between June 2009 and May 2010. Parts of Asia, including Japan and China, were found to have posted the largest amount of net emissions in January 2010, when they totaled 305 million tons in carbon equivalent.

The Ibuki greenhouse gas observation satellite, developed jointly by the institute, the Environment Ministry and the Japan Aerospace Exploration Agency, was launched in January 2009.

Election & nukes

December 7, 2012

Editorial: Parties must present concrete plans on future of nuclear power

http://mainichi.jp/english/english/perspectives/news/20121207p2a00m0na008000c.html

The Dec. 16 House of Representatives election will be the first since the Fukushima nuclear disaster began in March last year. In the interim, Japan has been through two summers of power saving, proving that the country can in fact get by with its nuclear reactors idle. There has certainly been an effect on people's lives and on the economy, but considering the severity of the nuclear disaster, it is impossible to think of building more reactors. The only choice now, in fact, is to reduce nuclear power.

How can Japan rid itself of atomic energy? The parties contesting the upcoming election must show us in concrete terms how they will answer that question. And at the forefront of that question is what they would do about restarting Japan's 48 idle nuclear reactors.

The newly-minted Tomorrow Party of Japan (TPJ)'s plan is a bold one. The TPJ election manifesto promises to stop all nuclear reactors, and that every nuclear plant in Japan would be decommissioned by 2022. The party would also promote the adoption of renewable energy technology as a way to help support local industries and boost employment. We can understand the TPJ's intentions, but widespread adoption of renewable energy will take time and money, and the party has not presented any solid measures addressing this fact.

The TPJ manifesto states that the government would prevent electricity prices from spiking by subsidizing electric companies for the first three years of the program through a bond issue. In the end, however, won't this just dump the cost of the switch away from nuclear energy on the taxpayer? The TPJ must explain to the voters that the party's plan won't be financially painless, and the same goes for the other parties advocating an instant zero-nuclear policy.

The ruling Democratic Party of Japan (DPJ) has pledged an end to nuclear power by the 2030s, but has also said it will approve reactor restarts that meet Nuclear Regulation Authority (NRA) safety standards.

We have called on the government to rank every reactor in Japan on a risk scale, and to decommission the facilities in order from highest-risk to lowest. Even if the government approves restarts, if those approvals are based solely on the judgment of the NRA, progress to a zero-nuclear society will come into question.

In terms of overall energy policy, the government must take responsibility for deciding whether reactor restarts are necessary, and then prioritize restarts of only the very safest plants. Of course, one major precondition for this is the completion of disaster preparedness plans.

The largest opposition Liberal Democratic Party (LDP), which spent its many years in power promoting nuclear energy, has pledged to create "an energy structure with the best mix of power sources within 10 years." Has the party not reflected at all on the Fukushima nuclear disaster? On the safety of reactor restarts, the LDP has taken the same stance as the DPJ, stating it would base any decisions on NRA safety evaluations. The LDP has not, however, shown any intention of ditching nuclear power.

The new Japan Restoration Party (JRP) promised in its manifesto to "create a developed world-leading and nuclear-free energy structure." The party has not, however, stated what it would do on the question of reactor restarts. Moreover, the party says its policy examples, which state existing atomic power generation would "fade out" by the 2030s, is not a campaign promise. The JRP, along with the LDP, appears to be trying to avoid making the issue of whether Japan should end its reliance on atomic power a point of contention in the election campaign.

The end of nuclear power in this country is an issue tied closely to industrial sector reform and a re-evaluation of the Japan-U.S. security guarantee. The political parties must not simply compete over timing or try to prevent the issue from emerging as a point of contention. We voters must watch them carefully to see which party is ready to present specific and convincing energy plans.

Election & nukes

December 7, 2012
Addressing the nuclear power issue

http://www.japantimes.co.jp/text/ed20121207a1.html

The Dec. 16 Lower House election will be the first national-level election held since the 3/11 disasters, including the crisis at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant. As if to show their concern over the plight of people whose lives have been disrupted by the nuclear catastrophe and to stress the importance of Japan's future policy on nuclear power generation, leaders of four parties gave their first campaign speeches in Fukushima Prefecture on Tuesday.

Prime Minister Yoshihiko Noda of the Democratic Party of Japan (DPJ) spoke in Iwaki; Liberal Democratic Party (LDP) leader Shinzo Abe, in Fukushima City; Nippon Mirai leader Yukiko Kada, in the village of Iitate; and Social Democratic Party chief Mizuho Fukushima, in Aizu Wakamatsu.

Because 160,000 local residents are still forced to live away from their homes due to radioactive contamination, Japan is quake-prone, nuclear waste storage facilities in Japan have little room to accept additional waste and technologies to allow the safe, permanent storage of high-level radioactive waste don't exist, attempts to bring a large number of nuclear reactors back online are likely to cause environmental and ethical problems. On the other hand, forces calling for the eventual abolition of nuclear power generation should realize that many technological and political hurdles must be overcome before they can achieve their goal. Above all, they must develop convincing proposals.

The LDP calls for checking the safety of all nuclear power plants over the next three years. Mr. Abe says that plants whose safety is confirmed should be brought online.

The Japan Restoration Party at one time said nuclear power generation would "fade out" by the end of the 2030s. But its deputy chief, Toru Hashimoto, now says that it is impossible to specify a timeline to end nuclear power generation, and blasts parties that specify such timelines. The Japan Communist Party and the Social Democratic Party call for the immediate closure of all nuclear power plants. The DPJ, Komeito and Your Party call for eventually ending Japan's reliance on nuclear power.

Nippon Mirai has adopted as its party slogan "graduation from nuclear power" in 10 years and makes fairly concrete proposals, such as putting a cap on the total amount of spent nuclear fuel, constructing a dry storage facility to keep such fuel for 100 years, and dividing Tepco into three different entities: one to generate electricity, one to provide compensation for victims of the nuclear crisis and one to deal with decommissioning Fukushima No. 1.

Concrete ways to promote green energy and facilitate the entry of small power generation entities into the electricity market must be developed. But political parties calling for the end of nuclear power generation must also be prepared to adeptly deal with foreign countries that oppose such a move. For example, the United States opposes the stockpiling of plutonium extracted from spent nuclear fuel in Japan if there's no prospect of it being reused as fuel as a result of Japan halting its nuclear fuel cycle project.

Parties should not call for the abolition of nuclear power generation just to win votes. They must present realistic proposals.

No party has told voters how they would achieve a nuclear-free Japan

December 14, 2012

INTERVIEW: Hiroshi Kainuma/ Parties should debate what going 'nuclear-free' entails

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201212140077

THE ASAHI SHIMBUN

In Japan's first national election since the disaster at the Fukushima No. 1 nuclear plant, almost all parties are espousing the abolition of nuclear energy—in pledges ranging from firm promises to vague ambitions.

But one academic accuses them of a significant omission: **No party has told voters exactly how they would achieve it.**
Hiroshi Kainuma is a junior researcher at Fukushima University's Fukushima Future Center for Regional Revitalization.

He is the author of " 'Fukushima' theory--the birth of a nuclear village," a 2011 book based on a thesis he wrote as a graduate student of sociology at the University of Tokyo.

The 28-year-old hails from Fukushima Prefecture. He says even before the disaster, people there, as elsewhere in rural Japan, were struggling with a slumping economy and limited access to health care and social support. And, he says, consultations on the future of nuclear power must take account of their interests.

Excerpts from the interview follow:

Question: Many parties are championing the abolition of nuclear power. What is your take on that?

Answer: Parties have always conducted campaigns knowing that the general public wants to "reset" something. Examples from the past decade include postal reform and child-rearing allowances. The recent chorus of calls to abandon nuclear power is another. Each party heard it and promised to meet it, but omitted details of how they would achieve it. I am afraid that voters cannot tell if the parties have detailed blueprints for achieving it.

Q: Which issues have parties failed to discuss?

A: All parties, including the main opposition Liberal Democratic Party, agree that Japan should review its reliance on nuclear energy and promote renewables. But most of them have failed to work out how to get by until renewable energy is fully available. They have merely promised to promote renewable energy. This is because they want to avoid facing a rise in carbon dioxide emissions, an inevitable outcome if they pledge to get through the period relying on fossil fuels.

I see **deception** there. They don't mention the trade deficits that would balloon as a result of increased imports of fossil fuels. Nor, for similar reasons, do they discuss the program to recycle spent nuclear fuel. **We need to end the situation in which parties ignore challenges because they cannot agree on solutions and merely talk about performing a "reset" in society.** Fundamental questions will remain unsolved if all that happens is they are repackaged.

Q: What do you think are the questions posed by nuclear power?

A: German sociologist Ulrich Beck says society used to distribute wealth and today it distributes risk. This is true also of nuclear power. The central government distributed risk to rural regions in exchange for alleviating poverty there, unconsciously imposing burdens on a vulnerable area.

We must confront this. In order to engage in substantial debate, we need to create an environment in which a party can declare: "We will dispose of contaminated soil and wreckage with these steps … Although other parties are avoiding the question, we will take this approach."

Q: How do people in Fukushima Prefecture see this election?

A: They understand that there is nothing for them merely on the parties' platforms. It is as if they have been given a restaurant menu which contains nothing appetizing. So they will go back to a place they are familiar with.

Q: On Dec. 4, four separate party leaders kicked off their campaigns for the Lower House election in Fukushima Prefecture, calling for the promotion of renewables.

A: People would suffer again if they simply switched from dependence on one failed energy to another. They know that solar power plants or floating wind turbines would not create as many jobs as hoped and that they could prove a bad investment.

People are fleeing Fukushima Prefecture, not because of fear of radiation, but because of a lack of jobs and the collapse of the health-care and welfare systems. Local communities were suffering from ailing industry, a declining birthrate and rapidly aging society long before the quake, tsunami and nuclear accident of March 2011. **But politicians tried to address those difficulties with the logic of central government: either by pumping in money or encouraging free competition.** These approaches only stalled finding solutions and meant the disasters, when they took place, had a more painful impact. The problems are still being ignored today.

(This article is based on an interview by Mari Fujisaki.)

Surprising visits from US diplomats (to Fukushima)

December 14, 2012

Voters' choice: U.S. diplomat sounds out political parties in Fukushima

http://mainichi.jp/english/english/newsselect/news/20121214p2a00m0na004000c.html

FUKUSHIMA -- United States Embassy staff recently made unusual visits to the local chapters of the ruling Democratic Party of Japan (DPJ) and the main opposition Liberal Democratic Party (LDP) to sound them out about their campaigns.

"What differences are there between the national party headquarters and the Fukushima prefectural chapter?" was one of the questions cast by the pair of embassy staffers, a first secretary of the Political Section and a Japanese employee. The two visited the offices on Dec. 5, the day after the campaign for the Dec. 16 House of Representatives election officially started, according to the local chapters and other sources.

The on-site information gathering is apparently aimed at grasping the campaigning trends in the prefecture -- where damage from the Fukushima nuclear disaster is still plaguing farmers, businesses and residents -- as well as the nuclear policy to be adopted by the next administration.

"It's surprising that a U.S. diplomat has come this far to a local region like here," said one official who received their visit.

In total, the embassy staff visited at least four locations -- the prefectural chapters of the DPJ and the LDP in the city of Fukushima, as well as the campaign offices of two candidates running on the LDP and Tomorrow Party of Japan (TPJ) tickets, respectively. Appointments were made via telephone before their visits.

According to the LDP's Fukushima chapter, the embassy staff were especially interested in policy differences between LDP headquarters in Tokyo and the Fukushima chapter, and asked why the latter was advocating the decommissioning of the Fukushima No. 2 Nuclear Power Plant. The staffers also said they would report their findings to the U.S. government.

Regarding the chapter's opposition to Japan's participation in the Trans-Pacific Partnership (TPP) free trade negotiations, the embassy staff told the LDP chapter that Washington is promoting the TPP and asked them if anti-TPP policy was an election ploy. In response, senior LDP chapter officials admitted to the policy difference with party headquarters, and explained local sentiment toward nuclear power and economic damage from harmful rumors about agricultural products.

The embassy officials also showed interest in the growing public support for the so-called "third political force" including the TPJ and the Japan Restoration Party.

At one of the campaign offices, the embassy staff reportedly remarked that the Japanese society is leaning toward the right and took a photo of a Shinto altar used to pray for election success.

An official representing the U.S. Embassy's Information Office said, "We have regular contacts with those in the Japanese political sphere, but we withhold from commenting on individual diplomatic exchanges."

Kazuya Sakamoto, a professor at Osaka University, said, "It is unusual for U.S. embassy officials to visit election offices in such local regions, and their visit is proof that the U.S. government believes public sentiment in Fukushima is important. While the U.S. is maintaining and promoting nuclear power and the TPP, it is apparently trying to find out how Japan's new administration will balance national and local interests, and to determine what stance the U.S. should take toward the new government."

Nukes key point in Japanese first election since 3/11

December 15, 2012

Nuclear energy a key issue as Japan goes to polls

http://ajw.asahi.com/article/behind_news/politics/AJ201212150039

THE ASAHI SHIMBUN

Japan goes to the polls Dec. 16 to shape key policies—including the future of nuclear energy—in the first nationwide election since last year's devastating earthquake and tsunami and subsequent nuclear disaster.

Social security, another key election issue, will also be on the minds of voters.

Prime Minister Yoshihiko Noda cited the future of nuclear energy as a top campaign issue when he dissolved the Lower House on Nov. 16 for a snap election.

"The election will ask the nation whether to choose a party that will reduce nuclear power to zero or a party that will continue the past energy policy," he told a news conference.

Noda's ruling Democratic Party of Japan promised to suspend all nuclear reactors by the end of the 2030s.

Your Party, a small opposition party, said it will halt all reactors by the end of the 2020s, and New Komeito, another opposition party, said it aims to do the same "as soon as possible."

Still, the three parties all plan to allow idled reactors to be brought back online before the nuclear-free goal is achieved.
The Tomorrow Party of Japan, on the other hand, will not approve the reactivation of those reactors.

The anti-nuclear party, formed days before the official campaigning period started on Dec. 4, said it will decommission all reactors within 10 years to "graduate from nuclear power generation."

The Japanese Communist Party and the Social Democratic Party both promised to suspend all reactors immediately.
The main opposition Liberal Democratic Party and the newly formed Japan Restoration Party are cautious about moving away from nuclear power.

The LDP has effectively postponed a decision on nuclear energy, promising only to "establish the best mix of sustainable electricity sources within 10 years."

The party, which promoted nuclear energy for decades before it lost power in 2009, is leading the DPJ in opinion polls. It will likely maintain its past energy policy if it returns to power.

LDP President Shinzo Abe has criticized calls for a nuclear phaseout "irresponsible."

And though the Japan Restoration Party said in a party document that "nuclear power generation at existing reactors would fade out by the 2030s," pro-nuclear party leader Shintaro Ishihara said he will review the expression. Acting party leader Toru Hashimoto, who once advocated scrapping nuclear power, also said the document is not part of the official campaign platform.

All 50 nuclear reactors were taken offline after triple meltdowns at the Fukushima No. 1 nuclear plant, which was struck by the Great East Japan Earthquake and tsunami on March 11, 2011. Only two reactors have since been restarted.
About 160,000 people have not been able to return to their homes in Fukushima Prefecture 21 months after the nuclear crisis unfolded.

How to fund social security programs has emerged as another key election issue because legislation to double the consumption tax rate to 10 percent by October 2015 was enacted in August.

The Noda administration argued that the hike is necessary to cover the nation's snowballing social security costs and gained cooperation from the LDP and New Komeito.

Social security spending, which amounts to 26 trillion yen ($311 billion), or 29 percent of the 90-trillion-yen government budget for fiscal 2012, is expected to increase by 1 trillion yen each year.

On Dec. 16, voters will elect representatives to the 480-seat Lower House, 300 in single-seat districts and 180 in proportional representation constituencies.

A total of 1,504 candidates, a record under the current Constitution, are running for seats, with 907 registered both for single-seat and proportional representation constituencies.

THE ASAHI SHIMBUN

Even anti-nuclear voters have voted for the LDP

December 17, 2012

Exit poll: Anti-nuclear votes spread across the board

http://ajw.asahi.com/article/behind_news/politics/AJ201212170097

THE ASAHI SHIMBUN

Ballots cast by people who advocate scrapping nuclear power ended up being spread among the various parties, meaning that anti-nuclear entities failed to gain seats, an Asahi Shimbun exit poll shows.

The Asahi Shimbun approached voters nationwide who had cast their ballots in the Dec. 16 Lower House election to find out if they supported "scrapping nuclear power immediately, "gradually phasing out nuclear power altogether" or "not pursuing zero nuclear power."

Fourteen percent chose scrapping nuclear power immediately, and 64 percent picked gradually phasing out nuclear power altogether.

Voters opposed to nuclear power cast ballots across a wide range of parties in the proportional representation system.
This was because parties other than the Liberal Democratic Party advocate a break with nuclear power to a certain extent.

Fifteen percent of the respondents said they do not want to pursue zero nuclear power.

The LDP has been a strong supporter of nuclear power. Yet, the party was supported by 16 percent of those who said they want to scrap nuclear power immediately, and 28 percent of those who said they supported gradually phasing out nuclear power altogether. **This suggests voters made choices based also on issues other than on nuclear energy.**

Of those who do not want to pursue zero nuclear power, 43 percent voted for the LDP.

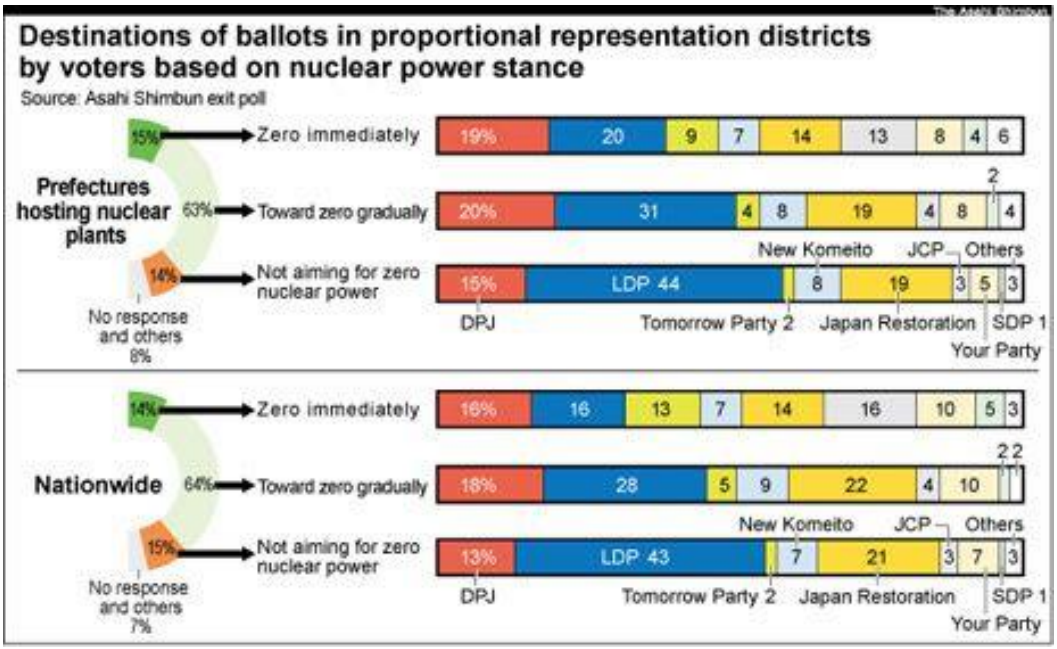
In 13 prefectures hosting nuclear plants, voters showed a similar tendency. But 20 percent of those who favor scrapping nuclear power immediately and 31 percent of those who support gradually phasing out nuclear power altogether voted for the LDP. The rates were higher than the nationwide averages.

As for single-seat constituencies, the LDP got votes nationwide from 41 percent of those who support a gradual phasing out of nuclear power altogether, and 47 percent of those in the prefectures hosting nuclear plants who gave the same answer.

The Democratic Party of Japan garnered votes from 24 percent and 26 percent of such voters, respectively.
Higher percentages of people who want a gradual reduction of nuclear power voted for the LDP in the single-seat districts than in the proportional representation constituencies.

That was likely because "third force" parties that advocate a break with nuclear power fielded candidates in a limited number of single-seat districts.

The 13 prefectures hosting nuclear power plants are Aomori, Miyagi, Fukushima, Ibaraki, Niigata, Shizuoka, Ishikawa, Fukui, Shimane, Ehime, Saga and Kagoshima prefectures, and Hokkaido



Voter voices: No choice but to vote for pro-nuclear party

http://mainichi.jp/english/english/newsselect/news/20121217p2a00m0na029000c.html

AIZUWAKAMATSU, Fukushima -- As a cold rain fell outside, victims of the Sept. 11 disasters huddled against the cold to come vote on the morning of Dec. 16 at a temporary office set up for the town of Okuma in a government building here.

Eri Kusano, 33, a disaster evacuee who lives in the city, voted for the Liberal Democratic Party (LDP) even though she was not a supporter of that party. She explained her reasoning: "Things might get better than they were with the Democratic Party of Japan (DPJ)." She also said, though, "If I hadn't been asked by a friend to vote for the LDP, I wouldn't have minded submitting a blank vote." Her husband, a nuclear power plant employee, lost his job after the disaster. She also works and helps support her family of three children, but the future is uncertain.

Okuma remains completely evacuated even now. The town government has decided not to return for five years, and it is seeking the quick setup of a temporary out-of-town community from the national government. Kusano asks of the new national administration, "More important than getting rid of nuclear power plants is recovery of disaster areas. I also want them to work on the unemployment problem."

In a temporary housing community in neighboring Aizumisato was Kazumi Hayakawa, 71, an evacuee from Naraha, who voted for the LDP this time after voting for the DPJ last time. "There was no other party worth voting for," he says.

Hayakawa's peaceful life was taken from him by the nuclear disaster, and his 74-year-old brother suffered a stroke at an evacuation shelter and is still hospitalized. He says he felt resistance to voting for the LDP, but more than that he felt,

"We were betrayed by the DPJ, whose policies were only words." He doesn't know when he will be able to return to his old home, and he doesn't think that the pace of disaster-area recovery can easily be quickened. However, he hopes that the new administration will "move forward with things steadily."

Voter voices: Nuclear power needed to survive

http://mainichi.jp/english/english/newsselect/news/20121217p2a00m0na026000c.html

The Mainichi spoke to some owners of small-scale factories in Tokyo's Ota Ward to learn what motivated them in this past election.

Katsuaki Kikuchi, 67, owner of Miyagiseiko, a machinery processor, voted for the Democratic Party of Japan (DPJ) in the previous House of Representatives election but changed his support to the Liberal Democratic Party (LDP) this time.

His previous vote for the DPJ was because of doubts over expanding national debt under the LDP and a feeling that two powerful parties were needed, like in the United States government. However, he says, he was disappointed by the DPJ's handling of the Futenma base relocation issue and its inability to fulfill its campaign promises.

"The DPJ still needs to brush itself up," he says.

After the economic crisis of 2008, his factory's sales for 2009 fell around 70 percent compared to the previous year. He has around 20 employees and will lose competiveness against foreign companies if electricity prices rise due to the halting of nuclear plants. He chose the LDP partly because it didn't propose an end to nuclear power.

Last year, his business finally recovered, but worsened Japan-China relations over the Senkaku Islands dispute have halted his exports to China. He says he hopes for "stabilized diplomacy" from the new administration.

Keiji Fukuoka, 81, who owns the metal processing factory Michizuka Seisakusho Co., says he felt the DPJ "just attracted the people's attention with policies that they couldn't really accomplish," and returned his support to the LDP.

"If (the government stops the nuclear power plants and) blackouts happen, corporations will flee overseas and employment will suffer," he says. "We must allow corporations to survive," by keeping power prices down through running nuclear plants, he says.

TPJ's Kada vows to move forward after anti-nuclear platform fails election test

http://mainichi.jp/english/english/newsselect/news/20121217p2a00m0na012000c.html

After a poor showing at the polls during Dec. 16's House of Representatives election, Tomorrow Party of Japan (TPJ) leader Yukiko Kada expressed determination to press forward with her party's anti-nuclear message.

"It was unfortunate that I couldn't make the voters' desperate cries to end nuclear energy heard. But I won't give up. I will move forward," Kada told reporters at a Dec. 16 news conference at a vote-tallying center in Tokyo's Chiyoda Ward.

"Voters' number one priority as they cast their ballots was a stable economy and employment, rather than nuclear energy policy," Kada said of her party's performance. Kada appeared weary during the news conference, occasionally missing questions from the assembled reporters.

Nuclear future - What to expect from the LDP

December 17, 2012

Future of nuclear power in Japan fuzzier with LDP win

http://mainichi.jp/english/english/newsselect/news/20121217p2a00m0na022000c.html

While the House of Representatives election manifesto of the victorious Liberal Democratic Party (LDP) does call for an end to a "reliance" on nuclear power, it notably avoids using the term "zero-nuclear" so prominent in the pledges of other parties.

Rather, **the LDP promises to decide on the reactivation of idled reactors "within three years," and to "establish the best mix of energy sources for Japan within 10 years,"** effectively putting off a final decision on the nuclear issue for quite some time. Compared to the "end to atomic power in Japan by the 2030s" promised by outgoing Prime Minister Yoshihiko Noda and his Democratic Party of Japan (DPJ), the LDP's pledges weaken the drive to end nuclear dependence.

Regarding the restart of Japan's 50 reactors, the LDP promised to "give absolute priority to the expert opinions of the independent Nuclear Regulation Authority," or NRA. The NRA will set new safety standards in July next year, and is not expected to do any reactor inspections before then. That is, it is very unlikely any idled reactors will be reactivated before next year's peak power consumption period in mid-summer.

Meanwhile, the LDP has also promised to keep Japan's nuclear fuel cycle project going for the long term, a pledge shared with the DPJ. Abe has furthermore indicated he is in favor of continuing development of fast-breeder reactors -- reactors specially designed to burn the mixed-oxide plutonium-uranium fuel produced by the fuel cycle program.

Abe has also not ruled out building new reactors. Opposition from local governments and other parties, however, prompted a senior Ministry of Economy, Trade and Industry official to say the LDP "probably won't move on the new reactors issue until after the House of Councillors election next summer."

Abe set to transform energy, foreign and monetary policies

December 17, 2012
http://ajw.asahi.com/article/behind_news/politics/AJ201212170077

THE ASAHI SHIMBUN

Japan is expected to reverse course to scrap nuclear power, and take a stronger stand in international disputes under a government led by Shinzo Abe, whose Liberal Democratic Party swept back to power in a Lower House election Dec. 16.

During campaigning, Abe condemned a pledge by the Democratic Party of Japan to shut down the nation's nuclear power plants within three decades as "irresponsible."

The LDP built up Japan's reliance on nuclear power. It was a strong promoter of the industry while it held power for decades until losing an election in 2009.

The party has said it will "reach a conclusion on restarting reactors within three years." The Abe administration is expected to approve firing them up one by one, as and when the Nuclear Regulation Authority certifies them to be safe.
Japan's 50 nuclear reactors were shut down following the disaster at the Fukushima No. 1 nuclear power plant in March 2011. Two have since restarted.

Electric utilities have provided substantial institutional support for the LDP. They have argued for prompt reactor restarts, citing the burden of buying additional fuel for thermal power plants.

"The LDP is closer to our way of thinking," Makoto Yagi, chairman of the Federation of Electric Power Companies of Japan, has said.

Meanwhile, the DPJ government planned to cancel--by withholding approval for--the construction of nine proposed reactors which currently exist only on paper.

The planned reactors include one in Kaminoseki, Yamaguchi Prefecture, where the pro-nuclear camp is confident it will win approval. "The tide will change when Abe becomes prime minister," one representative said.

Over the long term, the LDP will likely maintain nuclear energy. In its campaign platform, the party said it will "within 10 years determine the best ratios of sustainable electricity sources."

The future of nuclear energy is expected to be outlined in the Abe administration's basic energy plan, a declaration of its mid- to long-term energy policy.

The DPJ government planned to draft a basic energy plan in December which would have included its goal of pulling the plug on nuclear power by the end of 2030s. That ambition is now expected to be reviewed.

Also uncertain is the future of reforms to weaken the virtual monopolies of regional utilities and to promote the use of renewable energy.

The DPJ government planned to compile proposals in December for how to separate the power generation and transmission functions of regional utilities and to liberalize the electricity retail industry.

But the LDP has been reluctant to reform the electricity sector in view of opposition from its support base there.
"Under an LDP government, a policy change is unavoidable," a senior industry ministry official said.
…… (Tough on China… Pressure on the Central Bank)

THE ASAHI SHIMBUN

The "nuclear village" can smile again

Optimism rises in 'nuclear village' after LDP's victory

http://ajw.asahi.com/article/behind_news/politics/AJ201212190048

THE ASAHI SHIMBUN

The smiles have returned to the “nuclear village.”

After more than a year of soaring costs, sinking profits and doubts about future operations, the electric power industry gladly welcomed the Liberal Democratic Party's return to power.

The Dec. 16 Lower House election campaign was filled with promises to phase out nuclear power, including the outgoing Noda administration’s call to shut down all nuclear reactors by the 2030s.

Such promises were not included in the platform of the LDP, long supported by the electric power industry. Its overwhelming victory in the election is expected to reverse the anti-nuclear course that was set in motion after the Fukushima nuclear disaster last year.

"The energy strategy that plans to halt all nuclear reactors by the 2030s poses an excessively great challenge," Makoto Yagi, chairman of the Federation of Electric Power Companies of Japan, said in a statement released Dec. 17. "We ask the new administration to review it."

Yagi, also president of Kansai Electric Power Co., emphasized that nuclear power is a key energy source for Japan.
"It is important for our country to simultaneously diversify energy sources, including nuclear power, and achieve a stable energy supply, environmental protection and economics," he said.

Japan's 50 nuclear reactors were shut down after the disaster at the Fukushima No. 1 nuclear power plant in March 2011. Only two have been brought back online.

Utilities have argued for prompt reactor restarts, citing the burden of buying additional fuel for their thermal power plants.
"After a change in government, they will listen to our opinions," a senior Kansai Electric Power official said.

Investors share the industry's optimism.

Stock prices of the nation's 10 regional electric utilities all climbed on Dec. 17 after the LDP's victory.

The stock of beleaguered Tokyo Electric Power Co., operator of the Fukushima No. 1 plant, soared by more than 30 percent from Dec. 14 to its daily price limit. Kansai Electric Power's stock also temporarily reached its daily limit.
Investors expect the LDP administration will approve restarts of idle reactors, which would improve the finances of the utilities.

"It is premature to expect that nuclear reactors will be restarted in one go, but at least the risk of electric utilities being forced to decommission new reactors has diminished," an official at a major securities house said.

Senior LDP officials have already made remarks in line with expectations in the industry, which forms the core of the so-called "nuclear village," along with pro-nuclear bureaucrats and scientists.

Akira Amari, chairman of the LDP's Policy Research Council, stressed the need to restart reactors on a TV program broadcast Dec. 16.

“The biggest factor behind Japan’s growing trade deficits is the ballooning cost of natural gas imports,” Amari said. “Reactivating the reactors whose safety is confirmed by the Nuclear Regulation Authority will prevent Japan from depleting its wealth.”

The LDP said in its campaign platform that it will decide on reactor restarts within three years based on the results of NRA safety inspections. The party’s basic stance is that it will approve restarts as long as the NRA declares the reactors safe.

But the restart of the No. 2 reactor at Japan Atomic Power Co.’s Tsuruga plant in Fukui Prefecture remains in doubt. An NRA team that inspected the site this month cited a high likelihood that a seismic fault running beneath the No. 2 reactor building is active.

Japan Atomic Power has challenged the NRA’s assessment.

The LDP also said it will decide within 10 years on the proportion of nuclear power and other energy sources, including renewables, aiming for the "best mix of sustainable electricity sources."

During a Dec. 16 news conference after the election, LDP Secretary-General Shigeru Ishiba said although many parties called for the abolition or reduction of nuclear power in Japan, voters after all supported the LDP’s approach with its time frame of three years and 10 years.

The LDP plans to carefully study the situation before reaching any final conclusions on a basic energy plan to determine a mid- to long-term energy policy.

Japan’s energy policy is reviewed every three years.

The Democratic Party of Japan planned to compile a new plan in December, including its goal of halting all reactors by the 2030s, but the new government is expected to review that proposal.

Reforms of the electricity sector, such as plans to separate the power generation and transmission divisions of electric utilities and liberalize electricity retailing, have also become uncertain.

The DPJ government planned to draft reform proposals by the end of the year, but these changes could be stalled if the new government heeds calls from the electricity industry.

Wishful thinking?

December 19, 2012
Editorial: No turning back the clock on nuclear policy

http://mainichi.jp/english/english/perspectives/news/20121219p2a00m0na015000c.html

The Democratic Party of Japan (DPJ), running on a zero-nuclear policy pledge, was soundly defeated in the Dec. 16 election by the Liberal Democratic Party (LDP), which criticized the DPJ stance as "irresponsible." That doesn't mean, however, that anyone wants to return to a nuclear-dependent society.

In its House of Representatives election manifesto, the LDP promised to establish an economic and social structure that does not rely on nuclear power. LDP ally New Komeito's call for a "prompt-as-possible" shift to zero nuclear power, moreover, cannot be overlooked.

A change of course in energy policy has been explored by listening to various public voices following the outbreak of the Fukushima nuclear disaster last year. That progress cannot simply be tossed aside and the whole process sent back to the drawing board. The ongoing crisis broke out against a backdrop of nuclear policy and legal regulation promoted by past DP administrations. The new administration must use the lessons learned from this experience as a launch pad to confront the public's appeals for the abandonment of atomic power in Japan.

New Komeito pledged during the election campaign that it would establish a sustainable energy framework within the next 10 years. But putting off a decision on the ratio of nuclear energy to other sources for 10 years can prevent investment and research and development from identifying a clear direction. The party also calls for the full-fledged adoption of renewable energy and promotion of energy-saving measures for three years, but without a clear vision of the energy society it wants to build, corporations and the public will find it difficult to commit to such measures.

Realistically speaking, it appears implausible that the reactivation of Japan's idled nuclear reactors will go smoothly. The active fault investigations being conducted by the Nuclear Regulation Authority (NRA) have highlighted the inadequacy of surveys conducted by power companies and assessments by regulatory bodies in the past. Re-inspections of all nuclear power plants are unavoidable.

By next summer, the NRA is set to lay out new safety standards that will include backfit provisions requiring existing nuclear facilities to meet the latest safety criteria. This is likely to mean many nuclear facilities will need large-scale renovations to stay in operation. Moreover, the revised Regulations of Nuclear Source Material Law, which stipulates that as a general rule nuclear reactors should be decommissioned after 40 years of service, must not be ignored. That reactor numbers will fall is self-evident from these factors, and we must squarely face policies that presuppose our reduced dependence on nuclear energy.

There is a risk of protest against the NRA's harsh assessments, but the LDP has made it clear that it is ready to entrust nuclear safety to the agency's expert opinion. It was the LDP and New Komeito that pushed for the establishment of the NRA as a highly independent extra-ministerial body, and they must not take any action that would infringe upon that independence.

Finding a strategy for the nuclear fuel reprocessing cycle is unavoidable in dealing with Japan's nuclear policy. The LDP has postponed any definitive decisions, but changing policy direction becomes harder the longer it is put off. The fuel reprocessing cycle has reached an impasse. Let's hope that the new government works toward breaking away from the cycle, using New Komeito's calls to abandon the Monju Fast Breeder Reactor in Fukui Prefecture as a foothold.

Abe and the ban on new reactors

December 22, 2012

Incoming leader repeats pledge but links any move to policy on future energy mix

Abe hints at scrapping reactor ban

http://www.japantimes.co.jp/text/nn20121222x1.html

Kyodo

TABUSE, Yamaguchi Pref. — The head of the Liberal Democratic Party repeated Saturday that he will reconsider revoking the ban on construction of new nuclear reactors when he takes office next week.

Shinzo Abe, who is all but assured of becoming the nation's next prime minister on Wednesday, made the remarks in Tabuse, Yamaguchi Prefecture, hinting he could abandon the policy, which is aimed at reducing the nation's dependence on nuclear power in light of the dangers presented by the Fukushima meltdowns.

"We'd like to review how to think about the issue nationwide," Abe said at a news conference in Yamaguchi on Friday. He returned to his constituency Friday evening and visited the grave of his father, former Foreign Minister Shintaro Abe, and his grandfather, Nobusuke Kishi, before returning to Tokyo on Saturday evening.

Abe, who is set to become the nation's seventh prime minister in six years on Wednesday, said the new government will consider whether to allow power companies to build new reactors in line with his party's goal of determining the country's future energy mix within the next 10 years.

The ban on new reactors was part of an energy strategy crafted by Prime Minister Yoshihiko Noda's government in September, after three reactor cores melted at the Fukushima No. 1 power plant in Fukushima Prefecture in March 2011.

The strategy also said Japan will aim to phase out nuclear power in the 2030s, but that goal is widely expected to be retracted after the change in government following the Democratic Party of Japan's bruising defeat in Sunday's general election.

Currently, three reactors are under construction and nine more are at the planning stage.

Construction of new reactors could get go-ahead from new government

http://ajw.asahi.com/article/behind_news/politics/AJ201212220046

THE ASAHI SHIMBUN

YAMAGUCHI--Shinzo Abe said his administration should review a freeze imposed by the outgoing government on the construction of new nuclear reactors.

The Liberal Democratic Party chief was speaking Dec. 21 to reporters in Yamaguchi Prefecture, where he holds a Lower House seat.

"The DPJ administration took a decision, but I want to review it," Abe said.

In the aftermath of the disaster at the Fukushima No. 1 nuclear plant last year, the government of the Democratic Party of Japan decided to withhold approval for new reactors—with the exception of a handful already under construction—and furthermore to shut down all nuclear power reactors by the 2030s.

The LDP swept to an overwhelming victory in a Lower House election Dec. 16, but its platform was vague on the question of nuclear policy. The party promised only to "decide within 10 years on a sustainable 'best mix of power generation' for the future."

Abe is expected to be named prime minister in coming days.

At the Dec. 21 news conference, Abe stressed his intentions.

"The party's direction has been set. We will consider what our position is on the construction of new reactors in the future," he said.

As for giving existing nuclear reactors the green light to power up again, Abe said, "We will make a decision within three years, after the Nuclear Regulation Authority has established new rules."

Abe repeats need to review policy of not allowing new nuclear reactors

http://mainichi.jp/english/english/newsselect/news/20121222p2g00m0dm007000c.html

TABUSE, Japan (Kyodo) -- Japan's next prime minister, Shinzo Abe, reiterated Saturday that he will reconsider the current government's policy of not allowing utilities to build new nuclear reactors.

Abe, head of the Liberal Democratic Party who is set to become the new premier on Wednesday, made the remarks to reporters in Tabuse, Yamaguchi Prefecture, hinting that he could jettison the policy aimed at reducing dependence on nuclear energy following last year's Fukushima disaster.

Abe has said the new government will judge whether to allow power companies to build new reactors in line with his pronuclear party's stance of determining the country's future energy mix within the next 10 years.

The principle of not allowing the construction of new reactors was included in an energy strategy crafted by Prime Minister Yoshihiko Noda's government in September in the wake of the disaster last year at the Fukushima Daiichi nuclear power station.

The strategy also said Japan will aim to phase out nuclear power in the 2030s, but the goal is widely expected to be retracted by the new government following Noda's Democratic Party of Japan's crushing defeat in Sunday's general election.

Currently, three reactors are under construction and nine more are being planned to be built in Japan.

Changing direction on nuclear policy

December 27, 2012
Abe administration to overhaul nuclear, monetary policies

http://ajw.asahi.com/article/behind_news/politics/AJ201212270051

THE ASAHI SHIMBUN

Prime Minister Shinzo Abe will drastically shift the direction Japan takes in monetary and fiscal affairs, and will likely overturn a pledge by the outgoing administration to pull the plug on nuclear power.

In addition, Abe is expected to strengthen Japan's alliance with the United States and try to repair ties with China.
The government of the Democratic Party of Japan declared it would shut down all nuclear reactors by the 2030s. Abe condemned the policy as "irresponsible."

There is now a strong possibility of Japan retaining nuclear power, and Abe has additionally indicated a readiness to allow nuclear reactors halted last year to fire up again. The widespread shutdown was one response to the accident at the Fukushima No. 1 nuclear power plant following last year's Great East Japan Earthquake and tsunami.

"Once the Nuclear Regulation Authority creates stricter rules, we will decide over a period of three years whether operations can resume," Abe said at a news conference late on Dec. 26, the day he formally established his Cabinet.
He added, "We will also have to consider how we are to meet demand for electricity in the short term. There is the danger of a further hollowing out of the domestic manufacturing sector."

The Nuclear Regulation Authority is not expected to compile new safety standards until after July 2013, which means any decision on resuming operations could likely only be made after the Upper House election in the summer.

During negotiations with coalition partner New Komeito, the LDP overruled New Komeito's demand that Japan go nuclear-free. And the wording in the coalition agreement was toned down to state the aim of reducing "dependence on nuclear energy as much as possible."

This lack of a specific target could allow Japan to maintain its dependence on nuclear energy indefinitely.

But a more symbolic issue concerns whether the new government will approve the construction of new reactors.

During his first news conference Dec. 27, incoming economy minister Toshimitsu Motegi said it would take "a major political decision" on whether or not to allow construction of nine reactors that currently exist only at the planning stage.
"We will not immediately be declaring 'yes or no,' but we will collect experts' opinions in order to make a major political decision in the future," he told reporters.

The DPJ government decided to withhold permission for construction of the nine units. Among them is the Kaminoseki plant in Yamaguchi Prefecture planned by Chugoku Electric Power Co.

However, Abe indicated at a Dec. 21 news conference that he would leave the question of new construction undecided for now.

Meanwhile, personnel appointments point to a greater say in policy by senior former civil servants who in the past walked in step with the LDP in promoting nuclear energy.

One of Abe's new aides is Takaya Imai, a former deputy director-general of the Agency for Natural Resources and Energy. Imai served as an administrative aide during Abe's first stint as prime minister.

Named as an administrative aide this time is Tadao Yanase, deputy director-general of the Economic and Industrial Policy Bureau at the Ministry of Economy, Trade and Industry.

Both Imai and Yanase were involved in nuclear policy when they worked at METI.

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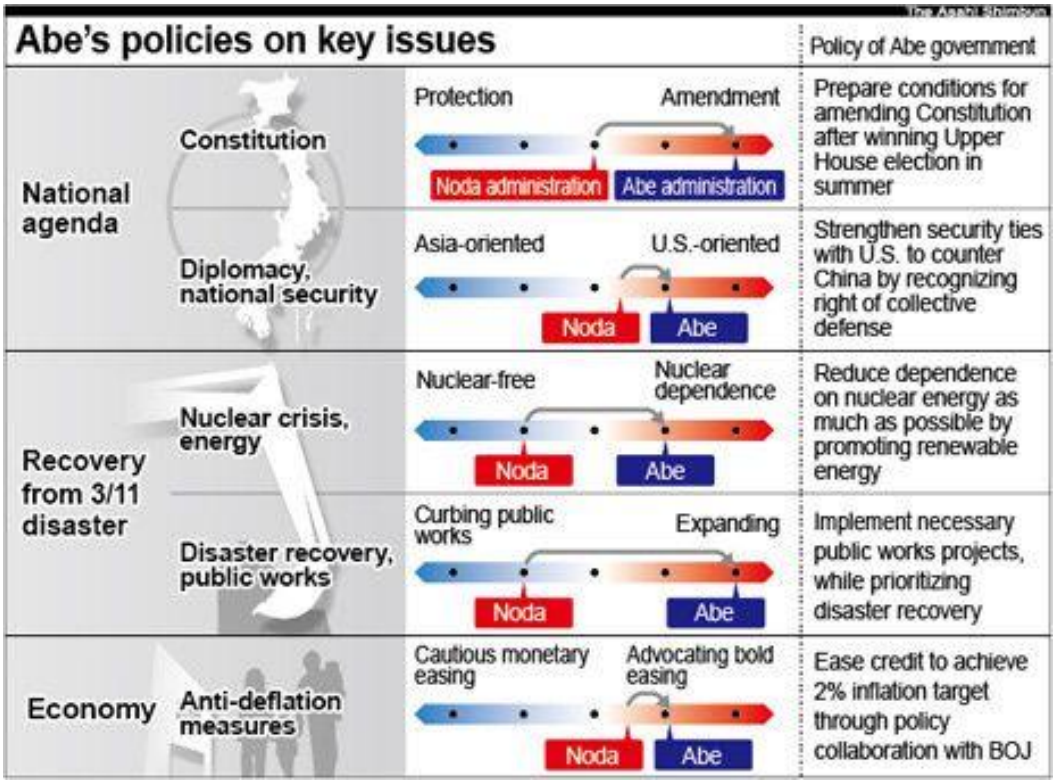


(No-)Nuke policy will be reviewed

December 28, 2012
Abe government questions 'no nuke' future hours after taking office

http://ajw.asahi.com/article/behind_news/politics/AJ201212280059

THE ASAHI SHIMBUN

The Abe administration is moving swiftly to distance itself from the nuclear-free society envisioned by its predecessor.

Early on Dec. 27, hours after Shinzo Abe formed his Cabinet, his economy minister, Toshimitsu Motegi, said the government would review the Democratic Party of Japan administration's ban on building new nuclear reactors that currently exist only on the drawing board.

Plans exist for nine such reactors. Additionally, construction is already under way on three further reactors, which the DPJ said can continue.

Motegi was speaking at his first news conference after assuming office. His declaration calls into question the DPJ's pledge to shut down all nuclear reactors by the 2030s—and perhaps pushes back the deadline indefinitely.

The DPJ aimed to meet the target by preventing construction of new reactors and by decommissioning existing ones as they reached the end of their standard 40-year service life. This would result in a gradual decrease from the current total of 50 reactors.

Because Motegi has opened the door to possible construction of new reactors, that scenario is now unlikely.

But it remains unclear whether coalition partner New Komeito will consent to the Liberal Democratic Party's plan to restore dependence on nuclear energy.

New Komeito called for a nuclear-free future as it campaigned for seats in the Lower House election. The coalition agreement with the LDP calls for reducing dependence on nuclear energy "as much as possible."

During a televised discussion Dec. 22, New Komeito leader Natsuo Yamaguchi said it would be a bad idea at the moment to approve building new reactors.

"That is something that would not likely win public understanding," he said.

Appearing on the same TV program, Shigeru Ishiba, the LDP secretary-general, countered, saying construction was possible. But Yamaguchi said such a decision should only be taken after much caution.

Meanwhile, Motegi's comment pleased advocates of nuclear power and angered those opposed, especially in Fukushima Prefecture, which is still a long way from recovering from the accident at the Fukushima No. 1 nuclear power plant last year.

"That is only to be expected," said Yasuchika Hasegawa, chairman of the Japan Association of Corporate Executives, reacting to Motegi's comment. He added, "It was still too early to be setting any kind of deadline and such a definitive statement should not have been made."

Local leaders whose localities already have nuclear reactors were generally pleased that further construction is now possible.

"Next year will be a good one," said Kazuharu Kawase, mayor of Tsuruga, Fukui Prefecture, which hosts a number of plants. They provide significant local employment.

Japan Atomic Power Co. plans to build two new reactors at its Tsuruga plant, adding to two already there. Initial plans called for the No. 3 reactor to enter service in 2017, and the No. 4 reactor in 2018.

Municipal government officials did not hide their disdain for the DPJ government and were clearly waiting for the LDP to take the reins of power once again.

There is now the possibility of construction beginning at the Kaminoseki plant in Yamaguchi Prefecture, a project which has polarized the town since it was first proposed in 1982.

One advocate is municipal assembly member Tetsuo Nishi, 65.

"I am reassured by the statement, which gives us hope," he said.

But on Iwaishima island, 4 kilometers from the planned site, a group of residents remains steadfastly opposed.

"Does the LDP want to once again torment the residents of Iwaishima?" asked 35-year-old Takashi Yamato. "We will continue our fight until it retracts the decision."

Choichi Ujimoto, 62, is a local organic farmer.

"Our 30-year struggle will continue," he said. "Since we cannot ask older residents to strive harder, it is us who must lead the cause now. We will show that we can make a living even without revenues associated with the nuclear plant."

The town of Namie, Fukushima Prefecture, today remains all but deserted. It lies close to the Fukushima No. 1 nuclear plant.

Residents still cannot return, and yet Tohoku Electric Power Co. has plans to build a new nuclear plant right there—at Namie.

"I cannot accept the idea of building a new plant when no clear explanation has been made of the cause of the nuclear accident," said Namie Mayor Tamotsu Baba.

"Does this mean the suffering has not been understood? Or is it a sign that the accident has already been forgotten?" Baba said.

Motegi says N-policy must be reviewed

http://www.yomiuri.co.jp/dy/national/T121227003553.htm

Jiji Press

New industry minister Toshimitsu Motegi said the policy to reduce the nation's reliance on nuclear power to zero in the 2030s, espoused by the previous government led by the Democratic Party of Japan, needs to be reviewed.

It is impossible for Japan to abandon its nuclear fuel cycle policy anytime soon, he also said at a news conference after the launch of the Cabinet of new Prime Minister Shinzo Abe on Wednesday.

"We will do all we can to ensure a stable power supply so that domestic economic activities won't be affected," Motegi said.

The government will take responsibility for restarting idled nuclear reactors once their safety is confirmed by the Nuclear Regulation Authority, he added.

Currently, only two of the nation's 50 nuclear reactors are operating. The two--the Nos. 3 and 4 units at Kansai Electric Power Co.'s Oi nuclear power plant--resumed operations in July. They are the first to have been restarted since the outbreak of the crisis at the Fukushima No. 1 nuclear plant.
(Dec. 28, 2012)

December 27, 2012

Abe administration puts plans to end nuclear power by 2030s under review

http://mainichi.jp/english/english/newsselect/news/20121227p2a00m0na014000c.html

The administration of Prime Minister Shinzo Abe is poised to review plans to shut down all nuclear power plants by the 2030s, as promised by the Democratic Party of Japan (DPJ)-led administration, the new trade minister said.

"We need to review the policy," Economy, Trade and Industry Minister Toshimitsu Motegi told a news conference after a Cabinet meeting on Dec. 27.

Motegi also said the government will resume operations at idled nuclear plants on condition that it wins understanding from local communities.

"The government will decide to reactivate nuclear plants under its own responsibility if they are confirmed safe," Motegi said.

The minister said the government will give the green light for the continuation of the construction of J-Power's Oma nuclear plant and the No. 3 reactor at Chugoku Electric Power Co.'s Shimane plant, which has already started.

Moreover, Motegi declared that the new administration will scrap the DPJ government's decision not to approve the construction of any new nuclear reactors.

"We'd like to make a political decision after we accumulate sufficient specialized expertise," he said.
In Japan, three nuclear reactors are under construction while there are plans to build nine others.

Approval of the construction of new reactors means the LDP-led government will utilize several nuclear power stations in the mid- and long-term.

Meanwhile, the minister ruled out the possibility of abandoning the nuclear fuel cycle project, in which spent nuclear fuel is to be reprocessed and reused for nuclear reactors.

Erase every decision from the previous gov't

December 28, 2012

Zero-nuclear policy, Kono Statement in the sights

Abe Cabinet signals big changes ahead

http://www.japantimes.co.jp/text/nn20121228a1.html

By MASAMI ITO
Staff writer

Prime Minister Shinzo Abe's Cabinet got down to work Thursday dismantling various policies of the previous administration, including the zero-nuclear target, and musing on a review of the 1993 Kono Statement, an apology for the coercion of women into sexual slavery during the war.

Industry minister Toshimitsu Motegi stated that the new government would review the Democratic Party of Japan's plan to completely abandon atomic power as an energy source by the 2030s. He also hinted the Liberal Democratic Party-led government would permit the construction of new reactors.

"It is not about making a 'yes' or 'no' decision right now, but a major political decision will be made in the future after collecting expert opinions," Motegi told reporters early Thursday, hours after he was appointed.

Pressured by a vociferous nationwide call to abandon nuclear power, then-Prime Minister Yoshihiko Noda and his DPJ-led government adopted a zero-nuclear policy in September. The decision was adamantly opposed by Keidanren, the nation's largest business lobby and a strong supporter of the LDP, which has welcomed the Abe government's intention to change course.

"The previous government's policy to stop all active nuclear reactors by the 2030s needs to be reviewed," Motegi said.

Abe has repeatedly stated that the LDP would take 10 years to come up with the "best energy mix," indirectly suggesting his government intends to maintain reliance on atomic energy despite the meltdowns at the Fukushima No. 1 nuclear power plant, which forced thousands of residents to flee and contaminated many of the prefecture's resources, from fish to vegetables to water, with radiation.

Motegi's comment was the first from Abe's Cabinet to clearly broach the subject of reviewing the zero-nuclear policy.

Also potentially up for review, if Abe has his way, is the 1993 statement [....]

The LDP is back in power for the first time in 39 months after voters bounced the DPJ in the Dec. 16 general election. Abe himself walked away from the prime ministership in 2007, when Cabinet scandals, a plummeting support rate and health problems overwhelmed him. Every leader since has lasted roughly a year at the top.
On Wednesday night, after his official reappointment as the nation's leader, Abe said he was older and wiser, and expressed confidence he could rule better this time.

Pro-nukes are back

December 29, 2012
Pro-nuclear bureaucrats back in the picture under Abe

http://ajw.asahi.com/article/behind_news/politics/AJ201212290056

December 29, 2012
THE ASAHI SHIMBUN

The Liberal Democratic Party wasted little time restoring the influence of the pro-nuclear industry ministry to move away from the nuclear-free society envisioned by the previous government.

Soon after new Prime Minister Shinzo Abe established his Cabinet on Dec. 26, moves were quickly made that elated ministry officials who had been kept on the defensive since the March 2011 accident at the Fukushima No. 1 nuclear power plant.

Even before he was named prime minister, Abe indicated the direction he would take concerning the nation's energy policy. And LDP members expressed confidence that the party's landslide victory in the Dec. 16 Lower House election had given them the go-ahead from the public to pursue nuclear power generation.

On Dec. 21, Abe visited Yamaguchi Prefecture, which he represents, to pray at the graves of relatives, including his father, Shintaro, a former foreign minister.

At a news conference at the Yamaguchi prefectural government building, Abe said he would review the decision of the Democratic Party of Japan-led government to halt new construction of reactors, opening the door for the possible construction of a nuclear plant at Kaminoseki in the prefecture.

Standing by Abe's side was Takaya Imai, a former deputy director-general of the Agency for Natural Resources and Energy, which comes under the jurisdiction of the Ministry of Economy, Trade and Industry. Imai was an administrative aide during Abe's first stint as prime minister.

A day after the LDP's election victory, Imai was removed from the deputy director-general's post and was appointed a policy aide to Abe, giving the ministry veteran greater influence over a much wider policy area.

When Naoto Kan was prime minister during the DPJ government, Imai was involved in exporting nuclear plant technology to Vietnam. When the administration of Prime Minister Yoshihiko Noda was moving toward resuming operations at the Oi nuclear plant in Fukui Prefecture this past summer, Imai served as a liaison with local government officials.

METI officials chose Tadao Yanase, deputy director-general of the Economic and Industrial Policy Bureau, as administrative aide to Abe this time around. Yanase was involved in compiling a plan for the promotion of nuclear energy in 2006, when he headed the Nuclear Energy Policy Planning Division.

Because past LDP governments worked closely with the ministry to promote nuclear energy, the return to power by the LDP provides the opportunity for the new administration to again promote nuclear power generation.

One reason the LDP is easily overturning the DPJ's nuclear policy is because the DPJ administration did not put much muscle behind its pronouncements. No Cabinet approval was given for seeking a nuclear-free society--and that objective was not clearly included in the new energy basic plan or any laws passed by DPJ administrations.

The LDP's coalition agreement with New Komeito includes a reduced dependence on nuclear energy as much as possible. But there is no telling how long that pledge will stand up.

The DPJ government, which began discussing future nuclear policy in spring this year, was never really a strong advocate of a nuclear-free society.

At one time, a consensus was developing to reduce the ratio of nuclear energy generation to 15 percent from the approximately 25-percent level before the Fukushima nuclear accident. In May, Goshi Hosono, who was state minister in charge of handling the nuclear accident, said the 15-percent level would be one starting point for discussions.

The DPJ government only started mentioning a nuclear-free future after seeing public sentiment turn against nuclear power in light of the Fukushima accident.

At public hearings held in 11 locations around Japan this summer, about 70 percent of participants wanted a nuclear-free future. A deliberative opinion poll found close to half of participants in favor of such a future.
Weekly protests in front of the prime minister's office drew thousands of citizens voicing their opposition to nuclear energy.

Although no Cabinet approval was given, the DPJ did include in its new energy strategy the goal of halting all nuclear reactor operations by the 2030s.

LDP officials say their election victory represented a change in public opinion.

"Rather than a nuclear-free nation, what was supported was a move to decide on the future of nuclear energy after discussing the issue for periods of between three to 10 years," Shigeru Ishiba, the LDP secretary-general, said.

At his first news conference after becoming industry minister, Toshimitsu Motegi said he would review the DPJ proposal to end operations at all nuclear reactors by the 2030s. He said future political decisions would be made about whether to allow construction to start on nine planned reactors.

Abe, at his first news conference after becoming prime minister on Dec. 26, spent much of the time explaining his economic policies but made no mention of Japan's nuclear policy.

Exit polls conducted by The Asahi Shimbun on Dec. 16 found that 78 percent of respondents favored either an immediate or gradual move toward a nuclear-free society, much larger than the 15 percent who opposed such moves.

Motegi and the LDP came under fire over the new administration's nuclear policy on a Dec. 28 television program.

"The reason why God returned the LDP to control of government was because He wanted you to clean up the mess you made of nuclear policy," singer Akihiro Miwa told the industry minister.

Having been exposed to radiation when the atomic bomb was dropped on Nagasaki on Aug. 9, 1945, Miwa criticized the Abe administration's stance of seeking to resume operations at nuclear reactors before any decision had been made on the final disposal site for spent nuclear fuel.

However, Motegi did not back down.

"There already is spent nuclear fuel," Motegi said. "That major problem will remain regardless of whether or not we resume operations at nuclear reactors."

No nuclear power "in the short-, medium- or long term"

December 28, 2012
Editorial: LDP must not overturn zero-nuclear policy

http://mainichi.jp/english/english/perspectives/news/20121228p2a00m0na005000c.html

Newly appointed Economy, Trade and Industry Minister Toshimitsu Motegi has announced that he "will make a political decision" over additional construction of nuclear reactors "after accumulating sufficient expert knowledge."

His remarks suggest that the new Liberal Democratic Party (LDP)-led government will upend its Democratic Party of Japan (DPJ) predecessors' policy against reactor construction, and hint that it may even green-light new reactors. Motegi has also clearly stated that the previous administration's move to end nuclear power in Japan by the 2030s will be reviewed.

The minister's position is, however, a far cry from implementing the coalition agreement between the LDP and New Komeito, which advocates a maximum possible reduction in Japan's dependence on nuclear power.

During its campaigns for the Dec. 16 House of Representatives election, the LDP pledged to work out a sustainable energy mix within the next 10 years, without mentioning how the party will handle nuclear energy in the medium- and long-term. If the LDP is to use its landslide election victory to grease the rails for an immediate examination of new reactor construction, we will see it as a variation on the iron fist in the velvet glove, except the cold metal being concealed is "promotion of nuclear power." The metaphor is all the more apt as public sentiment is set so firmly against atomic energy.

The nuclear disaster at the Fukushima No. 1 nuclear plant has demonstrated the grave consequences of a severe accident and the danger of hosting nuclear plants in this quake-prone country, on top of the government's shoddy nuclear regulation in the past.

Those factors were the very reason why most of the participants in public hearings and deliberative polling conducted by the government this past summer called for zero nuclear power, and why no party in the recent general election advocated a complete embrace of nuclear power -- not even the LDP. We cannot tolerate any move by the LDP to disregard everything said thus far and venture additional reactor construction. New Komeito has good reason to be concerned that the government would not be able to gain public support for more reactors.

For the time being, the main focus will be on whether to reactivate existing reactors suspended in the wake of the Fukushima meltdowns. The new administration led by Prime Minister Shinzo Abe is looking to put those reactors back online after their safety has been confirmed by the new Nuclear Regulation Authority (NRA). Doing so will not be easy.

The NRA is scheduled to have new nuclear plant safety standards drawn up by July next year, including strengthened earthquake and tsunami countermeasures, as well as countermeasures against severe

accidents like the Fukushima disaster. Preparing additional measures will require time, and some reactors may face decommissioning if they fail to meet the new standards.

The recent series of on-site surveys by the NRA on active fault lines running under the nuclear plants have raised questions over the legitimacy of surveys and safety screenings conducted by power companies and government regulators in the past. The new administration will also need to examine how to gain understanding from local governments hosting nuclear plants.

For example, the Hakodate Municipal Government in Hokkaido is opposed to restarting construction of Electric Power Development Co. (J-Power)'s Oma Nuclear Power Plant in Aomori Prefecture across the Tsugaru strait. It appears unlikely reactor restarts will work out the way the new administration desires.

We call on the government to seek out an energy policy that will not force us to rely on nuclear power in the short-, medium- or long-term.

Abe's energy challenges (short video)

Video on NHK "On Air" (December 28, 2012)

Abe's energy challenges

http://www3.nhk.or.jp/nhkworld/english/movie/feature201212282204.html
Will the public agree?

December 31, 2012

Abe expresses support for construction of new nuclear plants

http://mainichi.jp/english/english/newsselect/news/20121231p2a00m0na002000c.html

Prime Minister Shinzo Abe expressed support for the construction of new nuclear plants in an interview with TBS on Dec. 30 -- on condition that the government wins public understanding on the issue.

"New nuclear plants would be completely different from the old ones from 40 years ago like the Fukushima No. 1 Nuclear Power Plant, which caused an accident. We'll approve the construction of new plants while getting the people's understanding on these differences," he told the television broadcaster.

At a news conference on Dec. 21, Abe had hinted he was willing approve the construction of new plants when he said he "would like to reconsider" the Democratic Party of Japan (DPJ)'s policy of generally not approving new construction.
In his interview, Abe stated, "The people are uneasy about how we will deal with our current power demands, and that's why those who carelessly touted an end to nuclear power plants failed to receive the people's trust (in the Dec. 16 House of Representatives election)."

Economy, Trade and Industry Minister Toshimitsu Motegi said at a news conference on Dec. 27 that the administration intends to approve the continued construction of J-Power's Oma Nuclear Power Plant and the No. 3 reactor at Chugoku Electric Power Co.'s Shimane Nuclear Power Plant. On starting construction of new nuclear plants, he said, "We would like to make a decision on that after accumulating sufficient expert knowledge."

There are nine planned nuclear reactors in Japan whose construction is pending. Most are advanced boiling water reactors or advanced pressurized water reactors that incorporate safety and efficiency improvements into their original designs.

If construction of new reactors is approved, it will put an end to the DPJ's policy of having no active nuclear reactors by the end of the 2030s. On Dec. 29, Abe stated that he would not immediately make the DPJ policy his own administration's policy -- showing a clear intention of turning aside from the path of "ending dependence on nuclear plants."

However, part of the agreement between the ruling Liberal Democratic Party and New Komeito on their governing coalition is that they will "reduce dependence on nuclear power plants as much as possible." New Komeito is opposed to the construction of new nuclear plants.

Three nonnuclear principles not revisable?

December 31, 2012
Altering nonnuclear principles not on the table, Kishida says
http://www.japantimes.co.jp/text/nn20121231a4.html

By MIZUHO AOKI

Staff writer

The Cabinet of Prime Minister Shinzo Abe is not considering revising the three nonnuclear principles that forbid the possession, manufacture or storage of nuclear weapons on Japanese soil, new Foreign Minister Fumio Kishida says.

In a group interview with the media recently, Kishida said the Cabinet is not discussing relaxing the principles so that U.S. ships can carry nuclear arms when visiting Japanese ports. In July last year, a report by the Liberal Democratic Party's national strategy office advocated altering the three principles to "2½."

"The three nonnuclear principles are very important rules that previous Cabinets have valued," said Kishida, 55, who was appointed foreign minister on Wednesday. "This should be kept in the future. We are not having a discussion on a revision."

Unlike Abe, the former state minister for Okinawa and Northern Territories affairs is not regarded as a hawk. In fact, his appointment is viewed by some as an effort by Abe to placate foreign governments.

"I know that Abe's Cabinet is considered rightwing or hawkish. But we have to explain (to the public that) there is a positive side as well, such as to execute things that we must do as a nation," Kishida said.

"But I think it is also important to show our breadth . . . and show a sense of balance," Kishida said, adding he hopes to help bring balance to the Cabinet.

However, he showed no compromise on the Senkakus dispute with China, insisting that the islets in the East China Sea are historically, and by international law, part of Japan.

He also emphasized that it was important to keep the lines of communication open with China to avoid any incidents.

Since Japan purchased three of the five Senkaku islets from their Saitama-based owner in September, Chinese vessels have been cruising near or inside Japan's territorial waters around the disputed islets, which are called Diaoyu in Chinese. On Dec. 13, a Chinese state-owned plane breached Japanese airspace for the first time on record near the islets.

On the issue of nuclear weapons, Kishida, a native of Hiroshima Prefecture, said he wants to work toward abolition.

Noting that the Nonproliferation and Disarmament Initiative, a 10-country coalition formed in 2010, will be holding ministerial-level talks in Hiroshima in 2014, Kishida said he wants to use the opportunity to improve cooperation with other nations.

As for the Trans-Pacific Partnership, Kishida said the LDP remains opposed to entering into negotiations as long as they are premised on abolishing all tariffs without conditions.

"If the prime minister visits the United States sometime soon, I presume (they) will touch on the TPP issue," Kishida said.

As for joining The Hague Convention against child abductions by estranged parents, Kishida only said that relevant parties will be looking into the matter.

In March 2011, the DPJ government decided to prepare to ratify the 1980 Hague Convention on Civil Aspects on International Child Abduction.

"It is embarrassing that Japan can't even have discussions about this issue due to confusion at the Diet," Kishida said.
The government submitted draft legislation for joining the convention to the Diet in March, but it has been shelved due to confrontation between the ruling and opposition camps.

A graduate of Waseda University, Kishida worked at the defunct Long-Term Credit Bank of Japan before starting his political career as a secretary to his father in 1987. Kishida won a seat in the Lower House in 1993.

No great surprise

December 30, 2012

UPDATE: Abe maintains plan to review nuke-free policy

http://ajw.asahi.com/article/behind_news/politics/AJ201212300016

THE ASAHI SHIMBUN AND WIRE REPORTS

FUKUSHIMA NO. 1 NUCLEAR POWER PLANT--Newly installed Prime Minister Shinzo Abe reiterated his intention to review his predecessor's plan to eventually phase out nuclear energy on Dec. 29 after he visited the tsunami-devastated Fukushima No. 1 nuclear plant.

"We bear a position of responsibility, which is different from (the stance of our predecessor) that tried to immediately realize, as a government policy, mere hope for eliminating nuclear power plants," Abe told reporters after his visit to the crippled plant.

Donning protective gear, Abe took a bus tour of the plant--site of the worst nuclear accident since the 1986 Chernobyl disaster--and greeted workers at its emergency operations center in Okuma town on Japan's northeastern coast.

A massive earthquake and tsunami on March 11, 2011, swamped parts of the Fukushima plant, disabling backup systems and triggering radiation-spewing meltdowns that forced tens of thousands of people to flee. The disaster triggered massive protests against atomic energy and widespread public distrust in nuclear plant operators and regulators.

Japan's nuclear reactors were suspended for checks after the Fukushima meltdowns, and only two of the country's 50 reactors are currently online.

During his visit to the Fukushima plant's operations center, Abe urged employees of the plant's embattled owner, Tokyo Electric Power Co., to persevere as the company works to clean up radiation released by the accident and safely close the plant permanently.

"Your courage is what brings hope to Japan,'' Abe told workers at the center. "Yet, we still face a great challenge--an unprecedented challenge in human history to working towards decommissioning the plant in such scale.''

The previous government, led by the rival Democratic Party of Japan, had pledged to phase out nuclear power by 2040 by retiring aging reactors and not replacing them.

But Abe's Liberal Democratic Party, which regained power in elections this month, says it plans to spend 10 years studying the best energy mix for the country. Abe has said he may reconsider the previous government's decision to stop building reactors.

The relatively favorable stance toward resuming operations of more nuclear plants has won favor among business leaders worried about power shortages and rising costs; since the Fukushima disaster, Japanese imports of costly liquefied natural gas have soared.

It's unclear, however, if that would win the approval of the government's Nuclear Regulation Authority, which is drawing up new, compulsory safety standards and checking some plants for potential trouble from geologic faults that could compromise safety in case of earthquakes, which are common in this seismically active country.

Can LNG be an alternative?

January 2, 2013

LNG gains political value as Japan's needs soar

Alaska looks to be key source if pipeline plan goes through

http://www.japantimes.co.jp/text/nn20130102x1.html

By ERIC JOHNSTON
Staff writer

OSAKA — With Japan's nuclear power future clouded by discoveries of active faults near atomic plants in Fukui and Aomori prefectures, liquefied natural gas has become a critical resource and an area of great potential for strengthening relations with the United States.

From the frozen wilderness of Alaska's North Slope to Louisiana and the Gulf Coast, American LNG reserves have increasingly drawn interest from Japan since the March 2011 megaquake and tsunami. With all but two of the nation's 50 nuclear reactors shut down, Japan has seen LNG imports surge.

In fiscal 2011, LNG imports reached about 83.2 million metric tons (mmt), up 18 percent from the previous year. For fiscal 2012, which ends this March, total LNG imports are expected to reach 90 million mmt.

Japan's LNG came from 17 countries in 2011, but almost two-thirds were from four countries: Malaysia (19 percent), Australia (18 percent), Qatar (15 percent) and Indonesia (12 percent). Alaska, the only place in the U.S. where LNG exports are currently allowed, along with eight other countries, accounted for just 7 percent of last year's imports.
That is likely to change within the next decade.

Last year, then-Prime Minister Yoshihiko Noda and U.S. President Barack Obama discussed drastically increasing LNG exports to Japan.

Obama said that while the U.S. was still discussing its energy policy, Japanese energy security is considered important to bilateral ties.

Japanese firms have a specific interest in Alaska's North Slope, where there are plans to build a 1,280-km natural gas pipeline to the southern coast. The North Slope contains about 35 trillion cu. feet of proven gas reserves.

"Alaska's natural gas would provide a comparatively clean, sustainable, and entirely reliable energy source to our friends in Japan. Alaska's natural gas resources do not present the concerns and controversies surrounding natural gas exports from the Lower 48," Alaska Sen. Lisa Murkowski, who is vice chairwoman of a group of U.S. and Japanese lawmakers, said in a letter to Obama in late April, just before his meeting with Noda.

In 2011, Japan received eight shipments of Alaskan LNG, totaling 15.27 billion cu. feet.

Shipments went to utilities in Tokyo or the Kansai region.

"Alaskan LNG has many advantages for Japan, starting with cost. Not only is the gas cheap, but so is transportation. It only takes about a week for the tankers to arrive in Japan" says Kojiro Abe, trade representative for Alaska's Japan office. "America's political stability compared to some other LNG suppliers, and the safety of the sea lane from Alaska to Japan is a huge advantage as well."

Resources Energy Inc., a Japanese consortium, has already opened an office in Alaska. Members include Japan Petroleum Exploration Co., Idemitsu Kosan Co., Nippon Oil and Energy Corp., Mitsubishi Gas Chemical Co., and Nippon Telephone and Telegraph Corp.

The consortium hopes to have North Slope gas flowing to Japan as early as 2019 by building an LNG plant in the southern part of the state.

There are two major hurdles that must be overcome, however.

First is a pipeline. While it would be constructed beside a current oil pipeline and thus be logistically easier than plowing through virgin territory, who would pay for the project is a matter of ongoing discussion among Japanese, U.S. and international firms interested in the project, as well as the U.S. government.

The second issue is legal and political. A section in the 1976 Alaska Natural Gas Transportation Act says that if North Slope gas exports to countries other than Canada and Mexico exceed 1 million cu. feet a day, the U.S. president must ensure such exports will neither diminish the total quantity or quality, nor increase the total price of energy stores available to the U.S.

But Japanese and American firms are increasingly confident the U.S. government will allow greater exports.

In addition to Alaska, Japan hopes to buy up to 30 million metric tons per year of LNG from terminals in Louisiana, Texas, and Maryland. Last summer, Osaka Gas Co. and Chubu Electric Power Co. announced they'd signed contracts with a Texas firm to liquefy 4.4 million tons annually of LNG that will start arriving in Japan from 2017, assuming the final approvals are granted by mid-2013, as expected.

U.S. law also says private companies seeking to export LNG to a country without a free-trade agreement with the U.S., that includes a specific clause about exporting natural gas, must get approval from the U.S. Department of Energy for each shipment.

For a U.S. ally like Japan, approval is almost automatic.

But the DOE can deny permission if it determines such exports violate the "public interest." U.S. congressional opponents of LNG exports have used this stipulation to argue that sending large quantities of LNG outside the country will drive up prices domestically.

In addition, Alaskan environmentalists argue that a new natural gas pipeline will damage its environment.

Last month, however, a DOE-sponsored report concluded that exporting LNG could be good for the U.S. economy, even if gas prices go up.

"Benefits that come from export expansion more than outweigh the losses from reduced capital and wage income to U.S. consumers, and hence LNG exports have net economic benefits in spite of higher domestic natural gas prices," the report said.

Japan's quest for more U.S. LNG also has the support of influential Washington insiders.

In an August report, the Center for Strategic and International Studies recommended the U.S. begin to export LNG from the Lower 48 states by 2015.

"The U.S. should not resort to resource nationalism. As part of the security relationship, the U.S. and Japan should be natural resource allies as well as military allies. This area of cooperation remains insufficiently developed," the CSIS report said.

Back to nukes?

January 3, 2013

A cautious return to nuclear power

Though public is wary, new LDP-led government backs resumption of reactors, plant construction

http://www.japantimes.co.jp/text/nn20130103f2.html

By MIYA TANAKA
Kyodo

Japan appears to be heading toward a gradual revival of nuclear power generation under a new government supportive of retaining it, but the outlook for the industry in 2013 is unclear, with antinuclear sentiment still lingering among the public amid the disaster at the Fukushima No. 1 atomic plant.

The new government led by the Liberal Democratic Party has already signaled that it has no intention of following in the footsteps of the Democratic Party of Japan government, which was overthrown after the

Dec. 16 election, when it comes to energy policy. The DPJ government aimed at phasing out nuclear power by the 2030s.

"We need to reconsider the previous government's policy of seeking zero operations of nuclear plants," Economy, Trade and Industry Minister Toshimitsu Motegi told a press conference shortly after assuming the ministerial post.

He also said that completely giving up Japan's spent-fuel recycling policy, which would lose its role if nuclear power generation ends, is "currently not an option," and that the government backs the resumption of reactors as long as they are deemed safe by the Nuclear Regulation Authority, the new atomic watchdog.

The remarks are likely to encourage utilities, which have been desperate to restart idled reactors to boost their business. The minister's words also leave open the possibility of allowing utilities to install new reactors that have been planned but are not yet under construction.

But the nuclear industry is not necessarily optimistic about its prospects due to the huge impact the Fukushima crisis has had on the public.

"The LDP won (the Dec. 16 general election), so will nuclear power be pursued? I don't think things are as simple as that," Takuya Hattori, president of the Japan Atomic Industrial Forum, told reporters, adding that the industry would lose more public trust if it returns to business as usual.

"The point is whether the nuclear industry can show how deeply it regrets the Fukushima accident and how far it will change itself," said Hattori, a former executive vice president of Tokyo Electric Power Co.

2012 was tumultuous for Japan's nuclear plant operators. From May, the country experienced a period without nuclear power for the first time in decades, as reactors that had been operating before the nuclear crisis started went offline for mandatory routine maintenance and were unable to be restarted without first undergoing "stress tests."

Two reactors in western Japan were reactivated in July after clearing provisional safety standards created by the government amid massive antinuclear rallies, which drew some 200,000 people near the prime minister's office in Tokyo at one point, according to the organizers.

In addition to such a harsh climate of public opinion about atomic power, utilities may also face more headwinds now that the NRA is gearing up to assess the safety of reactors in the quake-prone country.

Recently, the NRA has suggested it will be tough with utilities, warning that geological faults under two plants are likely to be active, assessments that will significantly affect the prospects for restarting the two plants' reactors.

Motegi said the government will "respect" the safety assessments made by the independent NRA and added that reactors will not be allowed to restart unless they clear the new safety standards, which the NRA plans to craft by July to prevent a recurrence of the Fukushima crisis.

Tadahiro Katsuta, an associate professor at Meiji University who is a member of a panel tasked by the NRA with devising the standards, said that "high bars" are expected to be set for utilities.

But he also said he feels the plant operators are determined to meet the requirements at any cost and that there is no guarantee that the NRA can maintain its current tough stance against the companies.

"You don't know in what form pressure could be (exerted) on the NRA commissioners. Public opinion (skeptical about nuclear power) could also be a factor that is affecting them now, so if people start to become mum on the issue, the NRA's stance could change," Katsuta said.

Some political experts said the new government is expected to carefully consider how to handle the nuclear issue, especially before the House of Councilors election, expected in July, because explicitly taking a pronuclear stance could trigger a public backlash.

"The LDP's landslide victory in the Lower House election may have made some ruling party lawmakers think there is less risk of pushing for the resumption of reactors. But they could still take a cautious approach until they win the Upper House election, opting to do what they really want to after that," said Koichi Nakano, a political science professor at Sophia University.

Japan and the price of uranium

January 5, 2013

Uranium rebound seen as Japan considers reactor restarts

http://www.japantimes.co.jp/text/nb20130105n2.html

By BEN SHARPLES
Bloomberg

MELBOURNE — Uranium is poised to rebound from a second annual decline as Japan considers restarting its atomic plants almost two years after the start of the Fukushima disaster and China pushes ahead with the world's biggest nuclear building program.

The price of the fuel for immediate delivery may average $55 a pound (0.45 kg) in 2013, according to the median of five analyst estimates in a Bloomberg News survey conducted last month. The nuclear fuel slipped 14 percent to an average of $48.72 in 2012 and traded at a three-year low of $40.65 in November, data compiled by Bloomberg show. It was $43 a pound on Jan. 3.

A revival in demand from Japan is raising the prospect that supplies of the radioactive metal will shrink at the same time as **China continues with a project to increase its nuclear power capacity at least fivefold by 2020.** That's a boost for uranium producers such as Perth, Australia-based Paladin Energy Ltd. It's also a blow to exporters of liquefied natural gas, including Qatar and Australia, which have helped fill Japan's power shortage since the earthquake and tsunami that triggered the three meltdowns at the Fukushima No. 1 plant in March 2011.

"The biggest pressure on price at the moment is not necessarily the downgrade to demand since Fukushima, it's this massive inventory overhang," said Joel Crane, vice president of research at Morgan Stanley in Melbourne. "Should the Japanese government give the green light to restarts, that overhang is instantly gone and that will be very positive for prices."

The uranium forecasts for 2013 ranged from $45 to $62.60 a ton [shouldn't it be per pound?] in the Bloomberg survey conducted from Dec. 10 to 19. That compares with a three-year high of $73 in February 2011, according to data from Roswell, Georgia-based Ux Consulting, which advises the nuclear industry.

The price plunged as low as $49.75 a ton in March 2011 after the offshore 9.0-magnitude earthquake rocked Japan. The subsequent tsunami damaged reactors at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear plant, releasing

radiation and causing the evacuation of 160,000 people. After the disaster started, the nation's 50 workable commercial reactors all started to go offline for routine and more rigorous safety checks, and

countries from China to France re-evaluated their nuclear policies. Germany meanwhile said it would close all of its facilities.

Japan's 10 regional utilities generated or purchased 2.4 percent of their electricity from nuclear plants in November, down from 27 percent in February 2011. The nation's installed nuclear capacity is 46,148 megawatts at its 50 operable plants. Fossil-fuel plants accounted for 73 percent, up from 50 percent.

Speculation that uranium demand will rebound has grown since Dec. 16, when the Liberal Democratic Party won the general election by a landslide. The previous administration, led by the Democratic Party of Japan, which ordered the shutdowns, planned to phase out nuclear power by the end of the 2030s. The LDP was ousted in 2009, two years before Fukushima, after ruling for all but 10 months since 1955 and driving the national development of atomic energy.

The new government plans to establish a variety of sources for electricity generation within 10 years and will review the plan to exit nuclear power, trade minister Toshimitsu Motegi said Dec. 28.

"We can't say for sure that Japan will be free of nuclear power by the 2030s," Motegi said at a news conference in Tokyo. "We will make our decisions based on technological findings and not with prejudgment."

The government and the utilities face heavy public opposition to nuclear power amid concern that some plants are at risk of earthquake damage. All but two of the nation's operable 50 reactors remain idled since Kansai Electric Power Co. resumed two units at its Oi plant in Fukui Prefecture in July.

The restart of the reactors is going to be "fairly slow" and is unlikely to be completed this year, capping uranium price gains, according to Thomas Neff, a physicist and uranium-industry analyst at Massachusetts Institute of Technology in Cambridge, Massachusetts.

"It's probably 2015 before you are going to get any strong demand signals sent to the market," Neff said Dec. 28. "There's no particularly good reason to think that it's going to go up in the next year."

Japan Atomic Power Co.'s Tsuruga plant in Fukui and Tohoku Electric Power Co.'s Higashidori plant in Aomori Prefecture may be sitting on active geological faults, teams of scientists working for the Nuclear Regulation Authority said last month. Kepco is conducting additional checks after a team from the new nuclear regulator delayed a decision on whether a fault under its Oi plant is active. Utilities aren't allowed to construct reactor buildings and other important facilities above an active quake fault.

Tens of thousands of nuclear power opponents held weekly protests outside previous Prime Minister Yoshihiko Noda's official residence last year. A government-backed public forum found in August that 47 percent of participants favored cutting nuclear power to zero, while newspaper polls in the last 18 months showed support for ending atomic power in Japan.

But the new prime minister, Shinzo Abe, said Dec. 26 that the government will await new safety standards before deciding whether to restart the idled reactors. The NRA has said it will announce the rules in July, and Abe hinted some of the reactors may be restarted in the next three years if they meet the tougher safety standards.

"The uncertainty around Japan is holding prices back," Jonathan Hinze, a senior vice president at Ux Consulting, said in an emailed response to questions last month. "The number one thing to help the price recover even more is additional Japanese reactor restarts."

Stockmarket investors have been betting that the resumptions will occur and boost uranium demand just as China pushes on with plans to build at least 26 new reactors. At the same time, analysts are predicting a drop in the price of LNG as Japan's utilities seek to reduce their eletricity-generation costs by switching back to nuclear.

Paladin, which operates two uranium mines in Africa and has exploration assets in Australia, rose 22 percent in Sydney in the two days through Dec. 18. Energy Resources of Australia Ltd., whose Ranger mine in the Northern Territory produces about 10 percent of the world's mined uranium, advanced 13 percent over the same period. Australia has the world's largest known deposits of the fuel, according to the World Nuclear Association.

"The uranium price and Paladin would benefit from a restart of Japanese reactors," UBS AG analysts, including Glynn Lawcock in Sydney, said in a Dec. 17 report as the bank upgraded its rating on the stock to "buy" from "neutral." "The latest change in government puts the restart one step closer, in our opinion, albeit timing remains unclear."

Kansai Electric's shares rose 18 percent in Tokyo, the most since at least 1974, the day after the LDP returned to power. The company plans to restart reactors 3 and 4 at its Takahama nuclear plant after July, it said in a Nov. 26 statement. Tepco, which surged 33 percent on Dec. 17, aims to restart all seven reactors at its Kashiwazaki Kariwa plant between this April and September 2015, according to a business plan announced in May.

China has 14 reactors operating and the new ones planned, accounting for more than 40 percent of the plants being built globally, may increase the nation's capacity to 60 gigawatts by 2020, according to the World Nuclear Association.

Not a surprise

January 8, 2012

_No5 / News in Brief

More Than 50% Of Local Leaders Back Japan Nuclear Restarts

http://www.nucnet.org/all-the-news/2013/01/08/more-than-50-of-local-leaders-back-japan-nuclear-restarts

Policies & Politics
8 Jan (NucNet): More than half of the communities in Japan that host nuclear power plants are in support of reactors being restarted as long as their safety is assured by the government, a newspaper survey says.

The 'Yomiuri Shimbun' survey, published yesterday, shows that 54 percent of the 135 communities hosting nuclear plants would approve of restarts. The newspaper said 28 percent of the respondents did not express a position, while only 18 percent said they would not support the restart of nuclear units.

When asked to choose conditions for restarting nuclear reactors – a question for which multiple responses were allowed – 50 of the 66 mayors interviewed said central government should make a final decision, while 42 said the consent of local governments was called for. Thirty-seven said a consensus among local residents was necessary.

The newspaper said the percentage favour of reactor restarts suggests that the prolonged suspension of nuclear reactors has "seriously affected local economies" because nuclear power generation is a key local industry for many of the municipalities.

The survey was carried out in December 2012 among the mayors of 135 cities, towns and villages within a 30-kilometre radius of a nuclear plant, designated as priority areas for implementing measures to respond to a nuclear disaster.

The 'Yomiuri Shimbun' said Japan's Nuclear Regulatory Authority (NRA) expanded the radius for priority areas – in which residents would be told to stay indoors or be evacuated outside the area to avoid health hazards in the event of a nuclear accident – from eight to 10 kilometres to 30 kilometres when it issued new disaster management guidelines in October 2012.

The expanded zones cover 135 municipalities in 21 prefectures, up from 45 municipalities in 15 prefectures under the previous guidelines.

The newspaper quoted one mayor as saying the operation of nuclear reactors should be resumed because it would help “rejuvenate industry”.

All but two of the country’s nuclear 50 commercial nuclear reactors remain offline after the March 2011 Fukushima-Daiichi accident. All restarts must first be approved by the recently formed NRA.

Japan’s new Liberal Democratic Party (LDP) prime minister Shinzo Abe said for the first time last week that his government will endorse the construction of new nuclear power plants.

Mr Abe said the Japanese people are worried about having sufficient electricity in the immediate future. He said parties that called for a shift away from nuclear energy were therefore “not trusted” in the recent election

An emerging nuclear order

January 12, 2013

World's second nuclear age

http://www.japantimes.co.jp/text/eo20130112a1.html

By PAUL BRACKEN

NEW HAVEN, Connecticut — North Korea's launch of a long-range missile in December was followed by a flurry of global condemnation that was almost comical in its predictability and impotence. The launch underscored a larger reality that can no longer be ignored: The world has entered a second nuclear age. The atomic bomb has returned for a second act, a post-Cold War encore. This larger pattern needs to be understood if it is to be managed.

The contours of the second nuclear age are still taking shape. But the next few years will be especially perilous, because newness itself creates dangers as rules and red lines are redefined. This took at least 10 years in the first nuclear age, and this time may be no different.

In the Middle East, South Asia and East Asia, old rivalries now unfold in a nuclear context. This has already changed military postures across the Middle East. Part of the Israeli nuclear arsenal is being shifted to sea, with atomic warheads on diesel submarines, to prevent their being targeted in a surprise attack. Israel also is launching a new generation of satellites to provide early warning of other countries' preparations for missile strikes. If Iran's mobile missiles disperse, Israel wants to know about it immediately.

Thus, the old problem of Arab-Israeli peace is now seen in the new context of an Iranian nuclear threat. The two problems are linked. How would Israel respond to rocket attacks from Gaza, Lebanon or Egypt if

it simultaneously faced the threat of nuclear attack by Iran? What would the United States and Israel do if Iran carried its threat to the point of evacuating its cities, or placing missiles in its own cities to ensure that any attack on them would cause massive collateral damage?

Pakistan has doubled the size of its nuclear arsenal in the last five years. Its armed forces are set to field new tactical nuclear weapons — short-range battlefield weapons. India has deployed a nuclear triad — bombers, missiles and submarines — and in 2012 tested an intercontinental ballistic missile, giving it the ability to hit Beijing and Shanghai. India almost certainly has a multiple warhead in development, and has also launched satellites to aid its targeting of Pakistan's forces.

In East Asia, North Korea has gone nuclear and is set to add a whole new class of uranium bombs to its arsenal. It has rehearsed quick missile salvos, showing that it could launch attacks on South Korea and Japan before any counter-strike could be landed.

China, too, is shifting its nuclear forces to mobile missiles and submarines. These weapons can be put on alert in a way that would be highly visible to U.S. satellites and the global media. Thus, the Chinese can easily "nuclearize" a crisis with the U.S. or anyone else. They do not have to detonate a nuclear weapon, but only alert adversaries to the dramatic increase in the political stakes and dangers of a showdown.

Russia, not wanting to be left out of the act, has recently staged the largest nuclear exercises in decades to remind everyone that it remains a serious nuclear player, too.

These individual developments are troubling. But they cannot be understood in isolation from the larger multipolar system of major powers that is forming. To a great extent, this is a nuclear multipolar system: **Possessing nuclear weapons contributes to a country's global status as a major power.**

To see this, consider the following question: When was the last time that the U.S. or anyone else seriously proposed that India sign the Nuclear Non-Proliferation Treaty (NPT) — that is, that India give up the Bomb. Given America's economic problems and looming defense cuts, as well as growing Chinese power, there is no longer even a remote possibility that this demand will be made.

India has become an accepted, legitimate member of the nuclear club, the **fiction of the NPT** notwithstanding. It is even less likely that China or Russia would disarm for the sake of a nuclear-free world.

But the most urgent problem stems from the breakdown of major countries' one-time nuclear monopoly and the empowerment of smaller countries like North Korea, Pakistan, Israel and, quite possibly, Iran. A new set of rules for diplomacy, military strategy and arms control is needed to stabilize this emerging nuclear order. Pretending that it does not exist is not a strategy.

Paul Bracken, a professor of management and political science at Yale University, is the author of "The Second Nuclear Age."

TEPCO's bidding plan

January 14, 2013

Tepco's power bidding plan raises warming concerns

http://www.japantimes.co.jp/text/nn20130114a3.html

Kyodo

Tokyo Electric Power Co. plans to start a bidding process next month to secure long-term electricity supplies from thermal power sources.

The plan is generating concern in some quarters about the effect on greenhouse gas emissions because the system implies the sole use of coal — a major source of the carbon dioxide emissions thought to be driving global warming.
Some experts also question Tepco's presumed need to increase power generation beyond fiscal 2019. This is because the population of its service area is expected to shrink.

Since thermal power plants emit large volumes of carbon dioxide over the course of several decades, building new ones could waste much of the public's efforts to save power since the March 2011 core meltdowns crippled Tepco's Fukushima No. 1 power plant.

Consumers may also have to shoulder the cost of building the costly facilities.

Tepco, the nation's largest utility, was effectively placed under state control in July to prevent its demise from the nuclear crisis. Its new business plan calls for securing an additional 2.6 million kw of electricity supply from fiscal 2019 to 2021.
Financially crippled by the Fukushima disaster, Tepco plans to bid for extra power from suppliers building new generation facilities, instead of building new plants of its own.

The bidding process is expected to start in February and the suppliers are expected to be selected by this summer.
One of the issues drawing attention is the conditions for the bidding, which limit the per kilowatt power generation costs to just ¥9.53. This low threshold effectively limits all fuel choices to coal.

While relatively cost efficient, coal is known as a major carbon dioxide generator. According to the Environment Ministry, the most advanced coal-fired plant discharges more than twice as much carbon dioxide as a gas-powered plant when generating just 1 kwh.

Tepco says it is planning to curb emissions by purchasing carbon credits from other entities to offset the expected rise in discharges. But it will have a lot more to offset if coal is picked in place of cleaner-burning natural gas, for instance.

The utility has formulated a short-term plan to boost power supplies to offset shortages caused by closing all its nuclear plants in light of the Fukushima disaster following the Great East Japan Earthquake almost two years ago.
A government source, however, questioned the need for the long-term plan.

"**This coal-fired thermal power project has nothing to do with electricity demand for the immediate period and toward the future, and there should be no need to boost supplies by 2.6 million kilowatts,"** the official said.
Tepco is assuming a sharp rebound in power sales, which slumped in the aftermath of the 2011 disasters. It even thinks demand will bounce back to prequake levels in 2020.

Since the disasters, however, businesses and households have been reducing power use amid repeated blackout threats from the government and the utility. In the meantime, electricity generated by renewable sources, such as solar and wind power, have been growing thanks to a system that obliges utilities to buy that energy at fixed prices.
It is also projected that the population of the Kanto region, which includes Tokyo and adjacent prefectures — Tepco's core service area — will peak around 2015.

Tepco says that its demand forecast is based on the government's projections for gross domestic product and that it also took the public's power-conservation efforts into account.

"Perhaps they overestimated their projection because Tepco will collapse unless they devise a plan to boost sales by assuming growth in demand," the government source surmised. "At the end of the day, consumers will end up paying for the cost of unnecessary capital investments."

If Tepco's plan is adopted as is, it will have a serious impact on the greenhouse gas balance.

According to an Environment Ministry estimate, even factoring in what Tepco is trying to cover with its emissions quota, there will be a net increase of around 9 million tons of carbon dioxide per year.

This is far greater than the roughly 5.4 million tons of carbon dioxide emissions estimated to have been trimmed in fiscal 2011 via power-saving or other efforts that reduced household power demand.

The government has set a long-term goal of reducing greenhouse gas emissions substantially by 2050. A power-plant normally has a life of around 30 years. If one is built under Tepco's long-term plan, it will be running at least until around 2050 and serve as an impediment to achieving the government's goal.

It could also invite criticism from other countries where people are engaged in discussions on promoting measures to reduce the impact of global warming under the framework of the international convention on climate change.

Some countries have voiced opinions that industrial economies like Japan have not come up with convincing goals for emission cuts despite being the creator of the Kyoto Protocol.

Japan has also lost credibility among developing economies after indicating that it will refuse to honor emission requirements under the Kyoto Protocol after this year.

With Tokyo even considering lowering the medium-term goal of cutting 25 percent of emissions by 2020, if Japan is planning to increase coal-fired power generation, it may draw even stronger criticism.

"If we don't change infrastructure for energies now, we will see a large volume of emissions continue toward the future, and decisions in the next few years will be crucial," said Kimiko Hirata, of Kiko Network, an environmental conservation group. "If we allow coal-fired thermal power generation, we will be considerably narrowing the path for curbing emissions toward the future."

Readers offer some advice to Abe

Advising Abe on the wisdom of a nuclear restart

Readers offer some advice to the new prime minister on the contentious issue of nuclear power in post-3/11 Japan.

Gambling with future generations

Dear Prime Minister Shinzo Abe,

Although I have taught classes related to Japan at the university level for years, I am embarrassed to admit that I was unable to answer a recent question posed by one of my students. Given your well-known interest in traditional Japanese cultural values, not to mention your ability to influence the future direction of this country, I write hoping you might be able to assist me.

By way of background, my classes on Japanese culture always emphasize the role that *senzo sūhai* (ancestor veneration) plays in Japanese society. I find this topic of great interest to Western students, perhaps because their knowledge of their own ancestors is typically limited to two or three generations of their family.

It was in this context that a student recently asked me: "Why do the Japanese seem so indifferent to the fate of those who come after them, i.e., their descendants, when, on the other hand, they show such gratitude to those who came before them?

Needless to say, I was surprised by this question and responded, "What makes you think the Japanese aren't interested in the welfare of their descendants?"

"Well," the student continued, "if the Japanese were so interested in their welfare, why would they allow their government to endanger their descendants for 100,000-plus years by bequeathing them thousands of tons of highly radioactive and toxic spent fuel?"

I responded, "The Monju fast-breeder nuclear plant in Fukui Prefecture is designed to dispose of radioactive waste."

"I know, but I recently read a newspaper article that said this plant is still in testing mode after 30-plus years in the making. And didn't former National Policy Minister Seiji Maehara tell a Diet panel in November of last year: 'We have been aware of the two crucial problems. One is the fuel cycle: The fast-breeder (reactor) is not ready. The other is the back-end (waste disposal) issue. They have never been resolved.'

"Before leaving the U.S.," the student said, "I began to research this issue and discovered that the U.S., France and Germany have all abandoned plans to build fast-breeder reactors due to cost and safety concerns. What makes you believe Japan will succeed when all these other countries have failed? And anyway, **shouldn't these critical issues be solved before, not after more nuclear waste is created** by restarting now idle reactors, let alone constructing new ones?"

"You have a good point," I replied, "but even if a fast-breeder reactor ultimately proves unfeasible, the Japanese could still bury the spent fuel in a safe, underground repository somewhere, couldn't they?"

"Perhaps, but the question is where such a repository would be located? The U.S. recently abandoned plans to store such waste at Yucca Mountain in Nevada because they discovered the area was subject to earthquakes, not to mention the danger of water infiltration that could lead to radiological contamination of the ground water.

"Doesn't Buddhism, an important religion in Japan, teach that everything in the universe is in a state of flux? Given this, why should any of us think there is a location somewhere that can be guaranteed safe for the next 10, 50 let alone 100,000-plus years?"

"Well . . ." I started to reply but then I stopped. At that point, Prime Minister, I must honestly admit that I didn't know how to respond. And my consternation only increased when the student added: "In today's Japanese language class we learned the word *shison* to designate one's descendants. Why is it that only ancestors are venerated or respected in this country? Don't shison, representing the very future of the Japanese people, deserve to be respected as much as those who came before? If so, isn't shison sūhai, i.e., descendant veneration, just as important, if not more important, than ancestor veneration?"

Prime Minister, I recognize that, as a foreigner, my knowledge of Japanese culture is still incomplete. Let me therefore ask how you would have responded to this student?

Additionally, given that no other country in the world knows how to safely store nuclear waste for thousands of years, will you nevertheless endanger countless generations of Japanese through continued reliance on nuclear power?

BRIAN A. VICTORIA
Kyoto

Don't pander to radiation phobia

Dear Prime Minister Shinzo Abe,

For the sake of Japan, and for the sake of the world, I implore you to consider the issue of nuclear power in the spirit of moderation and reason, and resist efforts by the antinuclear lobby and elements of the media to promote fear and panic.

The most false and distressing of the efforts is the attempt to conflate the peaceful use of nuclear power with the terrible atomic bombings of Hiroshima and Nagasaki at the end of World War II. The events are incomparable, as is clearly showed by the human cost. On the one hand, over 100,000 people were killed by the Hiroshima blast. On the other, nobody has been proven killed or injured by the Fukushima nuclear accident itself.

Yet an extraordinary example of this propaganda was published in The Japan Times' Hotline to Nagata-cho column on Oct. 9 ("Let Inoue's antinuclear Jizo, forged in Hiroshima, guide Japan's future" by Jason Bartashius). The article, incredibly, decried the reopening of schools within the former evacuation zone, protesting at the temerity of people wanting to return to their homes, reform their communities and start the rebuilding of their lives. The author, who didn't deign to offer anything as prosaic as radiation measurements, implied that the children going to the schools would suffer the same fate as the children of Hiroshima 68 years ago!

It is well-known that low dose radiation is of zero or negligible risk to humans, yet the unwarranted fear of radiation is destroying the future of Japan.

A clear example is the Nuclear Regulation Authority's decision to expand the evacuation zone around nuclear power plants to 30 km, massively compounding unnecessary fear and sending municipalities nationwide into a frenzy of useless planning. Was it not enough that 573 people died because of unnecessary and panicked evacuation after the Fukushima accident, including dozens of elderly patients simply abandoned in hospital, some to die a degrading death?

Not only that, but the NRA is now proposing to expand the definition of an active earthquake fault line to one that has moved within the last 400,000 years, thus putting into doubt the restarting of nuclear plants all over the country. Is it really possible that humans could be so foolish as to curtail a vital economic activity at a given site because of the hypothetical risk of an earthquake every 400,000 years?

The linking of the use of nuclear weapons with 2011's accident at Fukushima is specious. It is also unethical. Yet ironically, there is a useful lesson to be learned in this attempt at conflation by the antinuclear lobby. It reveals the real source of public antinuclear sentiment: an unconscious equivalence of nuclear power with the destructive terror of nuclear weapons.

Never mind that when considered rationally, nuclear power is the safest large-scale source of energy available to humanity. Never mind that nuclear energy is incomparably healthier than energy produced by fossil fuels, or that it is vastly cheaper and more reliable than renewable energy, or that it produces close to zero carbon dioxide emissions. Never mind those things, because at some deep level of the public's unconscious, nuclear power equals terrible danger.

Mr. Prime Minister, the government has the right and indeed the duty to make decisions based on science and reason, and not be swayed by the irrational. The fear of radiation is a phobia that defies reason, and rather than pander to this fear, Japan should recognize the advantages of nuclear power and continue its steady expansion.

The benefits are undeniable and the bulk of the criticism it attracts is simply ill-founded. To paraphrase the words of American liberals, reality has a nuclear power bias.

MICHAEL RADCLIFFE

Yokohama

Take medical advice into account

Going nuclear again?: Prime Minister Shinzo Abe (center) inspects Tokyo Electric Power Co.'s emergency operation center at the crippled Fukushima No. 1 nuclear power plant in Okuma, Fukushima Prefecture, on Dec. 29. His ruling Liberal Democratic Party has pledged to review the previous Democratic Party of Japan government's plans to phase out nuclear power. AP

Dear Prime Minister Shinzo Abe,

In addition to the fear of thyroid cancer, for years to come many Fukushima parents will be plagued with the worry that their children may develop bone tumors or leukemia from exposure to strontium-90 (Sr90). A beta-radiating isotope difficult to detect with gamma cameras or Geiger counters, Sr90 is another invisible enemy possibly present in the environment due to the nuclear crisis at the No. 1 plant.

Like calcium, ingested Sr90 accumulates in bones. Also, it accumulates in teeth from fetal growth to the age of five. Dr. Martin Walter, a Swiss physician and member of the International Physicians for the Prevention of Nuclear War (IPPNW), is planning to measure the Sr90 levels in Fukushima children's baby teeth.

Baby teeth collected this past year will be incinerated and dissolved in chemicals to ascertain how much Sr90 was in the environment before the nuclear disaster began. Teeth collected in the coming years will offer a means to judge how much Sr90 was emitted from the No. 1 plant when compared to the

measurements of teeth collected in 2012. Martin intends to collect the baby teeth of Fukushima children for the next five to 10 years.

Sr90 is not found naturally in the environment. Nuclear weapons and power plants are its only sources. Baby teeth studies in the United States ultimately helped lead to the banning of atmospheric testing of nuclear weapons.

From 1945 to 1963 the U.S. tested 206 nuclear weapons in the atmosphere. In 1959, the Baby Tooth Survey was launched by the Greater St. Louis Citizens' Committee for Nuclear Information and the dentistry schools at Washington University in St. Louis and St. Louis University, with Dr. Louise Reiss as director. Over the course of 12 years nearly 320,000 baby teeth were collected. According to The New York Times, "The study ultimately found that children born in St. Louis in 1963 had 50 times as much strontium-90 in their teeth as children born in 1950 — before most of the atomic tests."

The findings of Reiss' study came to the attention of President John F. Kennedy and were presented before a Senate committee in June 1963. Two months later, on Aug. 5, the U.S., Soviet Union and Britain signed the Partial Test Ban Treaty. Reiss had played a role in convincing world leaders to ban the testing of nuclear weapons in the atmosphere.

In recent decades similar tests have been conducted to determine how much Sr90 is being emitted into the atmosphere by nuclear power plants. Here in Japan, Yuko Nishiyama, a Fukushima mother and activist, is helping Walter collect the teeth. Nishiyama evacuated Fukushima city in March 2011. She first relocated temporarily in Tokyo and then chose to move to Kyoto with her daughter, where she started a support group for evacuees.

"I want people to know that this is something we'll have to worry about," Nishiyama has said.

Prime Minister, we implore your administration to take into serious consideration the concerns of the international medical community when deciding the country's future nuclear policy. Government officials must also bear in mind the anxieties of Fukushima parents when determining how they should be compensated and supported.

JASON BARTASHIUS and ANDREAS NIDECKER

Kyoto/Basel, Switzerland

Jason Bartashius is a lecturer and writer who lives in Kyoto. Professor Andreas Nidecker, M.D., is a radiologist and board member of the IPPNW. Send all your comments on this issue and Hotline to Nagata-cho submissions of 500-700 words to community@japantimes.co.jp .

Nukes good enough for Japan's neighbours

January 15, 2013

Meeting on nuclear power generation in SE Asia

http://www3.nhk.or.jp/daily/english/20130115_30.html

Japanese businesses showcased their nuclear power plants and newest safety features at an international conference on nuclear power generation systems in Southeast Asia.

About 300 government and corporate officials from around the world gathered in the Malaysian capital of Kuala Lumpur on Tuesday to discuss the advantages and challenges associated with nuclear power plants.

At the conference, officials from Malaysia and Indonesia reported that, despite strong anti-nuclear public sentiment after the Fukushima disaster, nuclear power remains a dominant option for rapidly growing economies with surging demand for energy.

In their corporate displays, Japan's **Hitachi and Mitsubishi Heavy Industries** introduced nuclear plants and related facilities.

Mitsubishi Heavy Industries official Satoru Ishimoto says his company offers plants with unparalleled safety that make the best of the lessons Japan learned from the nuclear accident.

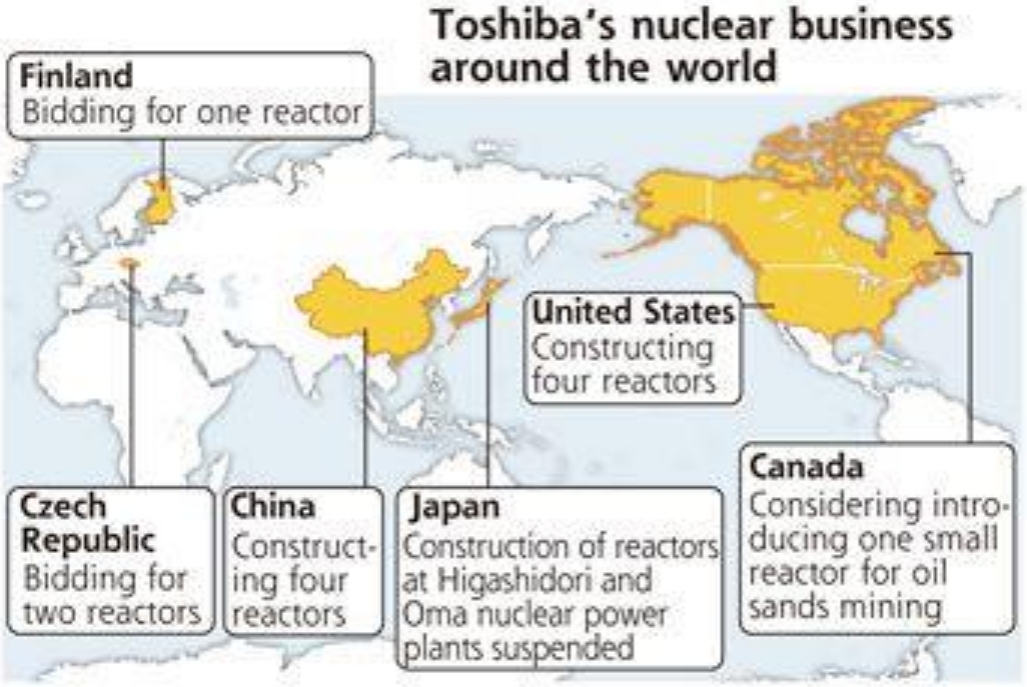
Japanese manufacturers are in fierce competition with foreign rivals for contracts to build power plants in Southeast Asian countries.

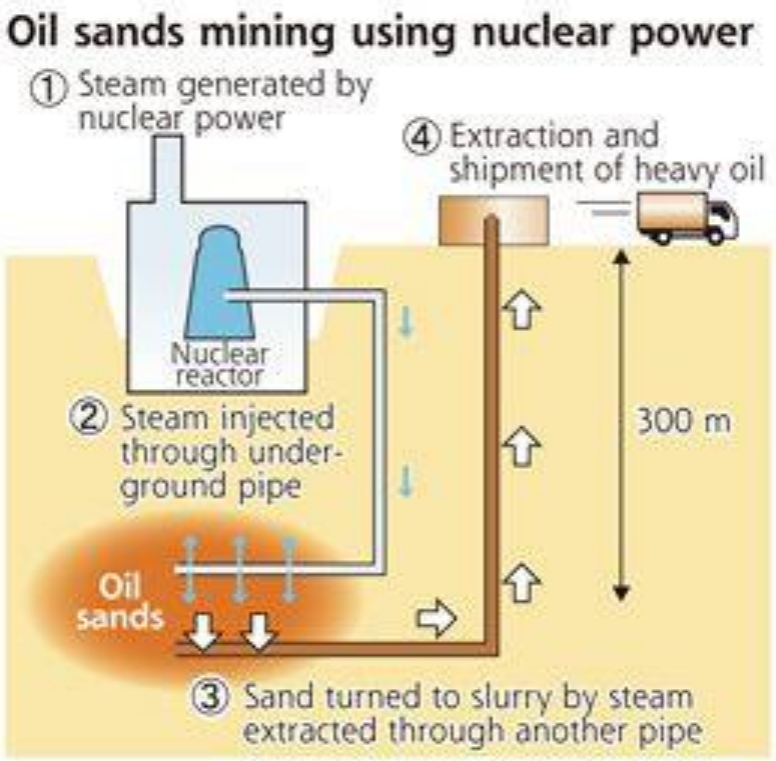
Thank you Toshiba?

January 16, 2013
Toshiba developing small N-reactor / Reactor to be used to mine oil sands in Canada; initial operation by 2020 eyed

http://www.yomiuri.co.jp/dy/business/T130115004424.htm

The Yomiuri Shimbun





Toshiba Corp. has been developing a small nuclear reactor for mining oil sands at the request of a firm engaged in such mining projects in Alberta Province, Canada, and aims to begin operating the reactor by 2020, it has been learned.

As the situation regarding the construction of new nuclear power plants and reactors in Japan remains unclear, Toshiba's move will likely attract attention as an effort toward utilizing the nation's nuclear technology in fields other than power generation.

Oil sands are sandstone deposits which contain a viscous form of petroleum, and can be used as petroleum-based fuel. Compared with oil fields, it has so far been difficult to develop oil sands. However, technological advances have led to the promotion of oil sands development in Venezuela and Canada. Canada is said to have about 100 oil sands deposits totaling about 170 billion barrels--the equivalent of about 100 years' worth of petroleum consumption in Japan.

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Generating steam

The output of Toshiba's new small reactor will be 10,000 kilowatts to 50,000 kilowatts, about 1 percent-5 percent that of a regular nuclear reactor, according to the sources.

Steam generated in the reactor will be sent to strata located at a depth of about 300 meters, where oil sands are found, to turn the sand into slurry. The slurry will then be extracted from the strata using a separate pipe.

To ensure the reactor's safety, Toshiba reportedly plans to construct a nuclear reactor building underground, while the building itself will be equipped with an earthquake-absorbing structure.

The firm has completed a basic design for the reactor and has already started approval procedures for construction in the United States. After getting the official go-ahead from the U.S. government, Toshiba will then undergo safety checks in Canada.

Currently, oil sands are mined using boiler-generated steam. However, as this method requires natural gas to fuel the boilers, it is necessary to transport the gas as needed. Also, carbon dioxide emissions from burning natural gas is seen to be a problem.

By contrast, the planned small reactor would not require refueling for up to 30 years after construction or release any carbon dioxide. Furthermore, nuclear reactors would also be cheaper should the general price of natural gas increase.

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Other purposes

Toshiba also plans to use the small reactor for purposes other than oil sands mining, the sources said.

For example, the firm is considering using it at desalination plants, which convert seawater into freshwater, or as a power source for electrolysis equipment to produce hydrogen for fuel battery-powered vehicles.

Usually, constructing a small reactor costs between 50 billion yen and 100 billion yen, less than 20 percent the cost of building a regular reactor. This would make the new reactor easier to introduce in frontier areas. Therefore, Toshiba has been working in Alaska and municipalities in northern Canada to introduce its small reactor as a small-scale power station.

To gain the understanding of local residents, Toshiba will disclose information about its small reactor to locals and carefully explain its safety to them.

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Influencing Toshiba's growth

Sales for Toshiba's nuclear business stands at about 600 billion yen, 10 percent of the firm's overall sales. As the firm considers its nuclear business as a core part of its future growth, Toshiba plans to increase sales to 1 trillion yen by fiscal 2017.

Currently, Toshiba is constructing eight regular reactors in the United States and China, and is expected to receive orders in the Czech Republic and Finland. The firm aims to receive orders for 39 reactors by March 2018.

While Toshiba has received orders for reactors at Oma and Higashidori nuclear power plants, both in Aomori Prefecture, construction has been suspended since the Great East Japan Earthquake in March

2011. While Prime Minister Shinzo Abe has expressed his support for building new reactors, there is still no prospect for resuming construction of these reactors.

Meanwhile, international competition for reactor orders has been intensifying as Chinese and South Korean firms increase their presence in the market. Under these circumstances, Toshiba also hopes to develop new markets by diversifying uses for nuclear reactors and enhancing its competitiveness in the industry.

Gov't won't drop reprocessing

January 18, 2013
Industry minister to continue nuclear fuel cycle policy

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201301180037

THE ASAHI SHIMBUN

The government will continue pursuing its nuclear fuel cycle policy, an expensive and problem-plagued recycling project whose future was in doubt under the previous administration.

"The significance (of the policy) will not change. We will continue it as a national policy," industry minister Toshimitsu Motegi told Shingo Mimura, the governor of Aomori Prefecture, on Jan. 17.

Under the program, spent nuclear fuel is reprocessed for reuse in nuclear reactors.

In Aomori Prefecture, a nuclear fuel reprocessing plant is under construction in Rokkasho and an intermediate storage facility is being built in Mutsu. Operations have yet to get under way in the reprocessing facility because of a series of mishaps.

"I think construction will steadily progress toward completion," Motegi said.

Before being dumped from power in December, the Democratic Party of Japan adopted a policy to phase out nuclear power by the end of the 2030s. That pledge raised questions about the future of the nuclear cycle policy and if Aomori Prefecture would be stuck with high-level radioactive waste from the reprocessing procedures.

"We will strictly keep the promise (not to make Aomori Prefecture a final disposal site)," Motegi told Mimura.

Abe should at least listen to public opinion with regards to nukes

January 24, 2013

Stay on the nonnuclear path

http://www.japantimes.co.jp/opinion/2013/01/24/editorials/stay-on-the-nonnuclear-path/#.UQFjyPL1tEs

Members of the Abe Cabinet have repeatedly hinted that the government will change the policy on energy and electric power set by the Democratic Party of Japan government. Trade and industry minister Mr. Toshimitsu Motegi said the government will review the DPJ government policy of ending in the 2030s the nation's reliance on nuclear power generation when the Abe administration writes a new, long-term basic policy on energy.

The DPJ adopted the zero nuclear power policy after hearings and deliberative polls were held nationwide. During the campaign for the Dec. 16 Lower House election, the Liberal Democratic Party said only that it would make a decision on whether to restart nuclear reactors within three years. At the very least, therefore, the Abe government should listen to public opinion on nuclear power generation if it tries to change the current policy.

If Japan increases the weight of renewable energy sources in an attempt to reduce or end its reliance on nuclear power, electricity rates may rise, causing difficulty for consumers and enterprises. But if one considers the huge costs incurred by the 3/11 accident at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant, which forced hundreds of thousands of people to evacuate — including some 160,000 people who still can't return to their homes — and the fact that decontamination of vast areas of land is proceeding far slower than hoped, it doesn't make any sense to continue nuclear power generation in this quake-prone country.

In addition, if nuclear power plants resume operation, storage facilities for spent nuclear fuel will soon be full, and there is no technology that can guarantee the long-term safe storage of highly radioactive nuclear

waste. Deep underground disposal of such waste poses serious environmental and ethical problems for future generations. Nobody can know the durability — in 100, 1,000 or 10,000 years — of the materials used to encase high-level radioactive waste stored in geological layers.

It is unrealistic to go back to the situation that prevailed before the Fukushima disaster. Given the prevalence of earthquakes, the government should end its traditional policy of establishing large-scale power plants, nuclear or nonnuclear, in depopulated areas, and instead promote a policy of establishing many small-scale power plants utilizing green energy sources across the nation in combination with smart grids, so that electricity will be transmitted in a stable and efficient manner.

The government also should reform the electricity market by removing the electricity distribution function from the hands of major power companies. That would make it easier for new power generating entities to enter the market and thus increase competition.

As a short-term policy, the government and power companies should increase use of liquefied natural gas at thermal power stations since LNG produces less greenhouse gas than other fossil fuels. But power companies must strive to decrease import prices by engaging in tough negotiations with LNG suppliers and buying from a broader range of suppliers.

Decommissioning too much for TEPCO. Gov't springs in

January 25, 2013

Abe vows gov't to take lead in scrapping Fukushima reactors

http://mainichi.jp/english/english/newsselect/news/20130125p2g00m0dm024000c.html

TOKYO (Kyodo) -- Prime Minister Shinzo Abe vowed Thursday that his government will take the lead in efforts to scrap the crippled reactors at Tokyo Electric Power Co.'s Fukushima Daiichi nuclear power plant.

"The state will be at the forefront" of such efforts, Abe said in an interview with Kyodo News at his office, adding that it is "impossible" for the plant operator to work alone toward decommissioning the plant's reactors.

The premier underscored the crucial need for scrapping the reactors "without further delay" to advance efforts in rebuilding Fukushima Prefecture, which hosts the crippled plant.

The Fukushima nuclear disaster following a massive earthquake and tsunami in March 2011 resulted in core meltdowns of three reactors. The government and TEPCO expect decommissioning work to take up to about 40 years.

[.....]

Have the Japanese change their minds on nukes?

February 4, 2013

56% back review of zero-nuke policy, 47% favor TPP: Mainichi poll

http://mainichi.jp/english/english/newsselect/news/20130204p2a00m0na016000c.html

For Prime Minister Shinzo Abe, whose Cabinet now enjoys an approval rating of over 60 percent, his energy policy including nuclear power, and Japan's possible participation in negotiations over the Trans-Pacific Partnership (TPP) free trade pact, are among vital issues that could make or break his administration.

In a nationwide Mainichi Shimbun survey taken on Feb. 2 and 3, 56 percent of respondents expressed their support for Abe's plans to review a policy promulgated by the previous Democratic Party of Japan (DPJ) government to end nuclear power generation within the 2030s. Thirty-seven percent were against a review of the policy.

Abe declared during a plenary session of the House of Representatives on Jan. 30 that his government will review the zero-nuclear policy from a clean slate. The latest poll found that 73 percent of supporters of the ruling Liberal Democratic Party (LDP), of which Abe is president, were in favor of the proposed review, as were 56 percent of supporters of its coalition ally, New Komeito. Overall, 67 percent of Abe Cabinet supporters back the review.
[....]

Call for liberalisation of power sector

February 10, 2013

METI panel wants utilities monopolies to end by 2020

Biggest postwar shakeup would let homes shop for cheapest supplier
Kyodo

http://www.japantimes.co.jp/news/2013/02/10/national/meti-panel-wants-utilities-monopolies-to-end-by-2020/#.URdzv_L1tEs

An industry ministry panel will propose a set of power industry reforms to the government that would enable households to select electricity suppliers from 2016 and force utilities to separate their energy generation and transmission businesses between 2018 and 2020.

The measures, which would represent the most significant postwar changes to the electricity industry, are intended to create a more competitive market by allowing new entrants to participate, ending the 10 utilities' regional monopolies, which the March 2011 natural and nuclear catastrophes proved were vulnerable.

Based on the proposals by the panel of experts Friday, the Ministry of Economy, Trade and Industry plans to submit a bill to revise the electricity business law during the ongoing Diet session.

As a result of the so-called unbundling of the industry, competition would be promoted in the power generation and retail sectors while the transmission and distribution networks, which have been under the strict control of the regional utilities, will become more accessible so various players can enter the market.

But uncertainties remain about whether the reforms will proceed as envisioned, given the reluctance voiced by the major utilities to divide their energy generation and transmission operations by splitting up subsidiaries.

According to a report agreed on by the panel, the reform process would commence with the creation around 2015 of an independent entity that would be placed in charge of coordinating power supply and demand nationwide. In the next stage, new entrants would be allowed into the household electricity retail market roughly in 2016, making it possible for consumers to start shopping for the cheapest power suppliers.

The need for a greater choice of power suppliers was recognized following complaints that consumers in the Kanto region centering on Tokyo had no option but to accept Tokyo Electric Power Co.'s electricity rate hikes last year, because the operator of the wrecked Fukushima No. 1 nuclear complex is struggling to finance mounting fuel costs for its thermal power stations.

As for the final stage of the reform, the 10 regional utilities would separate their power generation and transmission businesses around 2018 to 2020. The panel has proposed a "legal unbundling" method under which utilities would be required to turn their transmission sectors into separate companies.

The current pricing system for households, in which utilities pass on personnel expenses and other costs to their customers, should also be scrapped when power generation and transmission are separated, or at a later date, according to the report.

Japan started to liberalize its electricity market in the 1990s, allowing businesses to supply power to major utilities and large-lot users such as companies. But the process was only partial and new entrants

accounted for just 3.6 percent of the electricity sold to large-lot users in fiscal 2011, amid high costs to access the existing power grid.

Meanwhile, the retail market for households is still dominated by the regional utilities.

At the panel meeting, the Federation of Electric Power Companies of Japan said the time frame for achieving the separation of energy generation and transmission “is tough at the moment,” citing deteriorating business conditions due to the prolonged shutdown of all but two of the country’s commercial nuclear reactors because of the Fukushima disaster.

But many panel members urged the utilities to back the reforms, with one expert stressing that unbundling is crucial since it would enable the country to efficiently tap a variety of power sources, including renewable energies, amid electricity shortage concerns.

See also : Gov't panel calls for major power sector reform in Japan by 2020

http://mainichi.jp/english/english/newsselect/news/20130209p2g00m0dm043000c.html

Bad sign

Gov't needs to determine early whether to resume reactors

http://mainichi.jp/english/english/newsselect/news/20130211p2g00m0bu074000c.html

TOKYO (Kyodo) -- A senior lawmaker of the ruling Liberal Democratic Party said Monday it is necessary for the government to determine whether to resume nuclear plant operations at an early date.

"The economy will eventually stall in terms of energy cost" as long as most nuclear reactors remain idled, Hiroyuki Hosoda, executive acting secretary general of the LDP, said in his speech in Matsue, Shimane Prefecture. "It is needed to determine their resumption by securing their safety."

He also said, "Power companies will face capital deficits in around three years if their reactors remain idled, and the basis of their existence will be affected."

Currently, only two reactors of Kansai Electric Power Co.'s Oi plant are online among Japan's 50 commercial reactors amid widespread suspension of operations resulting from the nuclear disaster at the Fukushima Daiichi complex.

On Japan's participation in the Trans-Pacific Partnership negotiations, Hosoda expressed caution, saying it was likely the eventual terms of the negotiations would be "unacceptable" to Japan, with the United States leading the rulemaking of the Pacific-wide free trade talks. Japan "needs to consider (participation) in a cautious manner," he said.

The LDP pledged during campaigning for the Dec. 16 House of Representatives election that Japan would not join the negotiations for as long as they were premised on the elimination of all tariffs without exception.

See also: February 12, 2013

Senior LDP lawmaker urges a swift decision on fate of offline reactors

http://www.japantimes.co.jp/news/2013/02/12/national/senior-ldp-lawmaker-urges-a-swift-decision-on-fate-of-offline-reactors/#.URk-l_L1tEs

Ministries don't agree on Japan energy future

February 12, 2013

Sparks fly over power plants / 2 ministries at odds over building new coal-fired plants

http://www.yomiuri.co.jp/dy/business/T130210002630.htm

Tadaaki Inoue / Yomiuri Shimbun Staff Writer

The debate over whether to promote construction of new coal-fired power plants has intensified as two ministries have taken opposing positions on the issue.

The Environment Ministry holds a negative view of the plan in light of environmental concerns, including the fact that coal emits more greenhouse gases than liquefied natural gas and other energy sources.

The Economy, Trade and Industry Ministry, on the other hand, has been promoting the plan to help offset the anticipated increase in fuel costs due to the long-term suspension of nuclear power plants.

The Environment Ministry asked METI last month to postpone a planned bid by Tokyo Electric Power Co. to purchase electricity generated by outside thermal power plant operators, and the matter is being discussed by the two ministries, sources close to the deal said.

To make up for a future power supply shortage, the utility announced in November a plan--starting from July 2019--to purchase electricity generated at thermal plants to be built by power wholesalers.

Environment Minister Nobuteru Ishihara said Tuesday after a regular Cabinet meeting that his ministry is reviewing the utility's power purchase plan from the viewpoint of curbing greenhouse gases without creating complications.

Economy, Trade and Industry Minister Toshimitsu Motegi insisted on holding the tender as planned during a news conference the same day, saying, "Coal-fired power generation has a vital role in maintaining a stable electricity supply and economic efficiency."

Coal thermal power costs about 9 yen per kilowatt-hour, compared to 22 yen per kWh for oil-fired plants and 10 yen per kWh for LNG-fired plants.

However, the amount of carbon dioxide emissions discharged by coal-fired plants is said to be double that of LNG-fired plants.

Therefore, it may be difficult to obtain approval to construct new thermal plants after undergoing an environmental impact assessment by the Environment Ministry.

Prime Minister Shinzo Abe's administration plans to review the former Democratic Party of Japan-led government's policy of reducing greenhouse gas emissions from 1990 levels by 25 percent by 2020, but has yet to set a new goal.

Since the latter half of last year, the two ministries have made efforts to coordinate their views on the construction of new coal-fired plants. But TEPCO's plan to soon start accepting bids from outside thermal power plant operators has intensified the confrontation between the two ministries.

To help compensate for power supply shortages caused by the planned decommissioning of four reactors at its Fukushima No. 1 nuclear power plant, the utility will procure the necessary 2.6 million kilowatts from outside vendors starting in 2019.

As the bid ceiling was set at 9.53 yen per kilowatt-hour, it appears that it will be difficult for power generators other than coal-fired plant operators to take part.

A plan has emerged to hammer out a compromise through discussions by deregulation and other government panels if coordination efforts between the two ministries fail.

Don't change the power system, says industry boss

February 16, 2013

Power industry boss: Proposed reform threatens nuclear power generation

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201302160054

By KENTARO UECHI/ Staff Writer

Proposed sweeping reforms of the electric power industry would deprive utilities of so much revenue that they would be incapable of operating nuclear facilities they own now or plan to in the future.

That warning was issued Feb. 15 by Makoto Yagi, head of the Federation of Electric Power Companies of Japan. He is also president of Kansai Electric Power Co.

Yagi was referring to a proposal compiled Feb. 8 by a panel of experts with the Ministry of Economy, Trade and Industry that was described as “the most sweeping reform of the electric power industry in postwar years.”

The panel recommended as part of key elements of the reform that power transmission and distribution be separated from regional utilities within five to seven years so that these operations are undertaken by their subsidiaries.
The idea is to allow suppliers of renewable energies to have fair access to power transmission and distribution networks owned by the utilities.

Under the existing setup, utilities have monopolized power generation and transmission, as well as distribution, stifling competition. Many new suppliers found themselves at a great disadvantage in trying to find customers.
In response, Yagi raised doubts about the soundness of the proposed overhaul of the industry.

"It has yet to be ascertained if a stable supply of inexpensive electricity will be secured," he said. "The proposed reform will not necessarily benefit our customers."

He and many utility executives fear the proposed reform would result in a sharp drop in profits, which would make it harder for them to finance the operation of nuclear power plants.

Nuclear power stations are costly to maintain and building new facilities represents a huge investment for a utility.

Yagi also called for restarts of reactors which have been idled since the nuclear disaster at the Fukushima No. 1 plant nearly two years ago.

"Nuclear plants should be utilized to provide a stable and inexpensive power supply," he said.
Many utilities have sought government approval to raise electricity rates, saying imports of fossil fuels to reactivate thermal power plants are hitting their bottom lines.

Manipulation, fight for influence, subsidies - a divided society

February 17, 2013

Nuclear dispute shapes fight over future of fading town

by Jeff Kingston

http://www.japantimes.co.jp/culture/2013/02/17/books/nuclear-dispute-shapes-fight-over-future-of-fading-town/#.USHnBPL1tEs

HARD TIMES IN THE HOMETOWN: A History of Community Survival in Modern Japan, by Martin Dusinberre. University of Hawaii Press, 2012, 247 pp., $55 (hardcover)

This superbly told tale about the waxing and waning fortunes of Kaminoseki town over the past four centuries presents some interesting local counterpoints to the more familiar national narrative.

Kaminoseki, a port on the Inland Sea in Yamaguchi Prefecture, was a vibrant trading hub in the Tokugawa Period, but suffered decline from the late 19th century against the backdrop of national modernization.

Why read about some moribund backwater in nether Honshu? Because, as Martin Dusinberre writes, "to understand how people lived with everyday decline in modern Kamonoseki is to begin to understand the hopes and hard times of small communities across the world." This saga sheds light on how a community has responded to the changing world around it and how these forces have shaped its evolution, identity and cohesion.

After World War II, Kaminoseki enjoyed a brief recovery, but after the shift from coal to imported oil, it has been a losing battle. While the economic miracle of the late 1950s and 1960s was a national success story, the energy revolution transformed the shipping industry and eroded the port's commercial niche. The town's gathering troubles, including job losses, outmigration of the young and an aging population, are a familiar story all over rural Japan. This richly detailed account vividly conveys how this malaise played out over time and what it meant to successive generations.

Dusinberre, a former teacher on the Japan Exchange and Teaching (JET) Program, draws on a cache of local archival materials and extensive interviews to provide a unique and compelling view into the family feuds, class resentments and political maneuvering that animate this ailing community.

Kaminoseki's story is especially fascinating now because Prime Minister Shinzo Abe is from Yamaguchi and he is already weighing in on one of the town's long-standing battles. Abe's sudden chance at redemption as a political leader five years after his humiliating ouster represents a stunning reversal of fortune that, among other things, signals the revival of the town's divisive nuclear power project.

Dusinberre masterfully recounts the ins and outs of this three-decade-long local confrontation over hosting a nuclear reactor. Local nuclear advocates argue this is the only way to revive the town.

Following the 2011 Fukushima debacle, however, the governor of Yamaguchi suspended the Kaminoseki project and prospects for resumption looked bleak. While opponents felt vindicated by exposes regarding Tepco's numerous safety blunders, advocates saw the meltdowns as a major setback for their plan to cash in on nuclear subsidies and jobs. But now Abe and the Liberal Democratic Party are busy promoting nuclear energy despite polls showing 80 percent favor phasing it out.

Desperate leaders in Kaminoseki are gung-ho for reactors because **the potential risks of nuclear power are deemed less than the certain risks of economic oblivion.**

"Hard Times in the Hometown" helps us understand just how divided the community is between pro- and anti-nuclear campaigners, as **both sides are convinced that the other just doesn't get it.**

Readers learn how Chugoku Electric and town leaders connived to launch the project and overcome strong local opposition. The utility's "subtle manipulation" of civil society groups in Kaminoseki, "meant

that an ordinary citizen's pronuclear decision was as likely to be based on social, political, and even historical obligation as it was on a clear grasp of atomic energy issues." While economic incentives were a powerful inducement, Dusinberre argues that social bonds between citizens and town elites may have been more important in orchestrating approval for hosting the reactor.

Pronuclear advocates were not leaving things to chance. Prior to the 1987 mayoral election, scheduled on the one-year anniversary of the Chernobyl disaster, the town's population "miraculously" increased. A police investigation revealed that the pronuclear lobby had fraudulently registered nonresidents as local citizens, including employees of Chugoku Electric. Despite such tawdry revelations, the pronuclear candidate won re-election, but faced sustained and angry protests. The discord also turned violent as rightwing thugs came and assaulted antinuclear activists.

Iwaishima, an island that was merged into Kaminoseki, has a commanding view of the proposed reactor site and is a hotbed of opposition. Anyone associated with the pronuclear camp is subject to *murahachibu* (ostracism), including merchants and a Shinto priest. Tourist maps of the island actually omit a historic shrine because the priest is a pronuclear advocate. Parishioners ex-communicated their priest in venting their collective fears about nuclear energy and frustration with their powerlessness in the face of political shenanigans.

Dusinberre found that "the pronuclear minority included not just elected councilors but men who stood at the hub of social, economic and ritual networks." It is tempting thus to read into the reactor opposition an anti-elite movement, but the situation is more complicated. One of the key leaders of the antinuclear group was also a member of the island's elite families. Apparently, he was miffed that nuclear advocates had not sought his support. So he funded the antinuclear movement and enjoyed his sudden power as a leader to be reckoned with. Oddly, he confided, it was a matter of saving face, not atomic energy.

In assessing how atomic power led to community fission, the author explains the **importance of "entirely unrelated battles being fought through the framework of the nuclear dispute."**

Jeff Kingston is the director of Asian Studies at Temple University, Japan campus.

Liberalise the electricity market?

February 19, 2013

Editorial: Concrete measures needed to implement true electricity reforms

http://mainichi.jp/graph/2013/02/18/20130218p2a00m0na011000c/001.html

A report on electricity system reforms compiled by a panel of experts for the Ministry of Economy, Trade and Industry has outlined plans to fully liberalize the electricity retailing market in Japan and separate electricity production at major power firms from power transmission and distribution, specifying times for achieving the changes.

The plans bring Japan a step closer to electricity system reforms designed to transform regulations and market monopolies into liberalization and competition. Officials must now put their heads together and make concrete plans for a system to improve services and restrain electricity prices.

The government report states that full liberalization of the retailing market for home electricity will be implemented in three years' time, and that the separation of power transmission and distribution will be carried out in five to seven years. If electricity retailing is liberalized, home users will be able to purchase electricity produced by major utilities located in other areas, as well as new forms of electricity produced by market newcomers. This should spur competition between power companies, and produce a more convenient system for users.

To ensure fair competition, companies must be able to freely use the transmission and distribution networks held by major utilities. Separation of power generation and transmission is one step to boost the neutrality of such facilities and help secure fairness.

Previous plans to fully liberalize the electricity market in Japan, presented under the previous administration of Prime Minister Shinzo Abe, were derailed by resistance from major power companies and Abe's own Liberal Democratic Party (LDP). There is greater opposition to separation of power generation and distribution -- which would pressure major utilities to make organizational changes -- than to mere liberalization.

As the latest report provides targets for implementing reforms, it can be considered a step forward. These plans are expected to be legislated in the near future. Officials must not backtrack on the plans when they are screened by the ruling government parties.

Of course, there are outstanding issues to be addressed, such as how to ensure a stable supply of electricity and make sure electricity prices on remote islands and depopulated areas are kept to a reasonable level. Careful preparation is needed to overcome these issues and ensure that electricity users benefit from the changes.

Noteworthy in the government is the mention of establishing two new bodies. The first is a "wide-area grid organization." This body would facilitate arrangements within power companies to transmit and distribute electricity from areas with power surpluses to areas facing power shortages, and create plans for maintaining national power transmission and distribution networks. It would play a vital role in ensuring a stable supply of electricity and preserving infrastructure. We want to see legislation giving this organization a powerful measure of authority in its dealings with major utilities.

The second body is a "regulatory organization" to ensure the effectiveness of reforms. It will check the extent of liberalization of electricity retailing, neutrality in the power transmission and distribution sectors, and activity within the electricity wholesale market.

Past reforms failed to draw newcomers into the market because the system lacked a means to verify market fairness. Officials may create a spectacular system, but poor operation will only water it down. Electricity reforms must not go down the path of allowing former government bureaucrats to parachute into high-profile jobs through the practice of "amakudari."

We call on the government to make sure the new bodies and their internal organizations are effective, thereby preventing the reforms from turning out to be nothing more than a pie in the sky.

Nuke company selling uranium back

February 21, 2013

Japan Atomic Power takes rare step to sell uranium for loan payment

http://mainichi.jp/english/english/newsselect/news/20130221p2g00m0dm033000c.html

TOKYO (Kyodo) -- A Japanese nuclear power company has taken the rare step of selling some of its uranium for the use of nuclear reactor fuel, apparently to raise money to use to repay loans amid its faltering business conditions, sources close to the matter said Wednesday.

Japan Atomic Power Co. apparently moved to secure money to repay loans due in April, amid uncertainty over when it can resume operating its three idled reactors in the wake of the nuclear disaster at the Fukushima Daiichi complex.
Tokyo Electric Power Co. is also considering taking similar action as it continues to face funding difficulties following the nuclear crisis at its Fukushima complex, the sources said.

It is rare for a Japanese power company to sell uranium because the material is essential for the operation of nuclear plants and its suppliers are limited.

According to the sources, uranium, which could be diverted to military use, is procured in principle under long-term contracts. Japanese utilities import it mainly from overseas suppliers, including those in Canada.

While an official of Japan Atomic Power declined to disclose to whom it sold the uranium, it is likely the company returned it to the seller.

A senior official of a major utility said the move was an exceptional option because it likely meant selling the uranium for less than the import price.

Japan Atomic Power sells electricity to its major shareholders, which include Tokyo Electric and Kansai Electric Power Co. Although its electricity output has fallen to zero, it continues to receive "basic charges" paid by major utilities.

According to the sources, Japan Atomic Power plans to pay back 40 billion yen in loans by selling uranium and streamlining. As for another 100 billion yen in loans, major utilities are expected to continue guaranteeing payments beyond April.

In another blow to Japan Atomic Power, a panel of experts appointed by the country's nuclear regulator has agreed that a geologic fault running directly underneath a reactor at the company's Tsuruga plant is likely to be active.

The judgment, if officially endorsed by the five-member Nuclear Regulation Authority, could leave Japan Atomic Power with no option but to scrap the reactor in Fukui Prefecture.

In quake-prone Japan, plant operators are not allowed to build reactors directly above active faults.

See also Japan Times :
Japan Atomic Power takes rare step of selling uranium to pay off loans

http://www.japantimes.co.jp/news/2013/02/21/national/japan-atomic-power-takes-rare-step-of-selling-uranium-to-pay-off-loans/#.USXqMzf1tEs

Fukushima tourism "à la Chernobyl"?

February 21, 2013
Group wants Fukushima plant preserved for Chernobyl-style tourism

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201302210058

By YUTAKA SHIOKURA/ Staff Writer

Seven young intellectuals are seeking support for their proposal to preserve the crippled Fukushima No. 1 nuclear plant as a tourist site carrying a cautionary message for future generations.

They believe Japan must decide soon what it wants the plant to look like 25 years from now, and they hope to stimulate discussion of that through magazine articles and Twitter exchanges based on their "tourism" suggestion.

"If we are to keep the memory alive, we should not tear the plant down," said Hiroki Azuma, a professor of philosophy at Waseda University. "The plant would serve us better as a tourist site that people from around the world can visit and where they can learn from history."

The group also includes sociologist Hiroshi Kainuma and architect Ryuji Fujimura. All are unusual in that they are younger than 50 years old and are trying to push a radical proposal.

They suggest, for example, that the plant considers bidding for UNESCO World Heritage status, something already held by the Hiroshima Peace Memorial as the site of the world's first atomic bombing.

Currently, the plant is in a state of cold shutdown. However, many areas remain largely off-limits because of heavy radioactive contamination. Twenty-five years from now, decommissioning and decontamination work should be fairly advanced.

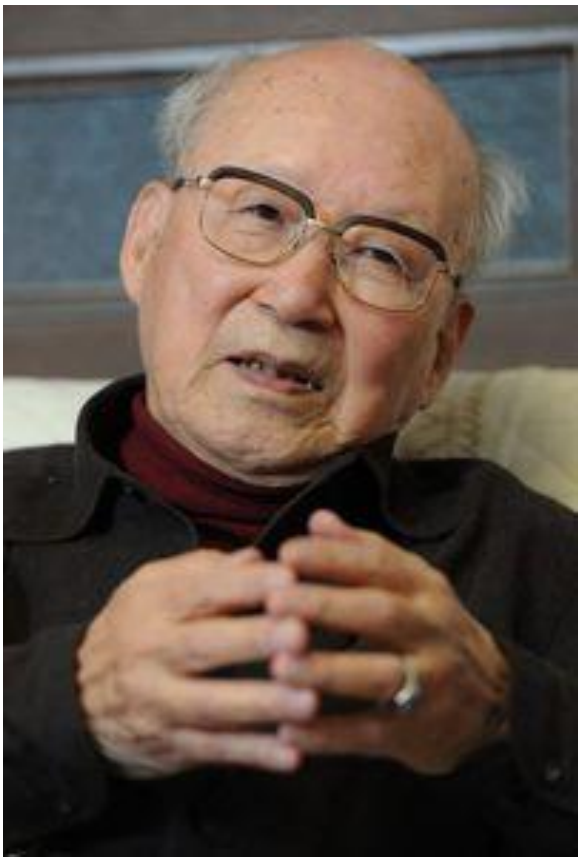
The group notes that these days tourists from around the world are visiting the Chernobyl plant in Ukraine, where a reactor exploded in 1986.

But the group admits public reaction has been divided.

Some welcome the proposal as "interesting," while others condemn it as "unscrupulous" or "tasteless."
The members met in February in Tokyo to discuss the proposal in detail, such as what tourists should be encouraged to see at the plant and nearby.
One person involved stressed the need to secure a venue that shows conditions at the plant before the disaster struck and what life was like for residents of Fukushima Prefecture prior to the March 11, 2011, Great East Japan Earthquake that generated towering tsunami.
Another warned against using the word "resort," on the grounds that something so lighthearted would probably draw opposition.
In October, the group traveled to the region to canvas residents of the city of Minami-Soma. Part of the city lies within the mandatory exclusion zone.
It found that they, too, had mixed reactions to the proposal.
Some welcomed it. One resident called it "an idea we could not have come up with."
But others said the disaster remains too raw and immediate to talk about easily.
"They are still trying to bring the plant under control and to decontaminate it," protested one resident.
The group plans to continue its dialogue with people in affected areas.

Shuntaro Hida on nuclear deterrence

February 25, 2013
Hibakusha: A-bomb victim doctor warns nuclear deterrence ineffective



Shuntaro Hida responds to an interview with the Mainichi Shimbun in Saitama. (Mainichi)

拡大写真

http://mainichi.jp/english/english/features/news/20130225p2a00m0na010000c.html

SAITAMA -- Shuntaro Hida, 96, who was a doctor at the Hiroshima Military Hospital when the U.S. military dropped the atomic bomb on Hiroshima on Aug. 6, 1945, has witnessed close-up how a nuclear bomb takes the lives of human beings. He was making a house call about 6 kilometers away from the bomb's hypocenter when the blast took place, and was exposed to radiation. He then scrambled to help the many who had been injured.

This experience became the foundation for Hida's life. As a survivor himself, he has treated over 6,000 hibakusha patients, putting his life on the line for the abolition of nuclear power.

When Hida saw news reports at his home in Saitama's Urawa Ward that North Korea conducted its third nuclear test on Feb. 12, he was struck afresh that as long as nuclear weapons continued to exist on this planet, there would always be countries like North Korea.

Pointing out that North Korea's repeated nuclear tests demonstrate the limitations of nuclear deterrence, Hida says, "There will be more countries who think that having nuclear weapons will give them an upper hand in foreign diplomacy. Unless the U.S. and other countries that currently possess nuclear weapons abolish them, humankind will not be able to escape from the fear of nuclear weapons."

Following the end of World War II, Hida opened clinics for low-income patients in Tokyo and Saitama Prefecture. Patients would come to the clinics having heard rumors of a hibakusha doctor, and once Hida asked his nurses to leave the consultation room, they would begin to open up about their experiences as survivors, their abnormal physical symptoms, and their desperate plight.

The bomb had slowly sucked the lives out of people who had barely survived the bombing after torturing them for five to 10 years. By the time Hida read a paper written by an American researcher on internal exposure and learned the true brutality of the atomic bomb, 30 years had passed since the bomb was dropped.

Why did research on the effects of radiation fail to make significant progress in Japan? Hida answers, "Because the U.S. went to great lengths to cover everything up."

Under the post-World War II occupation, Japanese doctors were strictly forbidden to record symptoms exhibited by hibakusha patients or conduct related research. The U.S. government, meanwhile, set up the Atomic Bomb Casualty Commission (ABCC) in Hiroshima and Nagasaki and studied hibakusha and the genetic consequences of radiation exposure, but did not administer any treatment.

The medical treatment of hibakusha -- or lack thereof -- showed that military affairs were considered a priority over human life. Whenever military affairs take priority, the people are forced to make sacrifices. This was something that struck Hida last October in Okinawa, where he was giving a lecture. He saw first-hand the U.S. military's MV-22 Osprey aircraft being deployed to U.S. Marine Corps Air Station Futenma in Ginowan, Okinawa Prefecture, despite protests from local residents.

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"No matter how strongly Okinawan residents say 'No,' the U.S. refuses to listen," he says. "It's as if Japan's a colony."

In January, Hida resumed his speaking engagements, from which he had taken a break for a month due to chronic back problems.

"It's not OK to sacrifice 10 people for the happiness of 1,000. We must not sacrifice even one life," he says. This conviction is what pushes him forward. (By Fusajiro Takada, Fukuyama Bureau, photo by Masaru Nishimoto)

(This is the final installment of a five-part series.)

Difficult to balance growth and safety

Survey: 45% of local leaders want nuclear phaseout; 35% say reactors are needed
February 25, 2013
THE ASAHI SHIMBUN
http://ajw.asahi.com/article/0311disaster/fukushima/AJ201302250121

Fewer than half of prefectural and municipal leaders near nuclear plants believe nuclear power should be phased out in Japan, reflecting the struggles of communities in balancing economic growth and safety, a survey showed.

Only four of the 156 local leaders surveyed by The Asahi Shimbun said Japan does not need nuclear power plants.

Fifty-five, or 35.2 percent, of the leaders said nuclear plants are necessary in Japan. Specifically, nine said they think "nuclear plants will continue to be necessary into the future" and 46 said they are "necessary for the time being."

The survey cover 21 prefectural governments and 135 municipalities located within 30 kilometers of nuclear power plants.

"They are necessary until new power sources that will resolve the issues of global warming and economic efficiency become available," said Jitaro Yamaguchi, the mayor of Mihama, Fukui Prefecture, where the Mihama nuclear plant is located.

Kazuhiko Yamashita, the mayor of Ikata, Ehime Prefecture, home to the Ikata nuclear plant, said, "We should utilize nuclear plants that are confirmed safe and make efforts not to slow down economic activities."

Twenty-six of the local chiefs did not comment or provide valid responses.

Among the 71 leaders, or 45.5 percent, who said "nuclear plants should be phased out," four said nuclear power should be abandoned within 10 years. Eleven said the phaseout period should be completed within 20 years, while eight said Japan should be nuclear-free within 30 years.

Others in favor of a nuclear phaseout did not give a preferred time frame.

Kagoshima Mayor Hiroyuki Mori said Japan should denuclearize itself "when civilian life and economic and industrial activities become insusceptible (to the change)."

The four leaders who said nuclear plants are unnecessary in Japan were the leaders of Misato in Miyagi Prefecture, Wajima in Ishikawa Prefecture, Iki in Nagasaki Prefecture, and Shohei Kitamura, the mayor of Fujieda, Shizuoka Prefecture.

"Given that Japan could overcome the electricity shortage during summer, it is doubtful whether (nuclear plants) are really necessary" Kitamura said.

Shizuoka Prefecture is home to the Hamaoka nuclear plant, which is believed to be at risk of being hit by a towering tsunami up to 19 meters high following the long-expected earthquake along the Nankai Trough southwest of Tokyo.

Among all 11 local government leaders in and near Shizuoka Prefecture, nine, including Kitamura, said "nuclear plants should be phased out" or are "not necessary."

The 71 leaders who want a phaseout of nuclear energy include the chiefs of four municipalities that host nuclear plants. They are the mayors of Futaba and Tomioka in Fukushima Prefecture, Tokai in Ibaraki Prefecture, and Kashiwazaki in Niigata Prefecture.

"The central government should reveal the risks of nuclear plants to the public and decide whether to abandon nuclear power generation through a referendum," said Yoshifumi Sekiguchi, the mayor of Tokamachi, Niigata Prefecture, located within 30 km of the Kashiwazaki-Kariwa nuclear plant.

Fukui Prefecture has 13 commercial nuclear reactors, the most in Japan. The mayors of Echizen city, Echizen town and Sabae city, all in the prefecture, said "nuclear plants should be phased out."

The survey asked about Prime Minister Shinzo Abe's plan to drop the "zero nuclear power generation policy" that was adopted by his predecessor, Yoshihiko Noda, in light of the disaster at the Fukushima No. 1 nuclear plant in 2011.

Sixty-six, or 42.3 percent, of the local leaders said they "fully support" or "generally support" Abe's policy.

"The Hamaoka plant and other plants located in regions at higher risk should not be restarted," said Shigeki Nishihara, the mayor of Makinohara, Shizuoka Prefecture. "But if they are confirmed safe and we win the consent of residents, we can accept temporary operations."

Abe intent on restarting nuclear plants

February 28, 2013

Abe vows to restart Japan nuclear reactors in policy speech

http://mainichi.jp/english/english/newsselect/news/20130228p2a00m0na014000c.html

Prime Minister Shinzo Abe gave the first governmental policy speech of his second administration before the House of Representatives on Feb. 28, declaring his intention to restart Japan's nuclear reactors as soon as they were judged safe.

"We will create a new culture of safety under the aegis of the Nuclear Regulation Authority (NRA), and restart reactors confirmed safe," Abe told the regular Diet session, his wording straying slightly but significantly from his Liberal Democratic Party (LDP)'s coalition agreement with New Komeito stating that restart decisions would be left to NRA experts.

On the hot-button issue of Trans-Pacific Partnership (TPP) free trade talks, meanwhile, Abe said that "the government will be responsible for deciding whether Japan will join," hinting quite strongly that he wished to participate in the currently 11-nation negotiations.

Abe kicked off his speech with a quote from famed Meiji writer and intellectual Yukichi Fukuzawa, "We shall each one of us become independent, and thereby build an independent nation," and the prime minister's remarks returned repeatedly to the theme of "independence."

On foreign relations and the Japan-United States security guarantee, Abe said that "revisions to the U.S. force structure in Japan will continue based on bilateral agreement," and indicated he wished to see the controversial U.S. Marine Corps Air Station Futenma in Okinawa relocated soon. Furthermore, to enhance the deterrent effect of the Japan-U.S. alliance, Abe said "Japan will take an even greater role," hinting at a continued push for constitutional reform allowing Japan the right to collective self-defense.

Also on security, Abe referred to a Jan. 30 incident in which a Chinese warship locked its fire control radar onto a Japan Maritime Self-Defense Force vessel and called on China to exercise self-restraint in the waters around the disputed Senkaku Islands.

"I call for Japan and China to return to the starting point of our relationship based on strategic mutual benefit," he said, adding that he hoped to meet Chinese Communist Party General Secretary Xi Jinping for one-on-one talks.

With an eye to Japanese participation in TPP talks -- staunchly opposed by Japan's farming cooperatives -- Abe advocated an "aggressive agricultural policy" that would "create an agricultural sector with great hope for the future." Furthermore, "we will support companies that give more of their profits back to their employees," he said.

Abe also visited the subject of disaster reconstruction in the areas hit by the March 2011 earthquake and tsunami, saying, "We will speed up recovery. The Reconstruction Agency will adjust in real ways to the special problems of each district." Regarding Fukushima Prefecture, parts of which have been badly contaminated by the Fukushima No. 1 nuclear plant disaster, Abe stated, "We will expend every effort on decontamination, halting economically harmful fears, and bringing the people displaced by the disaster home."

On education, Abe said that the government would consider changing the so-called "6-3-3-4 system" -- six years of primary school, three each for junior high and high school, and four years of university -- as well as move ahead with anti-bullying measures proposed by a government education committee on Feb. 26.

Abe also addressed fears over consumption tax hikes set to go into force in April 2014, stating, "We will guarantee a stable source of government finances, and build a social welfare system based on balancing benefits and burdens."

"It is every legislator's duty to debate the issues constructively, and produce real results," Abe said. "Let us promote debate in the constitutional review committee, and deepen the national dialogue on reforming the Constitution."

Abe also delivered a general policy speech to open the current regular Diet session on Jan. 28. His Feb. 28 speech marks the first time the general remarks and the administrative policy speech have been delivered during the same Diet session in 39 years

Reprocessing dilemma looms as large as ever over Japan

March 2, 2013

Spent fuel reprocessing issue must be tackled head-on now

http://mainichi.jp/english/english/perspectives/news/20130302p2a00m0na005000c.html

The Innovative Strategy for Energy and the Environment released in September last year by the administration of then Prime Minister Yoshihiko Noda had a subtle, yet significant difference between the domestic version of the text and the English-language version geared for an overseas audience.

The Japanese version strategy can be translated as, "We will mobilize all policy resources ... as to enable zero operation of nuclear power plants in the 2030s."

Meanwhile, the English version says, "We will mobilize all policy resources ... as to even enable zero operation of nuclear power plants in the 2030s."

"To even enable zero" and "to enable zero" leave the reader with very different impressions.

According to an insider who was involved with the creation of the strategy, the "even" had been inserted to weaken the impact of the "zero" out of consideration for the U.S. There's no use criticizing a former administration's duplicity now, but the administration of Prime Minister Shinzo Abe faces the same dilemma today. Reprocessing of spent nuclear fuel looms over the administration.

The Noda administration's dilemma can be explained thusly: if nuclear reactors are abolished as per the government's stated goal, there would no longer be a need for nuclear fuel. However, Japan is in possession of a massive stock of plutonium, which it has extracted from spent fuel reprocessing, and for which it has no use besides fuel. For the U.S., which has expressed commitment to the nonproliferation of nuclear weapons, Japan's "zero-reactors" strategy was a touchy subject in light of Japan's large reserves of plutonium that could be used for nuclear weapons.

"We simply can't go on accumulating huge amounts of the very material, like separated plutonium, that we're trying to keep away from terrorists," U.S. President Barack Obama said at the Nuclear Security Summit held in South Korea last March. The statement could have been taken as a message directed at Japan.

To strike a balance between the irreconcilable -- a "zero-nuclear" policy appealing to the Japanese public, and a "zero surplus plutonium" policy that would put the U.S. at ease -- the Japanese government had no choice but to insert the "even" in its energy strategy.

As for the current administration, Prime Minister Abe told the Diet on Jan. 30 that the government would reduce Japan's nuclear dependence "as much as possible," implying that new construction of nuclear reactors was a possibility. The administration also plans to continue spent fuel reprocessing. As such, it may appear as though no dilemma exists for the Abe administration. But the truth is not so simple.

First, there's the question of where the reprocessed fuel will go. Within and outside its borders, Japan has approximately 30 tons of fissile plutonium, which is the equivalent of several thousand A-bomb blasts experienced in Nagasaki in 1945. If and when Japan Nuclear Fuel's Rokkasho Reprocessing Plant in Aomori Prefecture is completed and goes live, Japan's plutonium stock will increase by about 5 tons per year.

The Federation of Electric Power Companies of Japan (FEPC)'s plan for these reserves had been to fuel 16 to 18 pluthermal reactors in the country. However, included among those reactors was the No. 3 reactor at the stricken Fukushima No. 1 Nuclear Power Plant that is slated to be decommissioned, as well as the No. 2 reactor at the Japan Atomic Power Co.'s Tsuruga Power Station, where the possible presence of a geologic fault has been pointed out. In addition, seven more reactors will have been running for over 40 years by the year 2030. With the prospect of reactor restarts still murky, the plan has become a mere pie in the sky.

International opinion is another issue. Experts at the United Nations Conference on Disarmament Issues held in Shizuoka last month pointed out that plutonium stores were terrorist targets, and that operating a reprocessing plant would be ill-advised. According to a report released last year by the U.S.-based organization Nuclear Threat Initiative (NTI), Japan ranked 23rd in security out of 32 countries with weapons-usable nuclear materials, due to the massive quantities of plutonium in its possession. The revision deadline for the Japan-U.S. Nuclear Agreement, which approved spent fuel reprocessing by Japan on the condition that it would not generate surplus plutonium, is coming up in 2018.
"There's no question that the U.S. will demand to know what we plan to do with our plutonium," says a Japanese government insider.

Japan has three options. The first is to significantly increase the number of pluthermal reactors. The second would be to reduce the amount of reprocessing. And third, Japan could stop reprocessing altogether.

As mentioned earlier, the first option is not likely. We're left with options 2 and 3, but they would both result in spent fuel -- that had been meant to be reprocessed -- taking up space in storage vessels around the country that are already close to full. Once they do fill up, operating nuclear reactors is no longer possible.

I stand behind option 3. Let's use the plutonium that we already have as fuel for pluthermal reactors, and stop all reprocessing. For the time being, store the increasing volumes of spent fuel in metal containers, while prompt legal changes are made to allow it to be buried underground in the future.

Naturally, the electric companies that had counted on reprocessing will object to such a course of action. Aomori Prefecture, which hosts the reprocessing plant and has stored the spent nuclear fuel planned for reprocessing there, may send back the fuel to the respective power companies. Moreover, there's no doubt that the selection of burial sites for spent fuel will run into a myriad of problems.

The most mystifying thing about this whole thing is that politicians continue to turn a blind eye to the grave predicament we're in. Debates during the recent general election and deliberations in the

current session of the Diet barely touch upon the issue. Do they believe that someone will take care of it while they look the other way?

The reprocessing plant will be completed as early as this coming October. Whether the government goes through with reprocessing or not, will require the public's consent. We're at a time when we as a society must search for a way to pull ourselves out of this impasse. ("As I See It" by Shuichi Abe, Science and Environment News Department)

New survey on nuke restart

March 4, 2013

Japan's nuclear plants unlikely to restart operations this year: survey

Kyodo
http://www.japantimes.co.jp/news/2013/03/04/national/japans-nuclear-plants-unlikely-to-restart-operations-this-year-survey/#.UTRsuzf1tEs

Japan's nuclear power plants are unlikely to resume operations by the end of the year because of the time it will take to complete safety checks under the new regulatory framework, a survey of the nation's operators of atomic reactors showed Sunday.

Kansai Electric Power Co.'s Oi nuclear power station in Fukui Prefecture, which currently boasts the only two operational reactors in the country, is meanwhile scheduled to be suspended for an inspection in September, regardless of the new safety guidelines to be unveiled by the Nuclear Regulation Authority in July, according to the poll.

The survey, which canvassed nine regional utilities and Japan Atomic Power Co., also found that their financial burden is growing as they reinforce safety measures in response to the March 2011 meltdowns at the Fukushima No. 1 plant.

Power companies expect the cost of implementing the new standards to total at least ¥1.1 trillion, while Kepco alone said it will require ¥285.5 billion in the medium- to long-term, according to the survey.

But Kyushu Electric Power Co. was more upbeat, saying it could restart two of its reactors in July, providing the NRA swiftly completes the necessary safety inspections. All of the other nine companies polled declined to provide specific dates for restarting their atomic energy plants.

Although Shikoku Electric Power Co. said it aims to fire up its reactors at the earliest possible time, it has applied for government approval to hike household electricity rates based on the assumption that it will be able to restart its nuclear plant in Ikata, Ehime Prefecture, in July.

The Ikata facility is viewed as the best candidate to be granted approval to resume operations, as its reactors differ in design from those at the Fukushima No. 1 plant and it has enhanced earthquake-resistant facilities in the event of emergencies.

Still, a senior official at the Ikata complex said it will be “impossible to restart (its reactors) by year’s end” unless the NRA conducts its safety inspections more quickly.

NRA Chairman Shunichi Tanaka has pointed out that **atomic power plant safety checks have previously taken between six months and a year to complete, at the very minimum**. Although the nuclear watchdog is aiming to speed up the process, broader safety measures under the new standards are expected to make it difficult to complete the inspections by the end of December.

In the period since the 2011 quake-tsunami disaster sparked the Fukushima disaster, the nation has only had to cope with a complete suspension of nuclear power for about two months. All of Japan’s commercial reactors were idled between the halt of Hokkaido Electric Power Co.’s Tomari plant in May 2012 and the restart of the two units at the Oi complex that July.

Yoichi Funabashi on the nuclear disaster

March 8, 2013

LESSON FROM THE NUCLEAR DISASTER: Too much focus on laws and systems instead of true leadership

http://ajw.asahi.com/article/0311disaster/opinion/AJ201303080085

Award-winning journalist Yoichi Funabashi has spent much of the past two years trying to uncover the full story behind Japan's gravest national crisis of the postwar era: the reactor meltdowns at the Fukushima No. 1 nuclear power plant.

Renowned for his insightful reporting on national security and Japan-U.S. trade and foreign policy issues, Funabashi is a former columnist, diplomatic correspondent and editor in chief of The Asahi Shimbun.

He recently published a two-volume work titled "Countdown to Meltdown" (from Bungeishunju Ltd.) that describes the actions taken by the major players as they confronted the disaster triggered by the March 11, 2011, Great East Japan Earthquake.

As chairman of the Rebuild Japan Initiative Foundation, Funabashi established the Independent Investigation Commission on the Fukushima Daiichi Nuclear Accident, the only private-sector organization to take an in-depth look at how this unprecedented disaster unfolded.

The commission released its report in February 2012, but Funabashi wanted to gain a fuller understanding of what went through the minds of the individuals concerned as they grappled with the crisis.

A major difference from the commission's report was the inclusion in his book of the words and deeds of many U.S. officials interviewed by Funabashi. In total, close to 300 people in Japan and the United States were questioned, and many spoke on the record.

Over the course of more than 900 pages, Funabashi describes how meltdowns occurred at three of the Fukushima plant's reactors after all electricity sources and cooling systems were lost.

He goes on to describe the struggles that emerged between government officials, executives of Tokyo Electric Power Co., the Self-Defense Forces and central ministry bureaucrats in the immediate aftermath.

Added to the picture are the interactions with various counterparts in the United States that at times hindered rather than helped the situation, especially in the early stages.

In an interview with The Asahi Shimbun, Funabashi explained the purpose for writing the book and his assessment of what has changed since then.

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Question: Your latest publication re-creates how the key individuals involved dealt with the Fukushima nuclear crisis. What are some of the key points that you wanted to present to readers?

Funabashi: I wanted to describe the essence of that crisis. I thought about whether it would be possible to do so by describing what the key players actually did.

I wanted to present an overall picture, much like a mosaic, by describing the various players and what they went through as the crisis unfolded. The people involved range from officials in the prime minister's office, those in the nuclear plant operation room as well as the emergency response headquarters on-site and those who were involved in evacuating residents.

Because looking into the cause of the accident is important, that was handled by the Independent Investigation Commission on the Fukushima Daiichi Nuclear Accident.

I also wanted to paint a bigger picture about the crisis by writing the stories about the many individuals who were involved.

Rather than say that such-and-such a person was good or that person was bad, I wanted to show that before the problem of radioactive fallout, everyone was weak like a baby because they were consumed by fear.

I believe the four nuclear safety inspectors failed to live up to their tasks. In the first chapter I wrote about inspectors fleeing the scene even as the emergency was unfolding.

Q: What was the major issue at question during the crisis?

A: That would be "in an emergency, can this nation put up a fight?" I was left with the feeling that the spirit, mettle and preparedness needed for such a battle also suffered a meltdown during the crisis. At the same time, I was not in a position to point fingers at people and criticize them. It was a reflection of Japan as a nation in the postwar era and its people, including all of us who lived through that era. While people may have enjoyed living through that time, the future will not be like that at all.

The governments of both Japan and the United States made every effort to protect their own people. In that vein, 20,000 Americans were sent to Japan to participate in "Operation Tomodachi."

In that situation, it was made clear that an alliance cannot be maintained unless Japan was a nation that was capable of protecting its own people.

For its part, it was only natural for the United States to think about protecting its citizens within the context of its own global strategy. Given the difficult circumstances, the United States acted admirably. But Japan also had to face the very important question of whether it had the mettle and preparedness to protect its own people.

That is the element that I most wanted to describe.

Q: The United States didn't entirely trust the Japanese government to take all the right actions. It thought the response should not be left solely up to Tokyo Electric Power Co., the plant operator, and that the Self-Defense Forces had to be brought into the picture. How serious were such considerations in dealing with the crisis?

A: An explosion hit the No. 3 reactor building at 11:01 a.m. on March 14, 2011. That caused the United States to realize that a far from normal situation was unfolding. At the same time, the United States began trying to gain a grasp of core temperatures and radiation levels by using Global Hawk surveillance aircraft as well as other aircraft to collect air samples. After a while, they also began monitoring radiation levels at lower altitudes.

Of course, no one knew what was happening in the cores, not Japan, not TEPCO nor the United States. However, the United States had the tools to monitor the situation from the air. Monitoring on the ground was also done by personnel with the U.S. Navy's Naval Reactors (responsible for safety and proper operations of the Navy's nuclear reactors). Those measurements were conducted at 15-minute intervals around the clock.

The gap between Japan and the United States in grasping the gravity of the situation was made decisive by the difference in monitoring capabilities. The United States quickly realized the situation was far more severe than Japan did. That led the United States to reach the conclusion that the SDF had to be used much earlier than the Japanese government realized. Japan was unable to decide whether the situation could be left entirely to TEPCO.

Japan also did not have a unit to handle an emergency situation of this scale. There was no legal definition of the primary task for the SDF of spraying water into the nuclear plants and storage pools for spent nuclear fuel. The government had to use extralegal measures to deploy the SDF. As a result, the actual spraying of water on March 17 got under way barely in the nick of time.

In terms of understanding the need for crisis management, the United States was certainly quicker off the mark.

Q: The United States faced problems in not knowing who to contact in the Japanese government to obtain reliable information. How would you evaluate the response by Japan?

A: Under the special measures law to deal with nuclear accidents, the Nuclear and Industrial Safety Agency (NISA) is legally supposed to serve as the secretariat. However, the head of the agency failed to function after being yelled at by Prime Minister Naoto Kan. There were many items that had to be taken care of, including sending officials to the local response headquarters and dealing with the barrage of media inquiries.

The local response headquarters also did not work smoothly.

Given these circumstances, politicians in the ruling Democratic Party of Japan felt they had to take the initiative in dealing with the crisis.

Kan also got into action. However, at first, it was not clear who was really in charge in the government for giving out orders.

For those reasons, the United States did not know if it had to obtain information at the accident site, through TEPCO headquarters or NISA.

When the United States thought the prime minister's office might have the information, it asked to be allowed to base officials there.

All of that added up to considerable frustration for the United States.

Q: However, Japan rejected that request to base officials at the prime minister's office on grounds it would violate Japan's sovereignty.

A: I felt Japan's argument was more convincing. It would be unthinkable if Japan made a similar request regarding the White House. Ambassador John Roos at that time became hyperactive because he was under pressure from so many quarters in Washington due to the inability to obtain information.

Q: Was there any possibility of the Japan-U.S. alliance falling into a crisis situation?

A: If the United States had closed its embassy, much like many other nations, and left Tokyo, it would have had incomparable significance. Japan would likely have been thrown into turmoil and left with the feeling that it had been abandoned in a time of emergency. That would have been a major blow to the Japanese public.

Would that have led to the end of the alliance? The issue is not as simple as that. But the trauma from such an event would have been considerable.

The Naval Reactors viewed the situation in a very pessimistic way because it is in charge of nuclear regulation for U.S. aircraft carriers. It would have been difficult even for the top U.S. Navy officer to argue for the importance of the alliance if the Naval Reactors had stated its case strongly.

Even Adm. Robert Willard, the U.S. Pacific Command commander, said at a White House meeting that in a worst-case scenario, the Navy might have to leave Yokosuka. That was how serious the situation was.

That would have been the first instance in the postwar era of the United States removing its troops based in Japan under enormous risk, a possibility that was never considered previously.

In the White House meeting, questions were raised about how difficult it would be from the standpoint of public sentiment and politically to have the U.S. troops return once they had decided to leave. The view was also raised that such a move would represent the beginning of the end of the alliance. The United States really struggled with that question because it was the first such instance in the postwar era.

Q: During the confrontation in the United States between the Navy and State Department, John Holdren, the president's science and technology adviser, entered the picture and decided on what course of action to take. Wasn't that very different from the situation in Japan?

A: That's right. During my interviews, I heard the opinion that there was no telling what would have happened if he had not gotten involved and skillfully led the discussion. In Japan, there is no equivalent post as science adviser to the president.

If one were to seek out someone with a similar position, it might have been Haruki Madarame, the head of the then Nuclear Safety Commission of Japan.

Unfortunately for him, however, after telling Kan that no explosion would occur at the No. 1 reactor, an explosion did actually happen. That led to an immediate drop in the appraisal of Madarame so he was unable to play the role of science adviser.

Because he was head of one agency involved in safety regulation, he also became wrapped up in bureaucratic turf wars. That prevented him from rising above the crisis, as Holdren did.
There is a real need for an independent adviser assisting the president through his expertise and by working solely in the interests of the president. That is because it involves making judgments based on scientific knowledge.

Q: Why was there such a gap in understanding between Japan and the United States over events that had unfolded at the Fukushima plant?

A: On the issue of whether there was water in the storage pool for spent nuclear fuel in the No. 4 reactor, the U.S. view was there was no water. In Japan, Ichiro Takekuro, a senior TEPCO official, also held the view there was no water. However, the official Japanese view was that as of the night of March 16, 2011, there still was water in the pool. That judgment was made on the basis of a photo taken of the pool from a SDF helicopter. The United States viewed the same photo and came to the conclusion that it did not see any water. There was that difference in views.

Although aerial monitoring can show what the temperature is over the pool area, it did not help in determining if there really was water in the pool. While the two sides did not always know what was occurring, the United States was much farther ahead in terms of around-the-clock monitoring to grasp what was happening on the ground.
While similar measurements were conducted by Japanese agencies, such as the science ministry, TEPCO and the Japan Atomic Energy Agency, the methods used were not uniform so there was a low capability for making a comprehensive appraisal. That led to the gap in understanding between the two sides.

Q: In the postscript of your book, you wrote that you wanted to shed light on the lack of independence on the part of Japan. The inability to think outside of the box by those involved in the nuclear energy sector was also evident. That all led to a wavering of the Japan-U.S. alliance. In the ensuing two years, has there been some change regarding that independence on the part of Japan?

A: In the report by the Independent Investigation Commission, the expression was used of "governance conducted by a village mentality and atmosphere."
In a sense, governance means the use and distribution of state power and authority in the most effective way to make the most use of social, human and economic resources to obtain a certain objective.

However, in the case of Japan, it often means only using homogeneous elements and eliminating what is considered heterogeneous. While it may stop short of not recognizing diversity at all, diversity is not always welcomed. Holding an independent viewpoint is not appreciated by others.
In conducting discussions, the conclusion is decided beforehand so that no one loses face. No one is satisfied unless everything is settled beforehand. That is the same for training exercises. There is a tendency not to conduct real training without a predetermined scenario which could lead to everyone being made uncomfortable.

In that way, no one loses face and no one's authority is disparaged. Everything is settled within a predetermined plan and everyone is thinking about everyone else. Risks are considered taboo and not brought out into the open. Risk is also not appraised independently. Because risk is only considered in a

way convenient to management and order, in the end, when it has to come into play, it is of absolutely no use.

Normally, there would be a need to incorporate a much more diverse set of viewpoints as well as heterogeneity, but in the past two years there has been almost no change in that respect.

For example, regarding where to store topsoil contaminated by radiation, while many people may feel in their hearts that it should be kept somewhere in Fukushima Prefecture, if that feeling is actually voiced, discussions quickly come to a halt because some will say that would further hurt and bully the residents of Fukushima.

What has not changed is the ability to minimize loss through a process of bringing out risk into the open, discussing the issues in an objective manner and setting priorities before deciding how to keep the loss at a minimum.

Q: There was failure to conduct real training exercises and SPEEDI (the System for Prediction of Environmental Emergency Dose Information) was not helpful. What lessons can be learned from that?

A: There may have been the acquisition of better hardware over the past two years, but there are still many shortcomings with regard to software. There are doubts as to how much specialization was really improved, as well as whether a command structure was decided on. In terms of enforcement of measures, not much has changed.

A true system to deal with crises has not yet been established.

For example, a major change might be possible if, in deciding to resume operations at nuclear plants, the decision was made to permanently base inspectors from the newly established Nuclear Regulation Authority at the plants and have them work together with officials of the plant operator when a crisis arose.

Another possibility would be to have those who would be actually manning the control rooms at the plants to inspect the new operation room and ask them if they would be satisfied that the changes incorporated would be sufficient even if earthquakes and tsunami led to a failure of the cooling system.

In the end, people will have to screen the changes proposed. Regardless of how skillfully the procedures, system and organization are put together, in the end it is people who determine if those factors actually work.

Those people who would handle operations at the control room should be asked if they feel satisfied that the changes will protect their safety and keep the plant under control.

That sort of thinking of asking the people who will actually use the procedures and systems to screen the changes is not currently found in Japan. Everything is about laws and systems.

But, in the end, it is about people and leadership.

Looking at municipalities in Fukushima Prefecture, those with true leadership have recovered to a much greater degree.

In order to respond effectively to a crisis, priorities have to be set and decisions made on what should be saved first. Only leadership is capable of achieving that. People will have to play central roles in screening whether proposed changes will really work.

However, I have doubts about the extent to which there have been changes in thinking along those lines over the past two years.

(This article was written by Izumi Sakurai and Roy K. Akagawa.)

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He served as correspondent for The Asahi Shimbun in Beijing (1980-81) and Washington (1984-87), and as American General Bureau chief (1993-97). In 1985 he received the Vaughn-Ueda Prize for his reporting on international affairs.

His books in English include "The Peninsula Question" (Brookings Institute, 2007); "Reconciliation in the Asia-Pacific, ed." (USIP, 2003); "Alliance Tomorrow, ed." (Tokyo Foundation, 2001); and "Alliance Adrift" (Council on Foreign Relations Press, 1998, winner of the Shincho Arts and Sciences Award).

His recent articles and papers in English include: "Fukushima in review: a complex disaster, a disastrous response" (Bulletin of the Atomic Scientists, March/April 2012); "Lessons from Japan's nuclear accident" (East Asia Forum, March 26, 2012); "The end of Japanese illusions" (New York Times, March 11, 2012).

He received his B.A. from the University of Tokyo in 1968 and his Ph.D. from Keio University in 1992. He was a Nieman Fellow at Harvard University (1975-76), a visiting Fellow at the Institute for International Economics (1987), a Donald Keene Fellow at Columbia University (2003), and a visiting professor at the University of Tokyo Public Policy Institute (2005-2006).

Areva to ship MOX to Japan - Recipient unknown

Source : The Globe and Mail

http://www.theglobeandmail.com/report-on-business/international-business/asian-pacific-business/areva-plans-first-nuclear-fuel-shipment-to-japan-since-fukushima/article9268609/?cmpid=rss1

Areva plans first nuclear fuel shipment to Japan since Fukushima

MARION DOUET AND RISA MAEDA

PARIS and TOKYO — Reuters

Published Monday, Mar. 04 2013, 3:41 PM EST

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French energy group Areva said it was preparing to send nuclear fuel to Japan for the first time since the Fukushima disaster of March, 2011, a sign of possible restarts of idled Japanese reactors.

The shipment of mixed oxide fuel (MOX) is likely to be controversial in Japan, where public opposition to nuclear power and reactor restarts remains strong in the run-up to the second anniversary of the March 11, 2011 catastrophe.

The fuel will be shipped out of the port of Cherbourg in northern France in early April, according to Greenpeace, an anti-nuclear group. Areva officials declined to comment on the timing.

France's state-owned nuclear group, whose activities range from uranium mining and enrichment to reactors and waste recycling, said it was in talks with Japanese authorities to prepare a shipment, which had been delayed since the Fukushima meltdowns.

"We believe there could be half a dozen reactors which will restart at the end of 2013 (in Japan)," Areva chief executive officer Luc Oursel told a news briefing on Monday.

The long-ruling Liberal Democratic Party of Japan has returned to power and has said it will reassess the previous government's decision to abandon atomic power after Fukushima, the worst nuclear disaster since Chernobyl in 1986.

A 2011 MOX shipment was destined for Kansai Electric Power Co's Takahama nuclear plant west of Tokyo, Chubu Electric's Hamaoka and Tokyo Electric Power's Fukushima on the eastern coast, according to Greenpeace.

"We suspect that part of the shipment is destined to the same recipients," Yannick Rousselet, a Greenpeace official, said.

A spokesman at Kansai Electric said the company had no plans for any MOX fuel shipments at this time but confirmed it had been the intended recipient of the 2011 shipment from France.

Kansai Electric uses MOX fuel in the No. 3 unit at Takahama and has plans in place to start using the fuel in the No. 4 reactor there.

Chubu Electric spokesman Akio Miyazaki denied that the utility will be the recipient of the shipment. Chubu's sole nuclear plant is closed for upgrades to its tsunami defences.

A Tokyo Electric spokesman said the company had no MOX fuel shipment plan in 2011 and no plans to accept the fuel at this time.

Because MOX fuel contains around 7-per-cent plutonium, it is perceived as a national security threat, and special precautions are taken during transportation.

The Fukushima crisis prompted the gradual shutdown of all of Japan's 50 nuclear reactors until there were none left operating in May, 2012, leaving the country without atomic power for the first time since 1970.

Now two reactors at Kansai Electric's Ohi plant near Takahama are the only ones operating in Japan so far, and the country has had to resort to imports of fossil fuel to run power stations, pushing it into a record trade deficit.

The decision last June by the previous Democratic Party of Japan government to restart the two reactors weeks after the last full shutdown galvanized the previously dormant anti-nuclear movement, sparking the biggest demonstrations in decades and contributing to the party's downfall in elections in December.

Media surveys have shown a majority of Japanese want to abandon atomic energy by 2030, if not sooner, which makes it a risky proposition for the new government to restart even the reactors deemed safe.

Utilities and the government, however, are keen to reduce expensive oil and gas imports. Major manufacturers have also called on the government to restart idled nuclear plants.

People's voices on nukes

March 12, 2013

Tokyo: Do you support Japan abandoning nuclear power even if it means increases in electricity prices?

by Mark Buckton

http://www.japantimes.co.jp/community/2013/03/12/voices/tokyo-do-you-support-japan-abandoning-nuclear-power-even-if-it-means-increases-in-electricity-prices/#.UT72FzdD-jQ

Katsuyoshi Tanaka
"Beer sommelier," 28 (Japanese)
Even if it's true that electricity bills will rise, I don't agree with using nuclear power due to the simple fact that it is not 100 percent safe. And, whilst I don't have kids yet, I hope to be a father one day, and I don't want them to grow up in a nuclear-dependent world.
Keika Yu
Self-employed, 33 (Chinese)
I think we should try to decrease our reliance on nuclear power in the wake of what happened two years ago in Fukushima, but admittedly that is difficult to achieve overnight, and all at once, so a step-by-step approach is what's needed, in my opinion.
Terri Nii
Editor, 50s (American)
I think that a comprehensive, long-term [energy] plan is necessary. While nuclear power may be necessary in the short term, new technologies and the development of alternative energy sources should be explored for the medium and long term.
James Platte
Visiting researcher, 33 (American)
A nuclear phaseout could have significant negative effects on the economy, lead to increased fossil fuel imports and greenhouse gas emissions. I think Japan must strive for balance in its energy policy and not tend to extremes of all-in or all-out for any one source.
Azusa Yano
Housewife, 39 (Japanese)
I agree with going nonnuclear, but it would make my life a little more difficult when bills go up. But that is outweighed by my fear of future accidents. As there are still many people affected by the last accident, we should think of them and move toward cleaner energy quickly.
Ben Beech
Photographer/teacher, 34 (English)
I have become opposed to nuclear power after seeing the devastating effects of the 2011 disaster. But for a resource-poor, import-dependent country, nuclear power seems essential to boost the economy. I just hope the pronuclear Liberal Democratic Party puts safety first.

Will Gov't listen to the people's voices?

March 16, 2013

Anti-nuclear' voices are weak as government begins energy policy revision

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201303160055

By MARI FUJISAKI/ Staff Writer

The government began work March 15 to overhaul Japan's energy policy. A panel discussed the value of alternative power sources but pointedly ignored a pledge by the previous government to pull the plug on nuclear power.

It was the first session in a series that brings together experts on a subcommittee of the economy ministry's Advisory Committee for Natural Resources and Energy, which aims by the end of this year to draft a new plan to meet Japan's future energy needs.

"The basic energy plan must clearly show the way toward obtaining a stable supply and lower costs," said Toshimitsu Motegi, minister of economy, trade and industry.

To that, a heckler from the public gallery shouted: "Don't forget to abolish nuclear power."

In 2012, the Democratic Party of Japan-led administration pledged to close all nuclear plants by the end of the 2030s. However, the current administration, led by the Liberal Democratic Party, believes such a move would be wrong.
It aims to abandon the target formally, and, in the short-term, to restart idled nuclear reactors. Both policies could serve as preconditions for the new basic energy plan.

Attitudes toward nuclear power have seesawed in the past couple of years. In June 2010, the DPJ, then a nuclear cheerleader, penciled in boosting atomic power to 50 percent of Japan's total generation by 2030.

Then the disaster at the Fukushima No. 1 nuclear power plant and public clamor for abolition forced the government to make a U-turn, pledging to phase out reactors by the end of the 2030s.

A change of government followed and since the immediate policy is to restart reactors, the subcommittee has no plans to discuss a target percentage for nuclear power in Japan's total energy supply. Nor will it enshrine such a figure in the basic energy plan.

Under the DPJ-led administration, the panel that held such discussions contained a fair number of nuclear skeptics. Broadly speaking, of 25 members of the committee on basic issues, eight were anti-nuclear.

But the Abe administration has tasked the talks to a different team: the general subcommittee, which has only two clearly anti-nuclear members. These are Kazuhiro Ueta, a professor of economics at the graduate

school of Kyoto University, and Kikuko Tatsumi, adviser to the Nippon Association of Consumer Specialists.

In the March 15 meeting, all the 15 members were heard discussing their general attitudes toward energy policy. Few of them called for the abolition of nuclear power.

Instead, many insisted that the subcommittee should consider energy from as broad a viewpoint as possible, including questions such as the possibilities of shale gas, a newly popular energy source in the United States, the potential of renewable energy, and the electricity savings.

Then one member broached the subjects the government seems to want to ignore.

"Nuclear power generation should be decreased as much as possible," said Takeo Kikkawa, a professor of business administration at the graduate school of Hitotsubashi University.

Yuko Sakita, a counselor on environmental issues, added: "The government should give itself the opportunity to listen to the people's opinions."

Ohi plant allowed to stay online till September

March 19, 2013

Oi N-plant to continue operations through Sept.

Jiji Press
http://www.yomiuri.co.jp/dy/national/T130319004241.htm

The Nuclear Regulation Authority said Tuesday that the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Oi nuclear power plant in Fukui Prefecture are allowed, in principle, to continue operations until the next routine check in September.

Although nuclear plants in Japan are required to meet new safety standards, which will come into effect on July 18, before being restarted, the nuclear regulator gave the approval by showing its intention to start checking whether the reactors fall short of any of the new standards in April, when the outline of the standards is drawn up.

The two reactors at the Oi plant in the prefecture are the only nuclear reactors in operation in Japan.

Shunichi Tanaka, chairman of the nuclear regulator, said it may demand the reactors cease operations if serious problems are found.

The government decided to restart the two reactors in June 2012, before the new nuclear regulator was established, and they are therefore legally allowed to continue operations through September, the authority said.

The authority said it will carry out examinations of the two reactors under the new standards at the end of the next routine check.

It proposed starting the safety confirmation process once the new standards' outline becomes clear, because safety requirements are to be raised substantially.

In its implementation plans shown on the day for the new safety standards, the authority demands that nuclear plant operators complete installation of all facilities needed for countermeasures against severe accidents stipulated in the standards.

Ohi nuclear plant will stay online until Sept.

http://www3.nhk.or.jp/daily/english/20130319_19.html

Nuclear regulators say they will allow 2 power reactors in western Japan to continue operation until September. New safety guidelines will be introduced July.

The No. 3 and 4 reactors at Kansai Electric Power's Ohi plant have been the nation's only two reactors online since last August. They cleared the government's earthquake resistance safety test in 2011.

Legally, the utility can operate the reactors until the next regular inspection in September.

Attention is focused on whether the Nuclear Regulation Authority will apply the new safety guidelines to the 2 reactors in July.

At an NRA meeting in Tokyo on Tuesday, Chairman Shunichi Tanaka said after the planned regular inspections are completed the 2 operating reactors will be checked to see whether they meet the new safety requirements.

Early checkup of Ohi plant by NRA

March 21, 2013

Oi reactors to get early NRA check to stay on

Kyodo

http://www.japantimes.co.jp/news/2013/03/21/national/oi-reactors-to-get-early-nra-check-to-stay-on/#.UUofOTf1tEs

To keep the only nuclear plant now online from shutting down, the Nuclear Regulation Authority said Tuesday it will inspect Kansai Electric Power Co.'s Oi atomic facility in Fukui Prefecture according to new safety standards prior to their official July debut.

After a regular meeting at which the watchdog compiled a basic policy for the introduction of the reactor safety standards, NRA Chairman Shunichi Tanaka said the Oi plant's reactors 3 and 4 will be inspected possibly by April.

If no problems are found, the NRA will authorize their continued operation until September, when they have to undergo routine maintenance, Tanaka said.

The NRA may face criticism for giving special treatment to the Oi reactors. Safety checks at the 48 reactors currently idled will only start in July, when the new standards take effect. These checks are required before any reactor can restart.

Reactors 3 and 4 at the four-reactor Oi complex were restarted last July and are currently the only ones online among the 50 surviving commercial reactors in Japan. The 48 others remain shut down amid safety concerns stemming from the meltdown crisis at Tokyo Electric Power Co.'s Fukushima No. 1 power plant triggered by the March 2011 earthquake and tsunami.

Tanaka said the NRA thinks that reactors 3 and 4 at the Oi plant will clear most of the new safety standards. "We cannot deny the possibility that the reactors may not fulfill one or two items" under the new standards, but the NRA intends to closely examine them, he said.

Tanaka added that if the NRA were to require online reactors to shut down every time the regulatory body comes up with new safety standards, it would hinder efforts to introduce new standards based on the latest findings.

The new safety standards are expected to call for the facilities and equipment of offline reactors to undergo checks in two stages.

March 20, 2013

Regulator to check Oi reactors before safety standards take effect

http://mainichi.jp/english/english/newsselect/news/20130320p2g00m0dm005000c.html

TOKYO (Kyodo) -- Japan's nuclear authority suggested Tuesday it will check Kansai Electric Power Co.'s Oi nuclear power plant, currently the only one with online reactors in the country, according to new safety standards, prior to their introduction in July, to avoid suspension of the plant's operations.

Shunichi Tanaka, chairman of the Nuclear Regulation Authority, said after a regular meeting at which the NRA compiled a basic policy for the introduction of the reactor safety standards that the Oi plant's No. 3 and 4 reactors in Fukui Prefecture will undergo safety checks possibly in April or later.

If no problems are found with the Oi reactors, the NRA will authorize their continued operation until September, when they have to undergo routine maintenance, Tanaka said.

The NRA may be criticized for giving special treatment to the Oi reactors because applications for safety checks at the 48 reactors that are currently idled will only start in July, when the new standards become effective. Safety checks under the new standards are required for all reactors to resume operation.

The Nos. 3 and 4 reactors at the four-reactor Oi complex were restarted in July and are currently the only ones online among the 50 surviving commercial reactors in Japan, operation of which was suspended

amid safety concerns following the nuclear crisis at Tokyo Electric Power Co.'s Fukushima Daiichi power plant triggered by the March 2011 earthquake and tsunami.

Tanaka said the NRA thinks that the No. 3 and 4 reactors at the Oi plant are able to clear most of the new safety standards, as countermeasures are being taken. "We cannot deny the possibility that the reactors may not fulfill one or two items" under the new standards, but the NRA intends to closely examine them, he said.

Tanaka added that if the NRA were to require online reactors to suspend operation every time the regulatory body comes up with new safety standards, it would hinder efforts to introduce new standards based on the latest findings.

According to the basic policy of the new safety standards, the facilities and equipment of offline reactors will undergo checks in two stages.

A foregone conclusion

March 20, 2013

Oi nuke reactors to stay online even when new safety standards take effect

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201303200067

THE ASAHI SHIMBUN

Japan's nuclear authority said March 19 it will not order two reactors at the Oi nuclear power plant in Fukui Prefecture to be shut for screening when new safety standards, yet to be finalized, take effect in July.

All of the nation's 50 nuclear reactors were shut down after the meltdowns in Fukushima Prefecture triggered by the March 11, 2011, Great East Japan Earthquake and tsunami. The No. 3 and No. 4 reactors of the Oi plant, operated by Kansai Electric Power Co., are the only ones that have been reactivated.

The government's nuclear industry watchdog, the Nuclear Regulation Authority, is expected to screen the two Oi reactors under the new safety standards, but only after they are shut down in September for regular inspections. As a result, Kansai Electric will likely be able to keep the reactors operating this summer months when power demand peaks.

Offline nuclear reactors will only be allowed to restart after NRA screenings under the new safety standards.

A draft outline, which the NRA presented in late January, said the new standards will make it compulsory for power utilities to step up measures against grave accidents, earthquakes and tsunami.

The underlying idea is one of "back-fitting," which means existing nuclear reactors have to keep up with upgrades in safety standards if they are to be restarted.

The NRA's chairman, Shunichi Tanaka, made clear March 19 that the Oi reactors, the only ones operating in July, will be screened after they have finished regular inspections.

"Back-fitting must be one that can be put into operation without causing confusion as soon as the new standards come into effect," Tanaka said in a "personal proposal" that he presented to a regular NRA meeting, only four months ahead of the scheduled upgrading of the safety standards.

The decision to keep the Oi reactors running and not shut them down in July was reached to avoid setting precedent in which nuclear reactors would have to be taken offline each time new safety measures were required.

The NRA noted it is a general rule in other countries to allow a certain grace period for safety measures to be implemented.

Tanaka emphasized that his proposal is aimed purely at facilitating a smooth introduction of the back-fitting mechanism.

"Back-fitting would be impracticable without a grace period," he said. "The mechanism is a trump card in that it enhances the safety of nuclear reactors in Japan."

Tanaka's latest comments suggest he is backpedaling on the issue. In January, he said the NRA could order the Oi reactors to be shut down before September, saying it cannot treat them as exceptions.

The Abe administration has overturned the previous government's pledge to pull Japan out of nuclear power generation by the 2030s.

Power utilities have griped to the NRA that the creation of multiple safety mechanisms, which will be obligated under the new safety standards, will pose too much burden on them.

A senior NRA official denied that the lobbying had influenced the NRA's latest decision.

"The NRA's independence is guaranteed by law," the official said. "And Tanaka is not someone who is easily swayed."

Tanaka did say, however, the Oi nuclear reactors will undergo preliminary, advance inspections that will start around mid-April and last for three months. Those inspections will be designated an administrative procedure, not statutory screening, because the new safety standards will not have taken effect.

During a March 19 news conference, Tanaka emphasized the NRA could call for shutdowns of the Oi reactors if serious safety problems are found. But he did not specify the nature of such problems.

A senior Kansai Electric official was clearly thrilled by the NRA's decision.

"While we have made an array of requests (to politicians), I never expected they would come true so soon," the official said.

The power industry faced its darkest hour following the disaster at the Fukushima No. 1 nuclear power plant two years ago. But everything changed when Abe's pro-nuclear Liberal Democratic Party defeated the Democratic Party of Japan by a landslide in December's Lower House election.

The NRA remains a thorn in the side of the government. It has stood in the way of reactor restarts by pointing out the presence of possible active geological faults beneath nuclear plant sites and by demanding costly safety measures.

The power industry has waged an all-out offensive against the NRA, while stepping up its lobbying of LDP politicians.

"The LDP cannot likely afford to make any bold moves until the Upper House election in July," said one source in the Federation of Electric Power Companies of Japan. "The approval for Oi has virtually set the stage for the restarts of other reactors."

Local government leaders responded by calling for early safety screenings under the new standards.

The mayor of Oi, Shinobu Tokioka, called on the NRA to provide assurances that the reactors there will operate safely.

"Residents cannot have a peace of mind as long as they don't know if the new standards are being met," Tokioka said March 19.

"I only want thorough screenings," said Masaaki Fukui, mayor of Takashima in neighboring Shiga Prefecture.

Nuclear opponents in municipalities hosting nuclear plants criticized the NRA decision.

"The logic behind it prioritizes the economy over life," said Harumi Kondaiji, a 62-year-old anti-nuclear advocate and city assembly member of Tsuruga, Fukui Prefecture. The body is dominated by atomic energy proponents. "This marks the first step toward the erosion of public trust in the NRA."

"The situation is no different from the former Nuclear and Industrial Safety Agency's cozy relationship with the power industry," said Teruyuki Matsushita, a 64-year-old anti-nuclear activist who formerly served on the town assembly in Mihama, Fukui Prefecture.

(Ryuta Koike, Naoki Tsuzaka and Kentaro Uechi contributed to this article.)

Abe will make "comprehensive decision" on restart

March 24, 2013

Abe to comprehensively decide on restart of reactors in Japan

http://mainichi.jp/english/english/newsselect/news/20130324p2g00m0dm087000c.html

TOKYO (Kyodo) -- Prime Minister Shinzo Abe said Sunday he will make a "comprehensive decision" on whether to restart reactors in Japan, noting the need for nuclear power.

"I will decide after assessing the safety" of resuming the reactors, Abe told reporters during a visit to Koriyama, Fukushima Prefecture, to check on the progress of reconstruction in areas affected by the March 2011 earthquake, tsunami and nuclear disasters.

At the same time, the prime minister said, "Reconstruction will be hard without an inexpensive and stable source of power," vowing to dispel "harmful rumors" stemming from the nuclear disaster at the Fukushima Daiichi power plant.

Abe visited farmers in Koriyama, who have been hit by public concern over the radioactive contamination of their products, and the largely deserted shopping district of the town of Namie, also in Fukushima.

Receiving a request from Namie Mayor Tamotsu Baba for the swift restoration of infrastructure, Abe assured him that rebuilding work will be accelerated.

The entire town is currently designated as a no-go zone, but the boundaries of the restricted area will be redrawn April 1, with residents to be allowed to temporarily visit some parts during the daytime.

Abe also visited the town of Tomioka.

As a prime minister, Abe visited disaster-hit Iwate and Miyagi prefectures in February. He last visited Fukushima in December, just after he took office.
March 24, 2013(Mainichi Japan)

Japanese Plutonium

[I seem to remember that Japan has about 45 tons of plutonium. Who else deals with plutonium apart form utilities ?
These figures have to be checked]

March 26, 2013

Japanese power companies possessed over 26 tons of fissile plutonium at end of 2012

http://mainichi.jp/english/english/newsselect/news/20130326p2a00m0na006000c.html

Japan's 10 major power companies possessed a combined 26.5 tons of fissile plutonium as of the end of last year, the Federation of Electric Power Companies reported at a regular meeting of the Japan Atomic Energy Commission on March 26.
Companies are not likely to formulate plans covering the use of this plutonium anytime in the near future, the federation says. This is because there are no immediate prospects for restarting more nuclear reactors in Japan in the wake of the Fukushima nuclear crisis, and plans for pluthermal nuclear power generation using plutonium as fuel have run into difficulties.
The Federation of Electric Power Companies reported that Kansai Electric Power Co. possesses 8.7 tons of fissile plutonium, Tokyo Electric Power Co. has 8 tons, and Chubu Electric Power Co. has 2.6 tons. The figures include companies' overseas stocks of plutonium.
Fissile plutonium can also be used in nuclear weapons, and a surplus without designation of where it will be used could raise concerns in international society. The federation plans to introduce pluthermal systems at 16 to 18 nuclear reactors in the future.

Construction of new nuclear plant abandoned

March 28, 2013

Tohoku Elec. to cancel plan for new nuclear power plant in Fukushima

http://mainichi.jp/english/english/newsselect/news/20130328p2g00m0dm087000c.html

TOKYO (Kyodo) -- Tohoku Electric Power Co. said Thursday it has decided to cancel its plan to build a new nuclear power station in Fukushima Prefecture, where antinuclear sentiment gained ground in the aftermath of the nuclear disaster at the Fukushima Daiichi power plant.

Tohoku Electric had been preparing to build the Namie-Odaka nuclear power plant on a tract of land straddling the city of Minamisoma and the town of Namie, both in Fukushima Prefecture, on the Pacific coast.

This is the first cancellation by a Japanese utility firm of a plan to build a new nuclear power plant following the onset of the March 2011 nuclear disaster at the Fukushima Daiichi power plant operated by Tokyo Electric Power Co.

Tohoku Electric, which is based in Sendai, the biggest city in northeastern Japan's Tohoku region and the capital of Miyagi Prefecture, is expected to remove the Namie-Odaka plant construction project from its management program for fiscal 2013 starting April 1.

Tohoku Electric, which first unveiled the plan for the new plant in 1968, had been making efforts to acquire some 150 hectares, or 1.5 million square meters, of land in the two municipalities to build the Namie-Odaka plant, but faced difficulties.

The planned site was flooded by the huge tsunami following the magnitude 9.0 earthquake on March 11, 2011, that devastated many parts of northeastern Japan and has been designated an evacuation zone.

It is located some 10 kilometers north of the disaster-stricken Fukushima Daiichi plant, which is located in the towns of Okuma and Futaba, Fukushima Prefecture.

Following the disaster at the Fukushima Daiichi plant, the Fukushima prefectural government declared it was pulling out of nuclear power generation. The Minamisoma and Namie municipal assemblies have passed resolutions urging Tohoku Electric to call off its plan to build the Namie-Odaka nuclear power plant.

Tohoku Electric had planned to start construction in fiscal 2016, starting April 1 that year, of the plant's No. 1 reactor, which would be a boiling water-type reactor with an output capacity of 825,000 kilowatts.

Tohoku Electric is expected to retain a separate plan to build the No. 2 reactor at its Higashidori nuclear power plant in the village of Higashidori, Aomori Prefecture, on the northern tip of Japan's largest main island of Honshu.

Currently, Tohoku Electric operates two reactors -- one at the Onagawa nuclear power plant in the town of Onagawa, Miyagi Prefecture, and the other at the Higashidori plant, but they have been shut down in the aftermath of the Fukushima disaster.

Tokyo Electric, known as TEPCO, is also building a reactor at the Higashidori plant.

Tohoku Electric supplies electricity to six prefectures in northeastern Japan -- Aomori, Iwate, Akita, Yamagata, Miyagi and Fukushima -- plus Niigata Prefecture on the Sea of Japan coast.

Tohoku Electric to abandon planned nuclear plant in Fukushima

Kyodo

http://www.japantimes.co.jp/news/2013/03/28/national/tohoku-electric-to-abandon-planned-nuclear-plant-in-fukushima/#.UVPsoTf1tEs

SENDAI – Tohoku Electric Power Co. is planning to withdraw its plan to build a new nuclear plant in Fukushima Prefecture, local government sources said Thursday, in the first such move since the March 2011 nuclear disaster.

Tohoku Electric apparently decided it was impossible to go through with the construction plan amid strong local opposition following the triple meltdowns at the Fukushima No. 1 plant. The utility will exclude the plan from its supply plan for fiscal 2013 to be released later Thursday.

Tohoku Electric has been in the process of acquiring around 150 hectares of land in the town of Namie and Odaka Ward, Minamisoma, but has faced strong local opposition.

The construction site was flooded with tsunami after the Great East Japan Earthquake, and the area was designated as a no-go zone.

Since the nuclear crisis erupted the same month, Fukushima Prefecture has supported the phase out of atomic energy while the municipal assemblies of Namie and Minamisoma have passed resolutions to stop attracting nuclear power plants to the area, making it difficult for Tohoku Electric to proceed with the construction plan.

Japan's utility scraps nuclear plant construction

http://www3.nhk.or.jp/daily/english/20130328_28.html

A Japanese electric power company has officially scrapped a plan to build a new nuclear power plant near the site of the 2011 nuclear disaster in Fukushima Prefecture.

Tohoku Electric Power Company said on Thursday that it will cancel the construction of the Namie-Odaka plant that was to be built about 10 kilometers north of the crippled Fukushima Daiichi plant.

The project met strong opposition from local community assemblies following the nuclear accident at Fukushima Daiichi operated by Tokyo Electric Power Company.

Tohoku Electric disclosed in 1968 a plan to build the nuclear facility in part of Namie Town and the Odaka district of Minamisoma City on the Pacific coast.

The areas were hit hard by the earthquake and tsunami in 2011.

The president of Tohoku Electric, Makoto Kaiwa, conveyed the decision to Fukushima Governor Yuhei Sato on Thursday.

Kaiwa said that the construction is not appropriate given that many evacuees are still forced to live in temporary housing after the accident.

The governor said that the decision is absolutely natural in the current situation and urged the utility to make good use of the planned construction sites for the reconstruction of Fukushima.

Tohoku Electric Power supplies electricity to seven northern prefectures on Japan's main island of Honshu.

The utility has two nuclear power stations in Onagawa, Miyagi Prefecture and Higashidori, Aomori Prefecture. But they remain shutdown after the Fukushima disaster.

This is the first scrapping of a plan to build a nuclear power plant by a Japanese power company not directly involved with Fukushima Daiichi.

Scrapping Nuke plant project

March 29, 2013

Tohoku Electric scraps N-plant plans

http://www.yomiuri.co.jp/dy/national/T130328004281.htm

SENDAI (Jiji Press)--Tohoku Electric Power Co. announced Thursday it has decided to scrap a nuclear power plant project, the first domestic firm to do so since the nuclear crisis at Tokyo Electric Power Co.'s Fukushima No. 1 Nuclear Power Plant in March 2011.

The project, launched in 1968, called for building a nuclear power plant on a site straddling the towns of Namie and Minami-Soma, both in Fukushima Prefecture.

The area was contaminated with radioactive material from the TEPCO plant, which suffered an unprecedented triple meltdown following the Great East Japan Earthquake and tsunami. Due to the incident, the two municipalities shifted their stance toward the construction of the plant.

Tohoku Electric reached the decision at a board meeting Thursday, based on the judgment that it can no longer stick to the project given the strong opposition, officials said.

Another factor behind the decision may be that the planned site of the facility, called the Namie-Odaka nuclear plant, was submerged by tsunami after the March 2011 earthquake.

Tohoku Electric President Makoto Kaiwa visited Fukushima Gov. Yuhei Sato to inform him of the company's decision. "It is not appropriate" to push ahead with construction taking into consideration the concerns of local residents and the difficulty in realizing it in the planned location, Kaiwa told Sato.

Tohoku Electric had planned to build an 825,000-kilowatt plant. Construction was to begin in fiscal 2016 with operations slated to start in fiscal 2021.

North Korea to restart nuclear reactor

April 2, 2013

N.Korea may restart disabled nuclear reactor

http://www3.nhk.or.jp/nhkworld/english/news/20130402_31.html

North Korea says it is considering restarting the graphite-moderated test reactor at Nyongbyon. The reactor was disabled in 2008 under the six-party agreement.

Restarting the reactor could lead to North Korea extracting plutonium, which could be used in nuclear weapons.
Apr. 2, 2013 - Updated 05:39 UTC

North Korea vows to restart nuclear facilities

http://mainichi.jp/english/english/newsselect/news/20130402p2g00m0in042000c.html

SEOUL, South Korea (AP) -- North Korea vowed Tuesday to restart a nuclear reactor that can make one bomb's worth of plutonium a year, escalating tensions already raised by near daily warlike threats against the United States and South Korea.

The North's plutonium reactor was shut down in 2007 as part of international nuclear disarmament talks that have since stalled. The declaration of a resumption of plutonium production -- the most common fuel in nuclear weapons -- and other facilities at the main Nyongbyon nuclear complex will boost fears in Washington and among its allies about North Korea's timetable for building a nuclear-tipped missile that can reach the United States, technology it is not currently believed to have.

A spokesman for the North's General Department of Atomic Energy said that scientists will begin work at a uranium enrichment plant and a graphite-moderated 5 megawatt reactor, which generates spent fuel rods laced with plutonium and is the core of the Nyongbyon nuclear complex.

The unidentified spokesman said the measure is part of efforts to resolve the country's acute electricity shortage but also for "bolstering up the nuclear armed force both in quality and quantity," according to a statement carried by the official Korean Central News Agency.

Pyongyang conducted its third nuclear test in February, prompting a new round of U.N. sanctions that have infuriated its leaders and led to a torrent of threatening rhetoric. The United States has sent nuclear-capable bombers and stealth jets to participate in annual South Korean-U.S. military drills that the allies call routine but that Pyongyang claims are invasion preparations.

North Korea has declared that the armistice ending the Korean War in 1953 is void, threatened to launch nuclear and rocket strikes on the United States and, most recently, declared at a high-level government assembly that making nuclear arms and a stronger economy are the nation's top priorities.

The threats are seen as efforts to force policy changes in Seoul and Washington and increase domestic loyalty to young North Korean leader Kim Jong Un by portraying him as a powerful military force.

"North Korea is keeping tension and crisis alive to raise stakes ahead of possible future talks with the United States," said Hwang Jihwan, a North Korea expert at the University of Seoul. "North Korea is asking the world, 'What are you going to do about this?'"

North Korea added the 5-megawatt, graphite-moderated reactor to its nuclear complex at Nyongbyon in 1986 after seven years of construction. The country began building a 50-megawatt and a 200 megawatt reactor in 1984, but construction was suspended under a 1994 nuclear deal with Washington.

North Korea says the facility is aimed at generating electricity. It takes about 8,000 fuel rods to run the reactor. Reprocessing the spent fuel rods after a year of reactor operation could yield about 7 kilograms of plutonium -- enough to make at least one nuclear bomb, experts say.

Nuclear bombs can be produced with highly enriched uranium or with plutonium. North Korea is believed to have exploded plutonium devices in its first two nuclear tests, in 2006 and 2009.

In 2010, the North unveiled a long-suspected uranium enrichment program, which would give it another potential route to make bomb fuel. Uranium worries outsiders because the technology needed to make highly enriched uranium bombs is much easier to hide than huge plutonium facilities.

But experts say plutonium is considered better for building small warheads, which North Korea needs if it is going to put them on missiles. Analysts say they don't believe North Korea currently has mastered such miniaturization technology.

Scientist and nuclear expert Siegfried Hecker has estimated that Pyongyang has 24 to 42 kilograms of plutonium -- enough for perhaps four to eight rudimentary bombs similar to the plutonium weapon used on Nagasaki in World War II.

It's not known whether the North's latest atomic test, in February, used highly enriched uranium or plutonium stockpiles. South Korea and other countries have so far failed to detect radioactive elements that may have leaked from the test and which could determine what kind of device was used.

"North Korea is dispelling any remaining uncertainties about its intention for developing nuclear arms. It is making it clear that its nuclear arms program is the essence of its national security and that it's not negotiable," said Sohn Yong-woo, a professor at the Graduate School of National Defense Strategy of Hannam University in South Korea.

"North Korea is more confident about itself than ever after the third nuclear test," Sohn said. "That confidence is driving the leadership toward more aggressive nuclear development."

Akio Matsumura at the New York Academy of Sciences

What Did the World Learn from the Fukushima Nuclear Accident?

http://akiomatsumura.com/2013/03/crisis-and-opportunity-politics-in-japan-and-the-united-nations-2.html#comments

March 11, 2013

Akio Matsumura gave this speech at the conference "The Medical and Ecological Consequences of the Fukushima Nuclear Accident" sponsored by the Helen Caldicott Foundation and Physicians for Social Responsibility at the New York Academy of Medicine. You can read a translation in German here.

I would like to express my thanks to Helen and the New York Academy of Medicine for organizing this timely event.

I'd also like to take this opportunity to express my appreciation to the many participants who have worked so hard to increase the public awareness of the risks of Fukushima. In the realm of nuclear power, science must be linked to political action. And so we are here today.

I have worked at the United Nations and other international organizations in London and New York for 40 years, and I have organized and attended many international conferences, starting with the UN Population Conference in Bucharest, Romania, in 1974. Over the years we've discussed in public and private what you might consider the defining issues of the 20th century: population, environment, social economic issues, disarmament, women, children, and democracy.

But we never discussed how one accident in a nuclear power plant could affect our lives for several hundred years, or how we lack a permanent nuclear waste repository, one that could store our spent fuel rods for one hundred thousand (100,000) years. Discussions of political systems and human rights now seem shortsighted when compared to a potential nuclear disaster that could affect our descendants for perhaps twenty thousand years. Twenty thousand years. Twenty thousand years ago humans were building tools in the Stone Age. Can you imagine?

Politics in Japan

I worry about the growing risk to children who are being continually exposed to radiation. Many of these children will suffer from infectious diseases, and many will develop thyroid, lung, or breast cancers sometime in their lives. According to Helen, over one million people have died of these diseases as a result of the Chernobyl accident. Others here have said that Fukushima so far has emitted more radiation than Chernobyl.

In my two visits to Japan last year, I asked the party leaders I met their thoughts on the unstable state of the reactors and the thyroid cancer risks in children. Few had any idea of the spent fuel rods, or of their high levels of radiation, or that they sat one hundred (100) feet up in a damaged structure. Fewer still were thinking about public health.

Undoubtedly, some politicians are aware of the potential catastrophe of Reactor 4. However, they showed their surprise when I told them that Reactor 4 has ten times more Cesium 137 than Chernobyl released, and 5000 times what the Hiroshima bomb released seven decades ago. They couldn't hide their shock when I told them that all of the spent fuel assemblies at Fukushima Daiichi contain 85 times more Cesium than Chernobyl, and 50,000 to 100,000 times what was released on Hiroshima. I thank Bob Alvarez for making these important calculations. I knew we had found the right message when we shared the article on our blog and it was read more than 1 million times in just a few days. These same political leaders wondered why they had heard none of this from TEPCO.

Last April Ambassador Murata and I met with Osamu Fujimura, who held the powerful position of Chief Cabinet Secretary. He assured us he would convey our message to Prime Minister Noda before he met with President Obama on April 30. Both leaders might have discussed Fukushima at their private meeting, but the idea for an independent assessment team and international help for the disaster were not mentioned publicly.

This was a mistake. The government's first responsibility is the security of its citizens. But instead of reaching out to independent scientists they only consulted TEPCO, focusing on minimizing the public relations fallout instead of the nuclear radiation fallout. In any country, governments and industry will keep sensitive information close after a disaster, but Japan's actions have been near autocratic.

Mixed Messages

Because of the government's unwillingness to share accurate information, Japanese citizens must rely on a scrutinizing press corps for any useful information about the accident. Unfortunately, as with the politicians, I found the journalists in Japan to be complacent and clueless. There is an amazing disconnect in Japan between the reality of Fukushima and the fictional image that the public has in mind. The press has failed in their job to close this gap. Japanese reporters, with several exceptions, have refused to investigate or ask the hard questions about Fukushima. The New York Times' Tokyo Bureau Chief, Martin

Fackler, provides a thorough look at the media's club mentality and aversion to investigation in his excellent book Credibility Lost: The Crisis in Japanese Newspaper Journalism after Fukushima.

To be sure, the government has not made their job easy. TEPCO says when and what information will be released, like when the site would open to the press and when the long video of the accident would be released. The accuracy of government medical reports is in question. But without anyone to ask those questions, the public is left behind a smokescreen, operating on half-truths.

The public has lost sight of the most urgent needs with regard to Fukushima. Its efforts to end nuclear power in Japan are inspiring but miss the mark; the protests are the result of fear, frustration, and uncertainty. Prime Minister Abe will guide Japan forward with a continuing dependence on nuclear energy. He will continue to restart Japan's nuclear reactors. Of all the politicians I spoke with, he was the least receptive to my message of the danger for the country's children or of Reactor 4's spent fuel rods. I feel sad that we must wait for the sacrifice of tens of thousands of children to come to light for the public to realize the disaster at hand.

I am surprised that one group has not taken forceful action. The spiritual roots of Japan sit firmly with respect for the natural environment. The Shinto and Buddhist influences in Japanese life have bestowed a sacred importance on the country's natural beauty and resources. Japan's environment has not known a bigger threat than that presented by the four damaged reactors at Fukushima. The country's spiritual leaders should be active in refocusing the country's concern toward the ongoing risks.

Are We Doing Enough?

We can see that Japan is ill-equipped to handle the ongoing problems of Fukushima. But this is more than a Japanese problem. It has and will affect all of us.

Are we doing enough?

For the past two years I have been warning of the potential catastrophe of Reactor 4 and the cancer crisis awaiting our children. There are four major areas of concern that could cause a bigger disaster:

1. In reactors 1, 2 and 3, complete core meltdowns have occurred. Japanese authorities have admitted the possibility that the fuel may have melted through the bottom of the reactor core vessels. It is speculated that this might lead to unintended criticality (resumption of the chain reaction) or a powerful steam explosion – either event could lead to major new releases of radioactivity into the environment.

2. Reactors 1 and 3 are sites of particularly intense radiation, making those areas unapproachable. As a result, reinforcement repairs have not yet been done since the Fukushima accident. The ability of these structures to withstand a strong aftershock earthquake is uncertain.
3. The temporary cooling pipes installed in each of the crippled reactors pass through rubble and debris. They are unprotected and highly vulnerable to damage. This could lead to a failure of some cooling systems, causing overheating of the fuel, further fuel damage with radioactive releases, additional hydrogen gas explosions, possibly even a zirconium fire and fuel melting within the spent fuel pools.
4. Reactor No. 4 building and its frame are seriously damaged. The spent fuel pool in Unit 4, with a total weight of 1,670 tons, is suspended 100 feet (30 meters) above ground. TEPCO plans to remove the spent fuel rods in the coming years, but if there is another massive earthquake nearby, this may not be fast enough. If this pool collapses or drains, the resulting blast of penetrating radiation will shut down the entire area.

These plants represent unprecedented international security risks. I view this as a problem for human civilization.

Have I been overestimating the potential catastrophe? Your calculations tell me there is a much higher probability of another disaster than one might think. So why are we allowing ourselves to take such a large risk – allowing our future to depend solely on chance and the goodwill of TEPCO and the Japanese government?

And if another earthquake and further meltdown are indeed possible at Fukushima, I must ask what so many Japanese leaders have asked me: why does the United States stand by silently?

It's in the United States interest to take public action to prevent future disasters. High quantities of radiation reaching the West Coast would ruin our food crops. The geopolitical tension that would arise after such a disaster and ensuing evacuation would strain already difficult relationships in East Asia. And, finally, we are vulnerable to similar threats at home: a similar disaster could happen in the U.S. or elsewhere in the world with a nuclear reactor or temporary spent-fuel storage facility.

There are more than four hundred (400) nuclear power plants online today, more than one hundred of which are in the United States. Several sit near fault lines. Others are old. And then there are the twenty four temporary spent-fuel storage facilities, holding rods like those suspended above Reactor 4. Many are only warehouses. Building a nuclear power plant might be rocket science, but maintaining the function of cooling system is not. Yet these systems are so delicate and prone to failure. As we've seen in the last months at Fukushima, something as simple as the corrosion of pipelines can set off a meltdown. It's time we regard nuclear power plants and storage facilities as security risks. Nuclear security is not an issue where the president should lead from behind.

Steps for International Action

In the case of a nuclear accident here or in any other country, you can be sure the government and nuclear power industry's reactions will mirror Japan's. They will control all information and access to the nuclear site, claiming national security concerns.

The right to keep information from the public after a disaster must be a privilege for the government, not an expectation. We need to establish now what level of access is necessary for scientists and reporters and what level of government discretion is necessary for national security. We need a framework for this agreement.

For now, this burden lies with the investigators. And we are not well organized. Even outside of a disaster scenario, there is no link between scientists and politicians – this is true here in the United States too! I was shocked to learn in the past two years how much trouble our top scientists have when contacting senators and congressmen. I didn't find this to be the case twenty years ago.

A continuous and open line of communication between independent scientists, engineers, journalists, and politicians is essential to handling another nuclear disaster effectively.

I would like to ask all of you to persuade your government to share with the Japanese government your concern with the potential catastrophe and its international security and health issues.

I conclude with three proposals for international action:

5. A fact finding mission to Fukushima made up of a select group of lawmakers from the United States, Russia, Ukraine, Germany, England, France and Canada;
6. A special program established by UNICEF and the WHO to take extra measures to save the children who are being continually exposed to radiation in coming decades;
7. A mechanism for nuclear scientists and medical doctors to collaborate and develop new technologies and medicines to treat the illnesses associated with radiation exposure.

When Prince Charles of England spoke last year at the Rio +20 Conference he said with regard to climate change, "It is, perhaps, a trait of human nature to act only when the worst happens, but that is not a trait we can afford to rely on here." He could have been speaking about Fukushima.

I again praise Helen and the New York Academy of Medicine for coordinating this event.
I thank you very much for your attention.

Separating power generation and distribution - But when ?

April 3, 2013

Pressure from industry and LDP waters down power reform proposal

http://mainichi.jp/english/english/newsselect/news/20130403p2a00m0na013000c.html

The Cabinet approved a proposal April 2 to drastically overhaul the country's power system. The reforms would include the splitting of major utilities' power generation and distribution into separate companies, and the complete liberalization of electricity supply to low-volume users such as private households.

While this would bring down regional monopolies of major utilities over household supply, and likely bring electricity prices down through increased competition, there is a deep-rooted wariness toward such change within the power industry and the ruling Liberal Democratic Party (LDP), casting a shadow on whether reform that puts consumers first will actually be realized.

Meanwhile, Economy, Trade and Industry Minister Toshimitsu Motegi emphasized the positive effects that could be anticipated from power reform at a press conference April 2. "Reform will expand the range of choices for consumers. Ultimately, it will lead to the lowering of electricity prices."

Also on April 2, Prime Minister Shinzo Abe ordered that "the reform policy be implemented swiftly, without omission," at the Headquarters for Japan's Economic Revitalization.

The proposed reforms will help establish an environment conducive to non-major power generation companies to enter the market, thereby encouraging competition that will lead to the streamlining of power company management and lowered electricity prices.

By demonstrating a commitment to reform through the announcement of plans to completely liberalize power retail and splitting off major utilities' distribution divisions, Abe hopes to maintain support for his administration while reviving the Japanese economy.

In particular, the separation of power generation and distribution is a main pillar of the proposed reforms that major power companies have long opposed.

Because companies newly entering the power generation business do not have the facilities to distribute electricity to customers, they borrow such networks from the major utilities that do. However, there is deep-rooted discontent with the arrangement among the newer power generators, who argue that prices for using transmission networks are high and the manner in which they are set murky, and also that the major utilities cite insufficient transmission volume as a reason to prevent the newer companies from using the networks to their satisfaction.

As such, the current system in which power generation and transmission are carried out by the same utilities has been viewed as an impediment to the emergence of new power companies. A senior official at the Ministry of Economy, Trade and Industry says that separating power generation and transmission will allow the use of transmission networks by new businesses, and "eliminate barriers to competition."

There is no guarantee, however, that the reforms will unfold smoothly. Objections to the separation of power generation and distribution erupted at a March 18 meeting of the LDP's Economy, Trade and Industry Division. Some participants took an adamant stand against such a move, while others argued that it was an obvious attempt to push through with reforms at a time when major utilities have been forced to raise prices and don't have much of a say.

The administration originally indicated in its proposal that the submission of related bills would take place in 2015, but was forced to revise the phrasing to say it will "aim to submit (related bills) in 2015." Additionally, at a subsequent General Council meeting, party members demanded that the government fulfill four conditions, including putting its utmost efforts into restarting the country's nuclear reactors and stabilizing the finances of Tokyo Electric Power Co., operator of the stricken Fukushima nuclear plant.

In the backdrop of this resistance is the political power amassed by major power companies who have built up close ties with regional economies through massive capital investments. These major utilities opposed past debates on liberalization by arguing that threats to their finances due to increased competition could pose problems for the stable supply of electricity. By controlling the networks necessary in bringing power from the generators to consumers, and agreeing to "liberalize" to new power companies on conditions favorable to themselves, they have kept competition to a minimum.

Indeed, the market share of new power companies supplying electricity to corporations and factories -- for which liberalization has already taken place -- is a mere 3.5 percent. Moreover, there has been little effort on the part of major utilities to win over the customers of their competitors. One insider admits that major utilities want to avoid competition, saying, "If certain customers got lower prices, other customers would demand the same, and there would be no end to it."

Regarding when power generation and distribution would be separated, Motegi denied the administration had backed down from its original intent by changing the phrasing in its proposal, saying, "It will take place seven years from now. Whether or not we say we will 'aim' to accomplish it then makes no difference."

According to a senior METI official, however, subtle changes in the proposal can have significant effects on the extent and timing of reform. "The administration has retreated to a level where, if the separation of generation and distribution is overturned later, no one can complain about it."

Restart Fukushima No.2?

April 6, 2013

Abe says restarting Fukushima No. 2 plant not easy

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201304060031

THE ASAHI SHIMBUN

Prime Minister Shinzo Abe said on April 5 that it would be "difficult" to restart the idled Fukushima No. 2 nuclear power plant, located about 12 kilometers south of the disaster-stricken Fukushima No. 1 plant.

"Even if safety is secured (in the No. 2 plant), it is difficult to restart its operations without the understandings of local residents. It is not easy with evacuees still unable to return to their hometowns," Abe said at a Lower House Budget Committee.

Fukushima Governor Yuhei Sato and the Fukushima prefectural assembly are demanding that all four reactors at the No. 2 plant be decommissioned.

However, Abe did not give a clear answer on whether the plant should be decommissioned, saying only that it is an issue for the plant's operator, Tokyo Electric Power Co., to decide.

Also at the budget meeting, Minister of Economy, Trade and Industry, Toshimitsu Motegi, said: "Safety (of the No. 2 plant) will be judged by the Nuclear Regulation Authority from a professional and independent standpoint. But, given the feelings of the people in Fukushima Prefecture, it is difficult to consider (the restart of the plant) in the same way as other nuclear power plants."

Meltdowns occurred at the Fukushima No. 1 nuclear power plant after power

Energy independence

April 6, 2013

News Navigator: What is energy independence?

http://mainichi.jp/english/english/perspectives/news/20130406p2a00m0na002000c.html

The Mainichi answers common questions readers may have about energy independence.

Question: What is energy independence?

Answer: Energy independence is when an area produces at least the amount of energy that is used in that district. It means producing heat and energy with that area's resources, and not importing crude oil, coal, gas or other resources from other areas or countries. In Japan, the wholesale electricity market was freed up in 1995, allowing local energy producers to sell electricity to power companies. Some rural municipalities that have noticed that energy production can be profitable have focused efforts there.

Q: Why rural areas?

A: Because unlike urban areas, rural districts have broad access to renewable energy resources like solar, wind and biomass. Since the Fukushima No. 1 Nuclear Power Plant disaster, the debate on energy diversification has gained strength. In July last year, in order to encourage the development of renewable energy, the national government began a system of buying energy produced by corporations, individuals and local municipalities at high prices. Many municipalities have begun aiming to join the market to gain from this system.

Q: Are areas stricken by the Great East Japan Earthquake also trying to get involved with renewable energy?

A: In Higashimatsushima, Miyagi Prefecture, where over 1,000 people died in the disaster, the city government is proceeding with a plan to install light-passing solar panels over rice paddy fields to allow both rice-growing and energy production at the same time, as well as plans to use wind power and wood biomass. The plans are hoped to help with economic recovery from the disaster. Municipalities in Fukushima Prefecture are also working on recovery plans that incorporate renewable energy.

Q: What results are the municipalities hoping for?

A: If rural areas can produce the electricity they use, they will no longer have to pay power companies for it. They also hope to create jobs involving power generation. It could help stem population loss and bring more economic activity to the area.

Q: Is energy independence in urban areas possible?

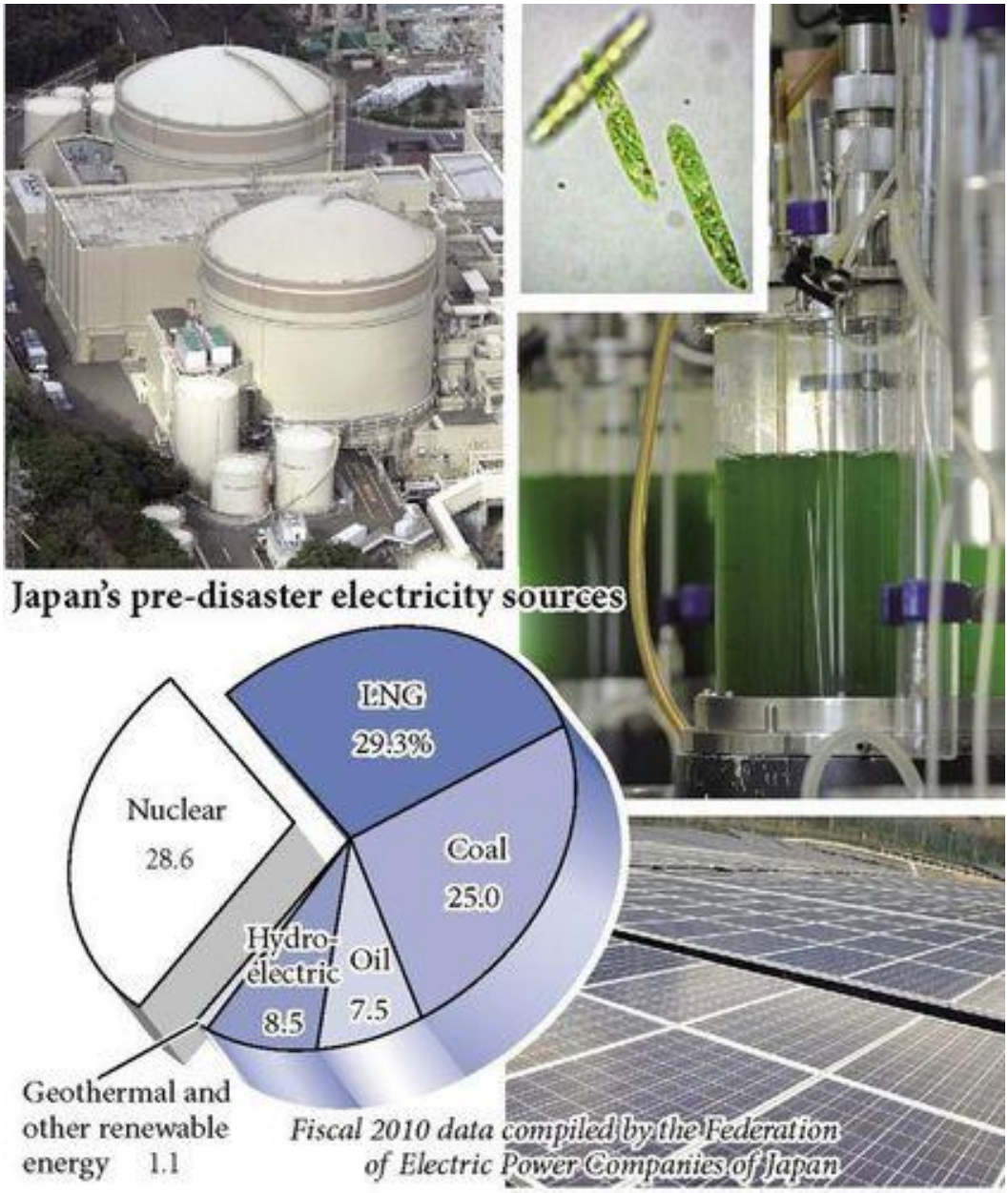
A: It would be difficult. Not all areas have populations and sizes well-suited to energy independence. For example, Chiyoda Ward in central Tokyo has only around 50,000 people at night, but due to the heavy presence of government buildings, offices and commercial structures, there are around 900,000 people there during the day. The energy needs of a major city are great and cannot be covered by renewable energy alone. (Answers by Seiya Tateyama, Business News Department)

Nukes are there to stay

April 8, 2013

Recharging Japan / Nuclear energy unlikely to be challenged anytime soon

http://the-japan-news.com/news/article/0000114862



The Yomiuri Shimbun

[Tetsuro Yamada and Koichi Yasuda / The Yomiuri Shimbun]

The following is the sixth installment of a series of articles exploring ways the nation's vitality can be increased.

Green water was slowly being mixed in experimental tanks on Okinawa Prefecture's Ishigakijima island.

What made the water green were euglena--single-celled microorganisms commonly found in puddles and ponds. Euglena are less than 0.1 millimeter long, but they photosynthesize extremely well in the strong sun on the island, doubling in number overnight.

The microorganism, cultivated on the island by Tokyo-based venture firm euglena Co., is in the spotlight for its versatility, as it can be used to make food, such as cookies, after being processed into powder. But some people are pinning their hope on the microorganism for a totally different reason--as a savior of Japan's energy supply. The oil extracted from euglena is very suitable as a biofuel.

However, large pools are required for mass production and, although it is technically possible to produce biofuel from euglena, it is unclear whether it is worth the cost.

As most of the nation's nuclear power plants remain idle following the crisis at the Fukushima No. 1 nuclear power plant, many people are talking about the future potential of various energy sources. There are growing public expectations for them, but it is unlikely they will suddenly become available.

Familiar examples are solar and wind power, which have proven unable to provide stable energy as they are dependent on weather conditions.

Before the Fukushima crisis, nuclear energy accounted for about 30 percent of the nation's electricity production. After the crisis, the country has become more dependent on thermal power to cover the loss of electricity produced by nuclear power. But importing more oil and natural gas for thermal energy production costs an additional 3 trillion yen annually. If this continues, it will be difficult to reduce the trade deficit, even if Japanese manufacturers and farmers become more competitive in the global market.

Japan faces a hard reality--to rejuvenate its economy, the nation has to use nuclear energy as well as fossil fuels, while seeking the best balance of energy sources.

"The longer nuclear power plants remain idle, the harder it becomes for us to maintain our technical know-how, and pass it on to future generations," said Takeharu Okano, general affairs chief at the Kitakyushu-based Okano Valve Mfg Co., a manufacturer of valves for nuclear power plants, which are able to withstand high temperatures and pressure.
Okano, 31, said orders for the inspection and maintenance of nuclear power plant valves have plummeted since the Fukushima disaster.

The Japan Atomic Industrial Forum hosts student job fairs every year. However, the number of companies taking part in February's fair dropped from 65 to 34 compared with before the Fukushima crisis. The number of students attending the fair also dropped sharply from 1,903 to 388.

If the nation's nuclear power plants remain shuttered, the nuclear industry will diminish rapidly along with people related to the industry, and eventually disappear. Can the nation confidently move in that direction?

"Experts are necessary to maintain nuclear power plants as well as decommission them. It's clear many countries, such as China, will continue building nuclear power plants," said Akihiro Sawa, executive senior fellow of the the 21st Century Public Policy Institute.

Sawa added, "It's unthinkable our country will abandon its nuclear power technologies and the personnel working in the field."

Peaceful use of atom to put the breaks on proliferation?

April 8, 2013

LDP secretary-general cites Japan's role as a non-nuclear model despite limitations

http://mainichi.jp/english/english/newsselect/news/20130408p2a00m0na015000c.html

Shortly after the outbreak of the crisis at the Fukushima No. 1 Nuclear Power Plant in 2011, Shigeru Ishiba launched a special committee on overall energy policy as chairman of the then opposition Liberal Democratic Party's (LDP) Policy Research Council. The Mainichi Shimbun recently interviewed Ishiba, now LDP secretary-general, about a review of Japan's nuclear power policy.

Question: There was an impression that the special committee ended its mission without producing a final report.

Answer: Hmm, I don't think so. It may be that there was not enough time or the task got complicated as it approached a final phase. But at least it was a big step forward, considering the fact that we had previously avoided the issue.

Q: How do you see the LDP's responsibility?

A: There is no doubt that we promoted nuclear power plants. Nuclear power engineers have never said that nuclear power is totally safe, but I doubt if politicians shared that view. There are many things that we can reflect on. What are we going to do if a plane crashes into a nuclear power plant or a terrorist

attack occurs against one? I did not fully think about those possibilities while I was defense agency director general and defense minister. **When it comes to nuclear power, we should not say, "Beyond the scope of assumption," but should consider every possibility.**

Q: Is there any change in your views from immediately after the outbreak of the nuclear disaster and now?

A: There is no change. We are not in a position to activate nuclear power plants at any cost at all. We will reactivate nuclear power plants if they meet high-level safety standards and local residents develop a sense of safety.

Q: Is nuclear power necessary from a standpoint of potential nuclear deterrence?

A: Our logic is not that Japan should have nuclear power plants as a potential nuclear deterrence. We think nuclear power is important as a form of self-sufficient energy. Nuclear energy and the military are two sides of the same coin. I think there is no choice for Japan to be the only country without that option. By showing our deep insight that nuclear power can be used for peaceful means it may put the brakes on the proliferation of nuclear arms.

The Japanese government's view is that possessing nuclear weapons is not banned under the Constitution. I do not totally reject debate on the issue of Japan having nuclear arms, but I do not necessarily agree with such debate. If Japan has nuclear weapons, North Korea can have them and South Korea can have them, leading to a collapse of the Nuclear Non-proliferation Treaty (NPT). But the prospect that Japan is capable of possessing nuclear weapons is significant. Japan plays a key role in the world by demonstrating the fact that it can have nuclear weapons if it wants to but chooses not to possess such weapons. Japan cannot play such a role if we halt the nuclear power policy.

Q: Is a nuclear fuel cycle necessary? It does involve a considerable amount of plutonium.

A: Yes, it's necessary. Existing plutonium cannot be converted to nuclear weapons all of a sudden. Proper technology is necessary to downsize it for use on missiles. Japan has put in place a system to accept inspections (of the International Atomic Energy Agency) to the fullest extent possible, and if we maintain our current cooperation, there is no reason to harbor doubts about Japan.

Japan should promote nuclear disarmament

April 8, 2013
Japan should take leadership role on nuclear disarmament
http://mainichi.jp/english/english/perspectives/news/20130408p2a00m0na001000c.html

The Non-Proliferation and Disarmament Initiative (NPDI), which is comprised of 10 non-nuclear powers, including Japan, Australia and Germany, is set to hold a foreign ministerial conference in The Hague on April 9.

As the only country that has been bombed by atomic weapons, Japan has pursued the elimination of nuclear arms while relying on the U.S. nuclear umbrella. Because of such a dilemma, Japan has taken a pragmatic policy line of seeking to gradually reduce nuclear weapons. The NPDI is also characterized by its realistic approach.

Currently, there are approximately 20,000 nuclear weapons in the world. The Nuclear Non-Proliferation Treaty (NPT), which came into force in 1970, recognizes only five countries -- the United States, Russia, Britain, France and China -- as the sole nuclear powers, and aims to prevent the proliferation of such arms to other countries. About 190 countries have ratified the pact. Although it is a biased treaty, the NPT obligates the nuclear powers to reduce their nuclear arms. In the NPT regime, however, there is a wide gap between the five nuclear powers and members of the Non-Aligned Movement (NAM), which are demanding that nuclear powers set a clear deadline for arms reductions.

As such, the NPDI was set up in September 2010 on the initiative of Japan and Australia as a coordinator between the nuclear powers and the NAM. It has held a foreign ministerial meeting twice a year, and Hiroshima is scheduled to host one in the spring of next year.

At the April 9 meeting in The Hague, the foreign ministers of the 10 members of the NPDI are expected to draw up six working documents in preparation for the NPT Review Conference in 2015. The documents include one calling on the Comprehensive Nuclear Test Ban Treaty to come into force at an early date, one calling for the reduction of nonstrategic nuclear arms and another on how to reduce the role of nuclear weapons.

Such an approach has been criticized by some as being too lukewarm. However, the NPDI has been making strenuous demands that nuclear powers take effective measures to ensure the transparency of nuclear weapons despite the deadlock over nuclear arms reductions resulting from the conflict between nuclear powers and the NAM. The NPDI's approach should be appreciated.

However, questions remain about the Japanese government's nuclear disarmament diplomacy. Tokyo chose not to sign a statement calling for efforts to outlaw nuclear weapons, which 34 countries including

Norway and Switzerland jointly submitted to the U.N. General Assembly's First Committee on arms reductions in October last year. As to the reason, the government explained that Japan cannot say that nuclear arms are illegal since it relies on the U.S. nuclear deterrence. However, is this really the reason?

It is true that the security environment in East Asia is becoming increasingly serious as North Korea has recently test-fired a long-range ballistic missile and carried out a nuclear test and China is apparently stepping up its military buildup. Still, Japan's refusal to support even a statement that does not set any deadline and only calls for efforts to outlaw nuclear arms highlights its extremely passive stance toward nuclear disarmament.

Japan should promote flexible but tough nuclear disarmament diplomacy in which it takes the lead in efforts to achieve the ideal of nuclear disarmament while taking a pragmatic policy line. (By Chiyako Sato, Editorial Writer)

Policies should take people's opinion into account

April 10, 2013

LDP Fukushima chapter at odds with headquarters over nuclear policy

http://mainichi.jp/english/english/newsselect/news/20130410p2a00m0na013000c.html

FUKUSHIMA -- The Fukushima prefectural chapter of the ruling Liberal Democratic Party (LDP) remains at odds with LDP headquarters headed by Prime Minister Shinzo Abe over whether to scrap all of the 10 nuclear reactors in the prefecture.

At its regular convention in June 2011, the LDP Fukushima prefectural chapter endorsed its position "not to promote a nuclear power policy." At the LDP national conference of regional secretaries general and policy chiefs on Nov. 22, 2012 -- ahead of the start of official campaigning for the House of Representatives election -- the Fukushima prefectural chapter vowed to put a policy of "abandoning nuclear power generation and decommissioning all of the 10 nuclear reactors" at the top of its campaign platform for the general election. The LDP headquarters then approved of it.

Behind the prefectural chapter's move were bitter experiences top executives of the LDP Fukushima prefectural chapter experienced in the wake of the Fukushima nuclear disaster. When an explosion occurred at the No. 3 reactor at the Fukushima No. 1 Nuclear Power Plant on March 14, 2011, Kenji Saito, chairman of the Fukushima Prefectural Assembly, along with his colleagues, delivered relief supplies to the local chapter's Tsushima branch in Namie, about 28 kilometers from the troubled nuclear power complex. Residents there were taking shelter with just the clothes on their back, and Saito himself was in a

business suit. But Self-Defense Force (SDF) personnel standing by in more than 10 SDF vehicles were fully equipped with protective attire, masks and goggles against the threat of radiation.

Saito, 69, recalled his close friend and Namie Mayor Tamotsu Baba, 64, saying suspiciously at the time, "They have been dressed like that since they got here." It turned out later that the Tsushima district was in fact contaminated with high concentrations of radioactive materials. Saito, who had promoted nuclear power generation in the past, regrets the enormous trouble caused to the people of the prefecture and vows never to let anyone to build nuclear reactors again.

Meanwhile, Prime Minister Abe, 58, plans to re-examine the main opposition Democratic Party of Japan (DPJ)'s policy of phasing out the country's nuclear reactors by the 2030s. Goji Sakamoto, 68, who made a comeback as a lower house legislator after winning the December general election, said, "The prefectural chapter will draw up policies based on the actual circumstances of Fukushima. Because the people of the prefecture are in favor of abandoning nuclear power generation, it is natural that the prefectural chapter should come up with a policy of abandoning nuclear power generation."

Nonetheless, the central government has not made any decision on whether to decommission the Fukushima No. 2 Nuclear Power Plant or reactivate it, leaving the possibility of further controversy.

Acknowledging that he had not had in-depth discussions with LDP headquarters on the issue, Takao Hiraide, 56, secretary-general of the LDP Fukushima prefectural chapter and a Fukushima Prefectural Assembly member, voiced hope that the LDP headquarters will fall in line with the local chapter. "Naturally, I am convinced that Prime Minister Abe and Secretary General (Shigeru) Ishiba fully recognize the prefectural chapter's policy," he said.

Japan's nukes utilisation "negligible" in 2012

April 13, 2013

Nuke plant utilization rate fell to 3.9% in 2012

JIJI

http://www.japantimes.co.jp/news/2013/04/13/business/nuke-plant-utilization-rate-fell-to-3-9-in-2012/#.UWhWYUpsFEs

The utilization rate of nuclear power plants plunged another 19.8 percentage points in fiscal 2012 to a negligible 3.9 percent from the year before, setting a record low for the second straight year, industry data showed Friday.

It was the first time the annual rate has dipped below 10 percent since the commercial use of atomic reactors began in fiscal 1966, the Federation of Electric Power Companies of Japan reported.

The slide reflected the suspension of all but two reactors in view of the March 2011 meltdowns at Tokyo Electric Power Co.'s Fukushima No. 1 plant.

Of the country's 50 remaining reactors, all of which were taken offline following the Fukushima disaster, the only two approved for restarts are reactors 3 and 4 at Kansai Electric Power Co.'s Oi plant in Fukui Prefecture. The two units were reactivated last July amid vehement public opposition.

The Nuclear Regulation Authority, the newly established industry watchdog, plans to start conducting checks on idled reactors to determine whether to permit them to resume operations once new safety standards take effect in July. Most units, however, are expected to remain offline for the time being.

The federation said the amount of electricity the nation's 10 major power companies generated and purchased from wholesalers in fiscal 2012, which ended March 31, fell 1.5 percent year-on-year to 923.6 billion kwh.

The figure dropped for the second year in a row thanks to power-saving efforts by households and businesses, as well as declining demand for industrial use.

While the amount of energy generated by nuclear plants nose-dived a staggering 84.2 percent to 15.9 billion kwh, the amount churned out by thermal power stations surged 9.2 percent to 666.7 billion kwh.

Among regional utilities, Tepco saw its electricity volume rise 3.0 percent, following a sharp fall the previous year because the 2011 Great East Japan Earthquake and tsunami knocked out its Fukushima No. 1 plant.

Separately Friday, the Environment Ministry said Japan's greenhouse gas emissions in fiscal 2011, which ran through March 2012, climbed 4.0 percent from the previous year to 1.308 billion tons of carbon dioxide. The rise mainly reflected the switch to thermal power generation while nuclear reactors were gradually shut down after the Fukushima meltdowns.

Compared to fiscal 1990, the base year for global emissions reduction efforts under the Kyoto Protocol, harmful gases in fiscal 2011 rose 3.7 percent. But after taking into account the absorption of carbon dioxide by forests and emission rights purchased abroad, the figure was down 4.0 percent from the base year, the ministry said.

According to the Kyoto Protocol, Japan must cut its annual emissions by 6 percent on average from the fiscal 1990 level during the fiscal 2008-2012 period. The ministry said that annual average emissions between the 2008 and 2011 fiscal years decreased some 9.2 percent from the base year.

At a news conference, Environment Minister Nobuteru Ishihara confidently told reporters that Japan is certain to achieve its numerical target.

Workers at Japan Steel on reduced hours

April 15, 2013
Source : Bloomberg
http://www.bloomberg.com/news/2013-04-15/japan-steel-works-falls-as-employees-take-time-off-tokyo-mover.html

Japan Steel Works Falls as Employees Take Time Off: Tokyo Mover

By *Masumi Suga - Apr 15, 2013 6:18 AM GMT+0200*

Japan Steel Works Ltd. (5631), a nuclear parts supplier for customers including Areva SA (AREVA), fell the most in two months in Tokyo trading after the Nikkei reported that workers at a plant will take time off as orders decline.

Shares slumped 5.6 percent to 489 yen as at 1:13 p.m. local time, set for the biggest drop since Feb. 5. Japan Steel Works was the biggest decliner among stocks listed on the Nikkei 225 (NKY) Stock Average.

About 500 workers, or 70 percent of the total workforce at the Muroran plant on Japan's northern island of Hokkaido, have accepted a proposal by the company to take about two days off a month for the six months starting mid April, spokesman Akito Aiuchi said today by telephone, confirming the Nikkei newspaper's report on April 13.

"The company's nuclear business in Japan will be tough for a while," Masayuki Otani, a Tokyo-based strategist at Securities Japan Inc., said by phone.

Japan Steel operates the only plant in the world capable of producing the central part of a nuclear reactor's containment vessel in a single piece, reducing the risk of a radiation leak. The Tokyo-based company has removed aged facilities and relocated some of its workers at the Muroran plant since the Fukushima disaster, President Ikuo Sato said March 13 in an interview.

A decision on whether to extend the time off plan beyond October will be made later by monitoring demand, Aiuchi said.

A (nuclear) deal here...

May 3, 2013
Abe signs nuclear energy agreement with UAE

http://ajw.asahi.com/article/economy/business/AJ201305030045

By TAKUYA SUZUKI/ Staff Writer

ABU DHABI, United Arab Emirates--Prime Minister Shinzo Abe has signed Japan's first nuclear energy agreement since the Fukushima catastrophe two years ago.

Abe signed the accord May 2 in Dubai with UAE Vice President Mohammed bin Rashid al-Maktoum.

"The Middle East is seeking nuclear energy as a new energy source. We want to provide Japan's safe and advanced nuclear energy technology," Abe said.

The two leaders also issued a joint statement calling for stronger bilateral relations over a wide range of topics, including politics and economics.

The UAE has plans to construct 12 reactors, and the Japanese government hopes the agreement will enable Japanese companies to win contracts for their construction.

Abe also told Mohammed, "We want to contribute toward stability in the Middle East in the form of renewable energy sources and energy conservation."

He then proposed holding strategic talks at the ministerial level between Japan and the six members of the Gulf Cooperation Council, including the UAE and Saudi Arabia. The UAE vice president agreed to the proposal.

The two leaders also agreed to begin preliminary discussions toward concluding an investment agreement between the two nations, and signed 12 documents related to such fields as medicine, education and culture involving both Japanese and UAE companies and organizations.

Japan, UAE sign nuclear agreement during PM Abe's visit

http://mainichi.jp/english/english/newsselect/news/20130503p2g00m0dm009000c.html

ABU DHABI (Kyodo) -- Japan and the United Arab Emirates signed a civil nuclear agreement Thursday during Prime Minister Shinzo Abe's visit to the oil-rich country, setting the stage for more sales of Japanese atomic technologies overseas.

It was the first bilateral nuclear agreement signed by Japan since the 2011 Fukushima nuclear crisis triggered by the devastating earthquake and tsunami.

"There are high expectations that Japan has a considerably high level of safety standards" after having experienced the Fukushima disaster, Abe told reporters in Abu Dhabi. "I want to provide Japan's safe and high-standard nuclear technologies."

Although the signing of the agreement was welcomed by the related industries, some critics said it is still premature to export Japan's nuclear technologies when the full facts of the Fukushima disaster are yet to be determined.

Among other issues, the two countries also agreed to enhance cooperation on the development of oil fields, maritime security and medical care, according to a joint statement issued after talks between Abe and United Arab Emirates Vice President and Prime Minister Sheikh Mohammed bin Rashid Al Maktoum in Dubai.

The two leaders discussed energy security at a time when Japan is hoping that the United Arab Emirates will continue to provide stable supplies of oil to the resource-poor country. A large portion of Japanese companies' oil rights in the United Arab Emirates expire after 2018.

Japan is eager to import energy resources at lower cost as most of its nuclear reactors remain offline, and demand for oil and liquefied natural gas has been growing for thermal power generation.

The signing of the pact took place amid efforts by Abe, who returned to the premiership last December, to generate economic growth by promoting exports of nuclear power technologies and other infrastructure systems.

Japan is also expected to sign a nuclear agreement on Friday with Turkey, the final leg of Abe's four-nation trip that also took him to Russia and Saudi Arabia.

In Saudi Arabia, Abe agreed with Crown Prince Salman bin Abdulaziz Al Saud to commence talks aimed at starting negotiations on a similar bilateral nuclear accord.

Prior to the latest signing, Japan had inked nuclear agreements with 11 countries, including the United States and Britain, as well as the European Atomic Community.
During his meeting the United Arab Emirates vice president, Abe requested the easing of import restrictions on Japanese food products that were imposed after the Fukushima disaster due to radiation concerns, according to a Japanese government official.
The vice president said in response that he would consider further easing of the restrictions as delicious Japanese foods are popular in Dubai, the official said.
Japan and the United Arab Emirates also signed a tax treaty as part of their efforts to facilitate mutual investment and economic exchanges.

May 2, 2013

Japan, UAE sign nuclear deal
http://www3.nhk.or.jp/nhkworld/english/news/20130502_35.html

Japan has concluded a deal with the United Arab Emirates to transfer nuclear power technology - its first since the Fukushima nuclear accident in 2011.

Japanese Prime Minister Shinzo Abe is visiting the Persian Gulf state on the third leg of a weeklong overseas trip.

After visiting a railway that Japanese companies helped build, Abe met UAE Vice President and Prime Minister Sheikh Mohammed bin Rashid Al Maktoum on Thursday.

Abe conveyed Japan's plan to hold ministerial-level strategic talks on a regular basis with 6 Gulf Arab states, known as the Gulf Cooperation Council. He also called for the start of working-level discussions with the UAE toward an investment agreement.

Abe said Japan can contribute to the country's energy supply. He pledged technology in the fields of energy conservation, renewables and nuclear power.

Mohammed replied the UAE wants to work with Japan in various fields and serve as a gateway to the Middle East and North Africa.

The 2 leaders concluded a nuclear deal, and agreed to promote bilateral investments and economic exchanges. They later attended the signing ceremony

A (nuclear) deal there

May 4, 2013

Japan, Turkey clinch nuclear energy deal

Kyodo
http://www.japantimes.co.jp/news/2013/05/04/national/japan-turkey-clinch-nuclear-energy-deal/#.UYPoYEpsFEs

ANKARA – Japan and Turkey reached a civil nuclear cooperation agreement Friday that will allow Japanese companies to export atomic power generation technology to the fast-growing nation.

The agreement was agreed on during Prime Minister Shinzo Abe's trip to Turkey, the last leg of a weeklong trip that also took him to Russia, Saudi Arabia and the United Arab Emirates.

On Thursday, Japan signed a nuclear cooperation pact with the United Arab Emirates, the first accord signed by Tokyo since the Fukushima nuclear meltdowns in March 2011.

In Saudi Arabia, Abe agreed with Crown Prince Salman bin Abdulaziz Al Saud to commence working-level talks aimed at starting negotiations on a bilateral nuclear accord.

Abe is eager to sell nuclear power technology despite the Fukushima nuclear crisis, which was declared "a man-made disaster," to boost economic growth.

The core meltdowns at the Fukushima No. 1 plant were triggered by a massive offshore quake that spawned giant tsunami which knocked out all power and cooling systems at the old and poorly protected plant.

Nuclear deterrence, did you say?

May 3, 2013
U.S. diplomat to visit Japan to discuss nuclear deterrence

http://mainichi.jp/english/english/newsselect/news/20130503p2g00m0dm046000c.html

WASHINGTON (Kyodo) -- A senior U.S. official will make a three-day visit to Japan from Monday to discuss nuclear deterrence, missile defense cooperation, and arms control and nonproliferation issues with officials of Japan's foreign and defense ministries, the State Department said Thursday.

On Tuesday, Rose Gottemoeller, acting undersecretary of state for arms control and international security, is scheduled to exchange views with experts and academics at a nuclear policy roundtable discussion hosted by the U.S. Embassy in Tokyo.

Following her trip to Tokyo, Gottemoeller will visit Seoul for two days from next Thursday to discuss nuclear deterrence and missile defense cooperation with South Korean officials, the department said.

Japan desperate for any kind of fuel

May 4, 2013

Japan's trade chief seeks foreign energy sources
http://www3.nhk.or.jp/nhkworld/english/news/20130505_03.html

Japan's energy situation is leading its trade minister to try to secure new sources of fuel.

Japan's liquefied natural gas imports have increased sharply since the nuclear accident in Fukushima two years ago. The surge is a major factor in the country's trade deficit.

Economy, Trade and Industry Minister Toshimitsu Motegi is visiting South America and the United States.

In his speech in Washington, he said he believes that the US government will soon approve exports of shale gas to Japan.

The US government restricts shale gas exports to countries that have not signed a free trade agreement with the nation.

During his visits to Colombia and Brazil, Motegi agreed with energy officials in the 2 countries to strengthen cooperation in energy sectors.

But he noticed that the South American countries lack the robust infrastructure to export oil and other energy resources to Asia.

Japan is competing with emerging economies where energy demand continues to expand.

The Economist on Japan's nuclear future

April 20, 2013

Japan's nuclear future

Don't look now

A series of mishaps comes at an awkward time for the government

Apr 20th 2013 | TOKYO |From the print edition

http://www.economist.com/news/asia/21576450-series-mishaps-comes-awkward-time-government-dont-look-now

FOR a few days last year it looked as if Japan would phase out nuclear energy entirely. After an earthquake and tsunami created a creeping nuclear catastrophe two years ago the Democratic Party of Japan (DPJ) said it would get the country out of nuclear energy by 2040. Although it quickly backtracked, almost all of Japan's 50 commercial reactors are still lying idle.

In February this year, Shinzo Abe, leader of the then incoming Liberal Democratic Party (LDP), said the new government would restart reactors after they passed a forthcoming set of new safety tests. The country's "nuclear village", a cosy bunch from industry and government, cheered. But now the stricken Fukushima Dai-ichi plant is starting to alarm the public once more. On April 15th the International Atomic Energy Agency (IAEA), a UN body, flew in to investigate a series of dangerous incidents.

A power outage in March left four underground pools that store thousands of the plant's nuclear fuel rods without fresh cooling water for several hours. A rat, it later emerged, had gnawed through a cable. Workmen laying down rat-proof netting caused another outage. Then this month regulators discovered that thousands of gallons of radioactive water had seeped into the ground; the plant's operator had installed a jerry-rigged system of plastic sheeting, which sprang leaks. The quantity of contaminated water has become a crisis in its own right, the manager has admitted. And now the pipes used to transfer water to safer storage containers are leaking too.

All this will further darken the public's view of nuclear power, says Hideyuki Ban, secretary general of the Citizens' Nuclear Information Centre in Tokyo, an anti-nuclear group, "because it looks like still more bungling". That is no mean feat.

Experts who examined the causes of the 2011 catastrophe reckon the LDP has paid too little attention to what went wrong. Kiyoshi Kurokawa, the chairman of a parliamentary investigation, says the country may be moving "too hastily back towards nuclear power, without fully regaining the trust of the Japanese public and the international community". Yoichi Funabashi, a former editor of *Asahi Shimbun* newspaper who headed a private-sector investigation, says it is unfortunate that the 2012 election, which brought the LDP back to office, did not include a proper debate about the future of nuclear energy.

Now the set of policies known as "Abenomics" is making a return to nuclear power ever more pressing. The LDP is expected to push hard to restart plants if it wins a crucial election for the upper house of parliament this summer. Mr Abe's focus on the economy has given greater say to the voice of business, including the big utilities whose plants are idle. Smaller firms clamour for cheaper power too.

Japan's broader economic future may be at stake. The trade deficit widened to 8.2 trillion yen ($83 billion) for the fiscal year 2012, nearly double the gap of 4.4 trillion yen in 2011, after decades of surplus. This leads to worries about the overall current-account balance; its deterioration could affect Japan's ability to keep funding its huge public debt domestically. A big cause is the cost of energy imported to fill the gap left by nuclear power. A weaker yen, the result of the central bank's radical loosening of monetary

policy, is further pushing up the price of imported oil and gas. “Of course the public would prefer to get rid of nuclear power, if it were economically possible,” says Toichi Tsutomu, an adviser to the Institute of Energy Economics Japan, “but people are realistic.”

Realistic or not, the public is still afraid of nuclear power. A nationwide poll in February found that around 70% of respondents wanted either to phase out all the plants, or to shut them down immediately. Opposition is likely to be strongest at the local level, as regions move to switch their reactors back on. This week an Osaka court ruled on a suit brought by local residents to have Japan’s only two operating reactors, at the Oi plant in Fukui prefecture, shut down. They lost, but their suit looks like only the first of many battles.

Abe's economic diplomacy

May 4, 2013

Abe pushes nuclear power, medical services in Middle East

http://ajw.asahi.com/article/behind_news/politics/AJ201305040051

THE ASAHI SHIMBUN

ANKARA—Prime Minister Shinzo Abe on May 3 wrapped up a four-nation tour highlighted by achievements in economic diplomacy, particularly in nuclear power and medical services.

“Japan has launched a full-fledged economic diplomacy,” Abe told a news conference in Ankara. “I will take the lead in helping (businesses) in a wide range of sectors expand abroad and drive Japan’s growth strategy.”

Leading a delegation of industry executives, the prime minister visited Saudi Arabia, the United Arab Emirates and Turkey from April 30 to May 3, following a trip to Russia.

Abe and Turkish Prime Minister Recep Tayyip Erdogan on May 3 signed a joint declaration that awards Japan exclusive negotiating rights on a new nuclear power plant in Turkey.

The plant in Sinop on the Black Sea will be built by a consortium led by Mitsubishi Heavy Industries Ltd. It will be Japan’s first export of a nuclear plant since the Fukushima nuclear disaster in 2011.

"Japan must be able to create perfect synergies with Turkey," a talkative Abe told a meeting of 250 Japanese and Turkish businesspeople in Ankara. "Nuclear plants are a prime example."

In the joint declaration, Abe and Erdogan confirmed that the two countries will conclude a nuclear energy agreement, a precondition for exporting nuclear-related technologies.

Energy issues were also high on Abe's agenda in other countries, including Russia, which Abe visited April 28-30.

Abe confirmed cooperation not only in oil development and supply but also in nuclear power with Saudi Arabia and the UAE, key oil and gas exporters for Japan.

"We can provide the world's safest nuclear technology as well as technologies on renewable energy," Abe said. "We also want to contribute to increasing energy supply capacity."

Japan signed a nuclear energy agreement with the UAE, the first since the Fukushima nuclear disaster. Japan hopes the accord will help Japanese companies secure a contract for the 12 new nuclear reactors planned by the UAE.

In 2009, South Korea edged out Japan in winning a contract for four reactors in the UAE under the initiative of President Lee Myung-bak.

Abe and Saudi Arabian Crown Prince Salman bin Abdulaziz also agreed to start working-level discussions on a nuclear energy agreement. Saudi Arabia plans 16 new nuclear reactors.

The medical sector was another target of Abe's economic diplomacy.

Japan agreed to expand cooperation with the UAE in dispatching doctors, exporting advanced medical equipment and opening a medical center that offers particle radiotherapy for cancer patients.

Abe also agreed to promote technological cooperation in medical services with Saudi Arabia.

Exports of medical technologies and nuclear power will form pillars of the growth strategy that Abe's administration will formulate in June.

Japan has been running an annual deficit of nearly 3 trillion yen ($30 billion) in the trade of medical equipment and medicine due to strict safety regulations and time-consuming screening procedures.

The government in January revived the regulatory reform council, which was abolished under the previous Democratic Party of Japan administration, and listed the medical sector as one of the priority areas.

(This article was written by Takuya Suzuki in Ankara and Kazuo Ikejiri in Tokyo.)

Takao Yamada : Japanese nuke exports feel like "double-dealing"

May 6, 2013

Japan losing its moral compass with nuclear reactor exports

http://mainichi.jp/english/english/perspectives/news/20130506p2a00m0na002000c.html

For Japan to export nuclear technology is very strange indeed. The Fukushima No. 1 nuclear plant remains unstable more than two years after the March 2011 triple meltdown there, and the country's broader nuclear energy system is still incomplete. In fact, it is deficiencies in Japan's nuclear plants that have stalled reactor restarts.

And yet, we are about to sell our reactors to foreign nations.

Some people might say that if it's fine with the other country and it helps Japan, then why not sell them? I cannot agree. The virtuous thing to do would be to learn from our own experiences and consider the safety of Japan's friends, but the government's way of thinking does away with virtue. We must not become a rich but amoral nation.

The Fukushima nuclear disaster revealed that experts have no power when slotted into small pockets of a sprawling system. This society, which is so accustomed to peace and prosperity, exposes its weakness by failing to get to the root of a problem when push comes to shove. We saw prideful conceit and wishful thinking -- namely that our anxieties will all be solved by technological advancement -- pass unquestioned.

Over this Golden Week holiday, I finally finished reading Yoichi Funabashi's **"Countdown to Meltdown**." The two-volume work, which won the Oya Soichi Nonfiction Award in April, uses witness accounts to illustrate the deep cracks in postwar Japanese society, glimpses of which the public caught just after the Fukushima nuclear crisis began.

Funabashi is the former editor-in-chief of the Asahi Shimbun daily, and his reporting skills enjoy a very high reputation. What left the greatest impression as I read was how many of the people recruited to help clean up the nuclear mess saw the crisis as **a "lost war**." They spoke of the parallels between military history and their own experiences at Fukushima, and furthermore revealed that the causes of that "defeat" had yet to be remedied.

One of Funabashi's sources was responsible for trying to restore power to the stricken Fukushima plant in the disaster's opening phase, and had to dispatch workers to a high radiation area to do the work.

"I felt like I was sending men out on a kamikaze mission, except they would have no Zero fighter plane or even any fuel," the source told Funabashi.

Another source was a senior government official who watched in astonishment as the management of plant operator Tokyo Electric Power Co. (TEPCO) failed to respond to cries for help from those on site. It was like "Guadalcanal," the official said, referring to the long and bloody battle for that Pacific island that ended in catastrophic defeat for the Imperial Japanese Army in 1943.

According to the book, it was TEPCO's older engineers, some even retired, who stepped to the fore in the crisis. The younger staff members were uncomfortable with going beyond standard procedure, according to one technocrat's observations. This calls to mind how the loss of a veteran presence eventually destabilized the Imperial Japanese Army in the years after the Russo-Japanese War of 1904-05.

The Japanese government maintains something called the System for Prediction of Environmental Emergency Dose Information (SPEEDI), designed to forecast the spread of radioactive materials after a nuclear disaster. After the meltdowns, however, the government hid the SPEEDI data, worried that releasing the information would cause chaos. One marine meteorologist, referring to Tokyo Gov. Naoki Inose's book "Showa 16-nen Natsu no Haisen" (Japan's defeat in the summer of 1941), lamented that ignoring vital information had become a tradition.

In the spring of 1941, before Japan's attack on Pearl Harbor, the Cabinet of Prince Fumimaro Konoe asked some young, top-flight minds in government and the private sector to run a simulation of a wider Pacific war. The elite analysis group concluded that "Japan, with the advantage of surprise, will be victorious in the early stages. However, the war will go on and, as the Soviet Union will join the fight against us, Japan is certain to lose. We recommend avoiding war."
Then Army Minister Hideki Tojo, however, was having none of it.

"Gentlemen, I thank you for all your diligent research. Your conclusions, however, are mere armchair theory, and show that you do not appear to be thinking of the realities of war. In fact, no one thought Japan could win the Russo-Japanese War, but we did," Tojo stated, and he ignored the report.

Similar episodes since then have illustrated how helpless postwar Japan is, despite the country's emergence as a solid economic power built on a foundation of uninterrupted peace. The Fukushima disaster has made it clear that building nuclear reactors in Japan is to invite into our country a danger on par with war.

What's more, we have not rid ourselves of this danger. The government changed at the end of 2012, but plant operator TEPCO -- described by the safety chief at the Nuclear Safety Commission as "having a corporate culture in which it does things it's told to do only because it has no choice," and being "optimistic and inward-focused" -- is the same as ever.

I finished Funabashi's book and turned on the TV, and was greeted by the image of Prime Minister Shinzo Abe. He was in Turkey, announcing Japan had been given preferential negotiating rights for nuclear reactor exports to that country.
"We will share the lessons we've learned from the (Fukushima) disaster with the world," Abe was saying. So what is the greatest lesson we've learned from the Fukushima crisis? In my mind, it's that nuclear power has two faces. It can spawn great prosperity, but can sometimes also rob us of our nation's land.

Within Japan, we look upon the Fukushima meltdowns with disgust and are groping our way toward a non-nuclear future. In the Middle East, Japan treats nuclear power as a business, putting profit first. This looks **like a case of double-dealing**, and does not suit a country with such moral influence as the postwar "new country" of Japan.

(By Takao Yamada, Expert Senior Writer)

Experts may feel OK over nukes but what about the people?

May 8, 2013

70% of nuclear experts still 'comfortable' with atomic power: survey

http://mainichi.jp/english/english/newsselect/news/20130508p2a00m0na007000c.html

Some 70 percent of nuclear energy experts with the Atomic Energy Society of Japan (AESJ) remain "comfortable" with atomic power, while at the same time public confidence in the technology remains low, a society survey has revealed.

The AESJ began the annual survey of its members in fiscal 2006, and of the general public in fiscal 2007. The fiscal 2012 survey, conducted in January and February this year, queried 500 randomly selected residents of the Tokyo region and 559 AESJ members at universities and in the private sector.

In the fiscal 2010 survey, 86.5 percent of AESJ members queried said they were either "comfortable" or "somewhat comfortable" with atomic power generation. In the fiscal 2011 survey -- conducted after the March 2011 Fukushima No. 1 nuclear plant meltdowns -- that figure dropped to 62 percent, but bounced back to 69.2 percent for fiscal 2012.

Meanwhile, only about 25 percent of the 500 members of the public agreed or somewhat agreed that Japan should keep using atomic power -- around the same rate as in the 2011 survey and half that of before the Fukushima nuclear disaster.

Asked if Japan should keep using atomic power, some 92 percent of AESJ members said yes -- 6.6 points higher than in the fiscal 2011 survey and close to the pre-disaster level of around 95 percent.

"The Liberal Democratic Party (LDP) included continuing atomic power in their election promises last year and won a huge victory, so I think nuclear experts might have regained some of their confidence in the technology," Kansai University professor of social psychology Shoji Tsuchida said of the survey results. "But it would be a mistake for them to think that the election results mean the public has signed off on nuclear energy."

Nuke restart enter LDP campaign

May 12, 2013

LDP to include campaign pledge calling for restart of nuclear reactors

http://ajw.asahi.com/article/behind_news/politics/AJ201305120048

By TOMOYOSHI OTSU/ Staff Writer

A confident Liberal Democratic Party will continue moving toward a return to operations at nuclear power plants around the nation by including the goal in its campaign platform for this summer's Upper House election.

The ruling party plans to include in its campaign the plank calling for resumption of nuclear reactor operations.

In the wake of the 2011 accident at the Fukushima No. 1 nuclear power plant, only two of Japan's 50 nuclear reactors are currently in operation, the No. 3 and No. 4 reactors of the Oi nuclear power plant in Fukui Prefecture.

In its campaign platform for the December Lower House election, the LDP only pledged to "seek a conclusion within three years" on whether to resume operations for other reactors.

However, the administration of Prime Minister Shinzo Abe has made it clear that it plans to allow the resumption of nuclear operations as long as the safety of the reactors is confirmed.

The change in the LDP platform will be in line with the stance taken by the Abe administration.

The party committee considering what to include in the campaign platform for the Upper House election in July will compile a comprehensive policy package in time for the meeting of policy chiefs of prefectural chapters scheduled for May 22. Important policy topics will be chosen from that package by the end of May for inclusion in the campaign platform.

Sources said the platform would focus on such issues as agricultural policy, measures to revitalize local economies and energy policy.

The comprehensive policy package will include wording on nuclear power generation that says "the central government will be responsible for the resumption of operations."

During Diet deliberations, Abe has said, "We will proceed with resumption of operations once safety has been confirmed."

That stance is a major reason behind the LDP's big push on nuclear policy in comparison to the campaign platform for the December Lower House election, which it won in a landslide to regain control of the government.

The party will stick with the same slogan of "recovering Japan" that was used in the Lower House election. The goal for the LDP and junior coalition partner New Komeito will be to gain a majority of seats in the Upper House to complete regaining total control of the government.

In a May 11 TV program, Sanae Takaichi, LDP policy chief, said, "The Upper House election will be about restoring a stable political environment."

May 11, 2013

'Abenomics' goes nuclear in campaign platform

LDP locks sights on reactors, Constitution

Kyodo
http://www.japantimes.co.jp/news/2013/05/11/national/ldp-locks-sights-on-reactors-constitution/#.UY5v90psFEs

A draft of the Liberal Democratic Party's platform for the upcoming election states that any reactors which clear the newly compiled safety criteria will be restarted — a move likely to upset antinuclear voters awakened by the Fukushima meltdowns in 2011.

The ruling LDP will vow to stimulate the economy, revise the pacifist Constitution and mend Japan's strained ties with China and South Korea in line with the intentions of Prime Minister Shinzo Abe, the party's president.

On nuclear policy, the government "will restart (reactors) under its own responsibility once it obtains the understanding" of local authorities and after the Nuclear Regulatory Authority judges them safe, the draft platform says.

Most of the nation's 50 commercial reactors, which were idled after the Fukushima nuclear disaster triggered by the March 2011 quake and tsunami, remain shut down. The LDP aims to determine within three years whether they can be restarted.

The loss of nuclear power has forced electrical utilities to **concentrate more on thermal power generation and crank up imports of fossil fuels**, weakening the nation's trade balance, as the aggressive monetary easing touted under "Abenomics" drives down the yen, making those purchases even more expensive.

The LDP, which returned to power in the Lower House election in December, will try to take full control of the Diet in the July election for the Upper House. The draft platform, which will be finalized later this month, contains about 300 policies […]

Not so simple for local communities

May 17, 2013

EDITORIAL: Tsuruga should be model for breaking free of nuclear energy

http://ajw.asahi.com/article/views/editorial/AJ201305170048

Keeping things as they are became practically impossible now that an expert panel has concluded that an active fault line runs directly under the No. 2 reactor of the Tsuruga nuclear power plant in Fukui Prefecture.

The panel is under the Nuclear Regulatory Authority, which was formed from a lesson of the March 2011 disaster at the Fukushima No. 1 nuclear power plant.

"What else can we say, but it is fortunate that no accident has occurred until now," a panel member said.

If the active fault moves and leads to a major accident, residents of Tsuruga city will be the first who will have to escape. Lake Biwako, which supplies water to the Kansai region, is only 40 kilometers away. Natural disasters strike without warning.

However, Tsuruga Mayor Kazuharu Kawase is opposing the panel's conclusion, saying it is not final. Some proponents of nuclear power generation in the local community say that if they can buy some time, the administration of Shinzo Abe, which supports restarting idled nuclear reactors, will come to the rescue.

The central government has been providing subsidies to local governments that host nuclear power plants. Some people disparagingly say Tsuruga is putting up resistance for money.

Let's stop and think. To aim at realizing a society that does not rely on nuclear energy, we need to squarely address serious impacts that the decommissioning of nuclear reactors may have on local communities that host them.

Tsuruga was once a thriving port city. But as the center of the economy shifted to Pacific coastal areas, it accepted four nuclear reactors to serve as the main pillar of the local economy.

However, the Fugen prototype advanced thermal reactor is in the process of decommissioning. After the Great East Japan Earthquake on March 11, 2011, prospects for restarting the aging No. 1 reactor at the Tsuruga plant remain dim. There are also no prospects for restarting the Monju prototype fast-breeder reactor after revelations of neglect in carrying out safety inspections. If the Tsuruga No. 2 reactor is also decommissioned, it is likely that Tsuruga will have no workable nuclear reactor for the first time in 43 years.

The local economy that takes for granted the presence of nuclear power plants will be shaken from its foundation. In particular, the impact on employment will be great. Of the approximately 68,000 people who live in Tsuruga, about 5,000 work at nuclear power plants and related facilities. Another 5,000 are also engaged in work such as the hotel industry, which is inseparable from nuclear power plants. When their families are included, tens of thousands of people rely on nuclear power plants to earn a living.

The impact on municipal finance is also serious. In exchange for hosting nuclear power plants, Tsuruga received a total of 50 billion yen ($489 million) in government subsidies. Including such revenues as fixed property taxes on nuclear plants, one-fifth of the city's budget is made up of nuclear industry-related income. The government subsidies are also used to cover part of the medical costs of citizens and labor costs of fire department employees.

While opposing the decision on the one hand, Tsuruga Mayor Kawase said, "Since it will take 30 to 40 years to decommission a nuclear reactor, a special company is needed for the process."

“One option is to disseminate technology to secure nuclear safety to the world,” he also said. If such a shift materializes, Tsuruga can be the model of a community that broke with nuclear power generation.

A local government that accepted the national policy of promoting nuclear energy is trying to sever its ties with nuclear power plants. How should the national government and power consumption centers such as the Kansai region support such attempts?

With so many nuclear power facilities, Tsuruga has been dubbed the “Ginza of nuclear power plants.” It is time we come up with the wisdom and various means of support to help Tsuruga cast off the nickname.

Decommissionning Tsuruga 2

May 17, 2013

Editorial: Lay the groundwork for decommissioning Tsuruga No. 2 reactor

http://mainichi.jp/english/english/perspectives/news/20130517p2a00m0na011000c.html

A panel of experts appointed by the government's Nuclear Regulation Authority (NRA) has concluded that an active fault lies just below the idled No. 2 reactor of the Tsuruga Nuclear Power Plant in Fukui Prefecture. Dissatisfied with the judgment, Japan Atomic Power Co. (JAPC), the operator of the power station, is poised to demand that the panel continue on-the-spot inspections and review its conclusion. However, it is highly unlikely that the panel will reverse its decision given the NRA's past discussions on the matter.

We would like to support the panel's conclusion from the standpoint of ensuring safety of nuclear power stations. NRA commissioner Kunihiko Shimazaki said, "It's lucky that there has been no accident at the reactor." It is inevitable for the reactor to be decommissioned. Spent nuclear fuel is stored at the No. 2 reactor building of the Tsuruga power plant. Even while operations at the reactor are suspended, the active fault could cause a serious accident.

Shortly after conducting an on-the-spot inspection of the plant in December last year, the panel of experts suggested that the crush zone just below the Tsuruga plant's No. 2 reactor was an active fault. However, JAPC argued that the expertise of the panel members was not well balanced and that the panel unilaterally deliberated on the matter. Even some members of the ruling Liberal Democratic Party (LDP) and local governments around the power station demanded that the crush zone be re-examined thoroughly and that discussions be held in a fair manner.

In response, the NRA held meetings to listen to opinions from other experts and to give JAPC an opportunity to counter the panel's judgment. Nevertheless, the panel did not reverse its conclusion.

JAPC complained that the judgment is not rational, but the NRA's stance to regard the crush zone as an active fault as long as it cannot rule out such a possibility is appropriate.

It is the JAPC that will decide whether to decommission the No. 2 reactor at its Tsuruga plant. Needless to say, the decommissioning of the reactor will have a far-reaching impact.

JAPC, a power wholesaler specializing in nuclear power generation, was founded jointly by nine major power suppliers and other entities, and owns three nuclear reactors -- the No. 1 and No. 2 reactors of the Tsuruga plant and the Tokai No. 2 nuclear plant in Ibaraki Prefecture. All these reactors have been idled and there are no prospects that any of them will be reactivated in the foreseeable future because of such factors as aging, the existence of an active fault on the premises and opposition from the local community.

Power companies that own nuclear plants have been accumulating funds to cover the costs of decommissioning and dismantling nuclear reactors, but JAPC has not yet saved enough funds to cover the expense of decommissioning its three reactors. Therefore, if the company were to decommission its reactors, it would certainly face a management crisis.

If that were to happen, power companies that have a stake in JAPC would be required to cover the losses incurred by JAPC, ending up in an increase in electricity charges. Such a situation could also spark calls for the reform of JAPC, such as a merger with another power supplier and transformation of JAPC into a company specializing in decommissioning nuclear reactors, and have a huge impact on the finances of local municipalities hosting JAPC nuclear plants and the regional economy.

The national government cannot evade its responsibility for issuing permission for the installation of the Tsuruga No. 2 reactor. The government should launch discussions on who should bear the costs of decommissioning the reactor and work out new measures to revitalize the local economy without relying on the nuclear plant in an effort to lay the groundwork for doing away with the reactor.

The government will enforce the new standards for regulating nuclear power stations in July, and aging nuclear plants will be also required to meet the standards. The NRA will continue to examine faults that exist on the premises of nuclear plants to see if they are active. There will certainly be other nuclear plants that will be forced to shut down. The decommissioning of the Tsuruga No. 2 reactor will serve as an important test for the future shutdown of many other nuclear reactors.

More nuclear talks

May 21, 2013

Japan looks to resume nuclear energy talks with India

Kyodo
http://www.japantimes.co.jp/news/2013/05/21/national/japan-looks-to-resume-nuclear-energy-talks-with-india/#.UZsuk0psFEs

Japan is considering resuming talks with India on bilateral cooperation in nuclear energy, the government's top spokesman said Monday.
"We have judged it sensible to negotiate an accord with India on nuclear cooperation," Chief Cabinet Secretary Yoshihide Suga told reporters.
Prime Minister Shinzo Abe is expected to promote exports of nuclear power plants to India under the accord when he meets Prime Minister Manmohan Singh on May 29 in Tokyo, sources close to the matter said.
The talks come amid widespread concern in Japan about the safety of nuclear power in light of the core meltdowns that took place at the poorly protected Fukushima No. 1 power plant when the March 2011 earthquake and tsunami hit.
Talks between the two countries were launched in 2010 but have been suspended since the disaster.
The Indian side has "expressed strong hope for a nuclear agreement with Japan even after the nuclear accident," Suga said. "As a country having experienced a disaster, (Japan) is responsible for contributing to the improved safety of atomic energy by sharing knowledge and lessons with the world."
As part of his strategy to boost the struggling economy, Abe is trying to promote exports of atomic and other infrastructure to the developing world.
Earlier this month, Japan concluded nuclear accords with the United Arab Emirates and Turkey during Abe's visits there.

May 20, 2013

Japan, India set to resume talks on nuclear energy agreement

http://ajw.asahi.com/article/behind_news/politics/AJ201305200076

THE ASAHI SHIMBUN
Japan and India are set to resume official negotiations on a nuclear energy agreement, which were suspended after the Fukushima nuclear disaster in March 2011, sources said.
Prime Minister Shinzo Abe and his counterpart, Manmohan Singh, are expected to include the policy to reopen talks on the agreement, a precondition for exporting nuclear-related technologies, in a joint statement at a summit meeting in Tokyo on May 29.
At a summit meeting in December 2011, the two countries confirmed they will make efforts to conclude a nuclear energy agreement, but only informal discussions have been held.

Japanese industry has been calling on the government to resume official negotiations so that Japanese-made nuclear reactors can be sold to India.
India is building five reactors and plans 18 more, according to the World Nuclear Association.
Abe is eager to conclude a nuclear energy agreement to strengthen relations with India and promote Japanese industry.
According to the sources, the government is considering including such expressions as "early conclusion of a nuclear energy agreement" in the joint statement.
Three rounds of official negotiations were held since 2010 before they were suspended due to the accident at the Fukushima No. 1 nuclear power plant following the Great East Japan Earthquake and tsunami.
In Japan, the only nation where atomic bombs have been dropped on the populace, concerns remain about providing nuclear-related technologies to India, which is not a signatory to the Nuclear Nonproliferation Treaty.
In 2010, Foreign Minister Katsuya Okada, of the then ruling Democratic Party of Japan government, suggested that Japan would suspend cooperation if India conducted a nuclear test.
He said India's nuclear disarmament and nonproliferation policy, such as ratification of the Comprehensive Nuclear Test Ban Treaty, would be an important condition for a bilateral nuclear energy agreement.

What about India joining the Non-Proliferation Treaty first?

May 25, 2013

EDITORIAL: Japan should ask India to join NPT first

http://ajw.asahi.com/article/views/editorial/AJ201305250025

The Japanese government has decided to restart talks with India to reach a bilateral nuclear cooperation agreement. The move is aimed at paving the way for exports of Japanese nuclear power technology to India.

India has developed nuclear weapons without becoming a party to the Nuclear Nonproliferation Treaty (NPT), a key international pact to prevent the spread of nuclear arms.

Japan, on the other hand, is a country which once suffered the ravages of nuclear attacks and has avowed to pursue the cause of the elimination of nuclear weapons under the NPT.

A nuclear cooperation agreement between Japan and India would further undermine the effectiveness and relevance of the NPT system.

Before negotiating such a deal, Tokyo should ask New Delhi to become a party to the NPT and sign the Comprehensive Nuclear Test Ban Treaty (CTBT).

Starting in June 2010, Japan and India held three rounds of negotiations over an agreement on bilateral civil nuclear cooperation. But the talks have been suspended since the 2011 Great East Japan Earthquake triggered disaster at the Fukushima No. 1 nuclear power plant.

Indian Prime Minister Manmohan Singh is slated to visit Japan in the coming week and hold talks with Prime Minister Shinzo Abe. The two leaders are expected to announce a restart of the nuclear talks in a joint statement they will release.

A total of 20 nuclear reactors are in operation in India, including some for military use. But most of them are small reactors made in India with domestic technology. The country is keen to import foreign technology to build large-scale nuclear power plants.

Since Japanese nuclear technology is used in large nuclear reactors made in the United States and France, it is difficult for India to import nuclear reactors from these countries unless it strikes a nuclear deal with Japan. To remove the obstacle to their exports of nuclear technology to India, Washington and Paris have been unofficially urging Tokyo to conclude a nuclear deal with New Delhi.

But this move raises serious concerns from the viewpoint of the NPT.

The NPT system is designed to limit the membership of the Nuclear Club to the five original nuclear powers of the United States, Russia, Britain, France and China while requiring them to make serious efforts toward nuclear disarmament. Other countries are allowed to receive foreign nuclear technology for peaceful use in return for refraining from possessing nuclear arms.

Supplying nuclear technology to India, which has run roughshod on the spirit of the NPT, would send out the message that countries can obtain nuclear technology even if they don't comply with the NPT.

Countries that are not parties to the NPT or have withdrawn from the treaty, such as India, Pakistan and North Korea, have carried out nuclear arms tests. Iran, an NPT signatory country, continued developing nuclear arms technology in the face of protests from the international community.

All these developments have worked to weaken the NPT system to an alarming extent.

Even so, Japan should not take any action that would push the NPT further down the road to ruin.

In 2008, in response to prodding by the United States, which wanted to export nuclear power technology to India, the so-called Nuclear Suppliers Group, which was then composed of 45 countries including Japan, approved an exception to the nonproliferation principles to allow India to receive nuclear power technology from other nations.

At that time, Japan's Foreign Ministry said the Japanese government maintained its official position that India should join the NPT at an early date as a non-nuclear power, and sign and ratify the CTBT quickly.

In protest against the start of negotiations between Japan and India for a nuclear deal, the 2010 Nagasaki Peace Declaration said, "a nation that has suffered atomic bombings itself is now severely weakening the NPT, which is beyond intolerable."

Japan, as the only country that has ever been struck by nuclear weapons, should remain unwaveringly committed to the principle of nuclear nonproliferation.

--The Asahi Shimbun, May 25

M.Abe as keen as ever on nukes

May 26, 2013

Abe to pledge nuclear plant restart in growth strategy

http://mainichi.jp/english/english/newsselect/news/20130526p2g00m0dm050000c.html

TOKYO (Kyodo) -- Prime Minister Shinzo Abe will clarify his government's plan to resume operation of idled nuclear power plants in a growth strategy to be compiled in mid-June, sources familiar with the matter said Saturday.

The draft energy policy to be included in the growth strategy states that steps will be taken to restart reactors judged safe for operation by the nuclear regulatory authorities, they said.

The government will pledge that it will make utmost efforts to ensure plant safety to gain support from municipalities hosting nuclear plants, the sources said.

The energy policy laid out in the growth strategy will be the government's official endorsement of Abe's plan to rely on nuclear power until the nation's final policy is made on nuclear energy use.

The growth strategy is one of the "three arrows" of Abe's economic policies aimed at pulling Japan's economy out of nearly two decades of deflationary recession, along with aggressive monetary easing and large-scale public works projects.

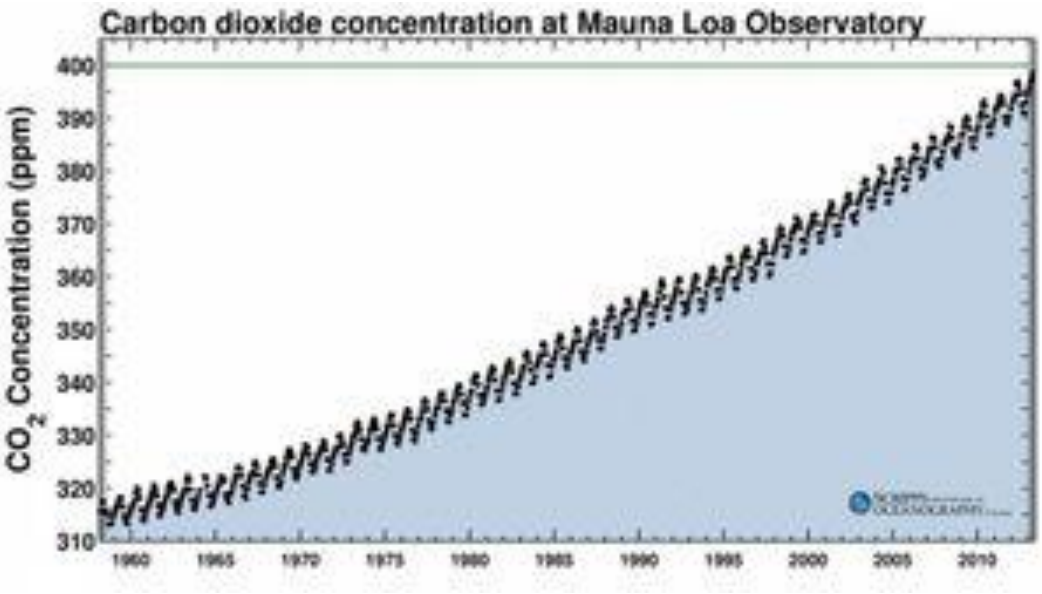
Of the 50 commercial reactors in Japan, only two are currently online amid safety concerns over the use of nuclear power in the wake of the 2011 Fukushima Daiichi plant disaster.

The draft policy says use of nuclear power plants is needed for the country's stable power supply, and the government will complete the separation of electric power companies' electricity generation and distribution operations by 2020, the sources said.

For a "truly lasting legacy", don't let the nuclar village decide for Japan

Mr. Abe: Bag the nukes and heed the Keeling Curve

by Stephen Hesse
http://www.japantimes.co.jp/life/2013/05/26/environment/mr-abe-bag-the-nukes-and-heed-the-keeling-curve/#.UaDgo9hBpg4



Dear Prime Minister Abe,

As you ride your recent wave of popularity, I know you are well aware that waves end, either in a crash or a fade. And you are luckier than most to have another chance since being elected as prime minister for the second time despite crashing out of the job in 2007 after serving for less than a year.

Today, at the peak of your ride before the summer Upper House election, you are making promises to everyone, from farmers and advocates of the Trans-Pacific Partnership to the business community and national universities.

But I can't help wondering if you are really committed to providing Japan's young people with a better future in the form of a safe and sustainable society they can be proud of.

Others will challenge your plans to jumpstart the economy, assume control of Japan's backyard and amend the Constitution. My question is this: With all your talk of a beautiful, bright future, why are you still wedded to a backward-looking, business-as-usual nuclear-energy policy?

Economies rise and fall, and recover if we're lucky. But a comprehensive plan for nationwide reform of energy generation, distribution — and efficient use — could ensure Japan a safe, sustainable, low-carbon future for decades.

Japan could be a world leader in the development of alternative energy sources and a showroom for cutting-edge technologies. This would strengthen and stabilize Japan's fragile economy — something that so-called quantitative easing will not.

Dare to dream even bigger, and a comprehensive, non-nuclear, low-carbon energy plan could make the Abe name synonymous with reversal of the Keeling Curve (see later) — something that would truly be an Olympian legacy.

First, though, let's be honest: Japan is no place for nuclear power. Elsewhere, perhaps, but not here, where "Shake, Rattle and Roll" ought to be the nation's anthem.

Still, the three reactor meltdowns at the Fukushima No. 1 nuclear power plant operated by Tokyo Electric Power Co. (Tepco) and the ongoing leakage there of radioactive cooling water have not been enough to convince you along with Japan's so-called nuclear village that our young people deserve far better.

(See Jeff Kingston's Counterpoint column in today's Japan Times, where he defines the nuclear village as "nuclear advocates, and beneficiaries, in the utilities, regulatory agencies, the Diet [Japan's parliament], big business, the media and academia.")

Nor do the active faults running near, and under, our "safe" reactors dent your denial, Mr. Abe, or lessen your commitment to a deadly, outdated status quo.

However averse you may be to the policies of your rivals, you could prove yourself a better man by endorsing the energy policies of your predecessors in the Democratic Party of Japan, who recognized the wisdom of a non-nuclear, low-carbon energy future.

You already have the business community on your side. Few, if any, will abandon you simply because you choose to pursue a sustainable long-term energy vision that is non-nuclear and low-carbon.

In the end they will thank you for creating a new domestic industry that will rival Japan's global success with automobiles.

In fact, your insistence on nuclear energy, even as common sense and new technologies point in the opposite direction, leaves many of us wondering what plans you have for the nuclear-power industry.

Are you committed to keeping Japan free of nuclear weapons? Or is this on the table, too, along with "reform" of the Constitution?

And if keeping the nuclear-weapons option alive is not the purpose, then can we assume that those who profit most from nuclear energy, Japan's utilities, are pulling your strings regarding energy policy?

By choice or not, you are letting the nuclear village call the shots and they are controlling Japan's energy future, which does not bode well for your legacy — nor for the future of Japan's young people.

"Lobbying power belongs to people who've made money already. It represents the accumulated money and power of the last 50 years, not the next 50 years," the renowned U.S. academic, author and environmentalist Bill McKibben noted in a recent interview with Kristine Wong on Greenbiz.com, speaking of the fossil-fuel industry in the United States.

"Fifty years from now, I have no doubt that the wind-industry lobby will be powerful, and perhaps obnoxious. Maybe it will be stepping on the neck of the tidal-power industry, or whatever else is coming next," he added with characteristic humor.

McKibben is well known for having established 350.org, an organization dedicated to bringing carbon-dioxide emissions under control and stabilizing the level of CO2 in the atmosphere at 350 parts per million (ppm). Which brings us back to the Keeling Curve: If you are searching for a simple, easy-to-understand indicator of the pernicious character of our energy status quo, you need look no further.

In 1958, David Keeling (1928-2005), a U.S. climate scientist affiliated with the Scripps Institution of Oceanography at the University of California, San Diego, set up a CO2 monitoring system at the Mauna Loa Observatory atop the 4,169-meter Hawaiian volcano of the same name. That system has now taken hourly readings of CO2 in the atmosphere for 55 years, creating an unimpeachable record of our planet's changing atmospheric profile.

For many people, their first glimpse of the Keeling Curve was in Davis Guggenheim's Oscar-winning 2006 documentary, "An Inconvenient Truth," about former U.S. Vice President Al Gore's campaign to educate citizens about global warming. For climate scientists, the graph has long been a haunting gauge of an inexorable climb in CO2 levels.

The line is jagged because each spring the trees in the northern hemisphere grow new leaves, which pull carbon from the air, creating a noticeable drop in CO2 concentrations in the atmosphere. In autumn, when those same trees drop their leaves, CO2 levels once again begin to rise.

Each year, however, CO2 spikes at levels slightly higher than in the year before. And this month, according to climate scientists, the Keeling Curve has hit a psychological red line because our planet's atmospheric concentrations of CO2 have, in recent weeks, reached 400 ppm. — a level not seen for between 3 million and 5 million years.

For humans, this is totally unknown territory, as we have only been around for about 200,000 years.

And so it goes. Year by year, one saw tooth at a time we are driving the Keeling Curve steadily upward, at an angle of ascent that shows no hint of abating.

Which is why McKibben points out in his interview with Wong, "For the moment, we need everybody who's at all concerned about climate change — the biggest problem facing the world — to make it their business. This, at this point, is everybody's business. And it better be because the economic consequences of not doing anything about it are staggering, quite aside from the moral human consequences."

In Japan, however, following two decades of failed efforts to jumpstart the economy with massive public-works spending, we are so eager for good news that the recent ersatz economic uptick — a bubble even more fragile than the last one that burst in the early 1990s, leading to Japan's extended "lost decade" — has voters giddily in love with you, Mr. Abe.

Machinery orders are up, the yen is down, gross domestic product has hit an annualized rate of 3.5 percent, the Nikkei stock-market index is higher than it's been in five years. … Finally, surely, happy days are here again.

A closer look, though, shows that all is not well in Brave New Japan. There is fear of the government bond market crashing, the costs of daily necessities are climbing while salaries are not, and Japan and its neighbors have not been this bellicose in years.

For me, the greater concern is that the nuclear village has become emboldened to tout nuclear power once again, even as Japan continues to reel from the economic and psychological costs of the meltdowns and despite ongoing radioactive leaks at Tepco's Fukushima.

The only talk of energy we hear is about buying cheap liquefied natural gas from the U.S. Yet this is nothing more than another stopgap measure to avoid crafting a sustainable energy policy based on Japan's domestic low- and no-carbon energy resources that include abundant potential solar, wind, geothermal and marine energy.

And while Japan myopically fiddles with 20th-century measures, China is charging ahead with 21st-century technologies.

"China has halved its growth in electricity demand, dramatically increased its renewable-energy capacity and decelerated its emissions growth," reports Tim Flannery, the head of the Australian Climate Commission and one of the world's leading authors on climate change, in a recent interview.

A non-nuclear, low-carbon future for Japan is eminently doable and offers a stable, sustainable economy. Plus, it's better to compete with China over energy solutions rather than uninhabited islets.

So go for a truly lasting legacy, Mr. Abe, and prove you're committed, not to Tepco, but to **providing a safer and more inspiring future for all today's young people, worldwide.**

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Indo-Japanese deal on nukes - Converging interests?

May 30, 2013

Abe pushes ahead with India nuclear agreement, despite concerns

http://ajw.asahi.com/article/behind_news/politics/AJ201305300078

THE ASAHI SHIMBUN

Despite major concerns about the effects on the global nuclear nonproliferation structure, Japan and India have agreed to push forward with negotiations for a nuclear agreement.

The joint statement released May 29 by Prime Minister Shinzo Abe and his Indian counterpart Manmohan Singh was the result of both countrries' converging interests.

The Abe administration has placed the export of nuclear plant technology as a key plank in its economic growth strategy, and a nuclear agreement is needed with India to clear the way forward.

This spring, Abe visited the United Arab Emirates, Saudi Arabia and Turkey to sell them on Japanese nuclear technology.

However, unlike those three nations, India is a nuclear power and has not yet signed the Nuclear Nonproliferation Treaty.

Japan has lobbied for India to abandon its nuclear arsenal and join the NPT, but to no avail.

An exception was made for the export of nuclear plant technology to India in 2008 by the 48-nation Nuclear Suppliers Group, to which Japan belongs. The decision to exempt India was made at the behest of the United States.
In exchange, India has pledged a moratorium on nuclear testing.

Japan says it will suspend cooperation in the nuclear energy field with India if the country does not keep to the moratorium.

While the nuclear weapons issue is a sensitive one for Japan, the country has compromised with India because of its potential as a huge market for nuclear energy technology.

In addition to six reactors now under construction, there are also plans to build at least 20 more. The construction costs for a single reactor run between 400 billion and 500 billion yen ($3.9 billion and $4.9 billion).

With the prospects for constructing new nuclear reactors in Japan fading as a result of the 2011 disaster at the Fukushima No. 1 nuclear power plant, the export of nuclear energy technology is of extreme interest to roughly 10,000 companies in Japan that are connected in some way with the field.

A high-ranking industry ministry official said, "The economic trickle-down effects from exports are huge."
A government source said, "Japan's technology is indispensable for the United States and France, which having been selling nuclear plant technology to India."

Because the United States and France use Japanese-made parts for nuclear plants, the absence of a nuclear agreement between Japan and India slows down nuclear business deals for those two nations as well.

In late April, French Foreign Minister Laurent Fabius pressed Japanese government officials to move quickly on signing a nuclear agreement with India.

India also wants to move quickly on such an agreement because it faces chronic electricity shortages due to inadequate power generation facilities and power transmission lines.

Its 9-percent energy shortfall could stymie India's economic growth in the years ahead if the deficiency is left unattended.

While the May 29 joint statement made no mention of the NPT in connection with India, Abe said he hoped the Comprehensive Nuclear-Test-Ban Treaty would go into force as soon as possible.

India has also not signed the CTBT, but Abe said that he received a commitment from Singh on the voluntary nuclear test moratorium.

However, concerns still remain over exporting nuclear technology to India. The Fukushima disaster raised questions about whether Japan should export such technology. Groups of atomic bomb victims have also criticized plans to export the technology to India.

Chief Cabinet Secretary Yoshihide Suga said on May 29 that a major precondition for negotiations with India was gaining assurances that the technology would only be used for peaceful purposes.

There is a liability risk involved in exporting nuclear technology to India as well. In the event of an accident, responsibility for compensation is not limited to the plant operator and could also extend to the companies that constructed the reactor.

One executive of a nuclear plant manufacturer said: "We have no idea to what extent we would be held responsible. There will likely be few companies that are eager to jump into the market."

DIFFERENT ATTITUDES ON CHINA

While Abe also wanted to strengthen political ties with India as a means of countering China, those efforts did not go as smoothly as the talks on the nuclear agreement.

Like Japan, India also has a territorial dispute with China. Abe hoped to take advantage of that fact to bring India to his corner when dealing with China about the sovereignty of the Senkaku Islands.

India, however, wants to emphasize its economic ties with China as a means of expanding exports for such major industrial sectors as information technology and pharmaceuticals.

Chinese Premier Li Keqiang visited India last week, and the joint statement released at that time said that the two nations recognized each other as partners not rivals.

(This article was written by Jun Tabushi, Yuriko Suzuki and Masaaki Shoji in New Delhi.)

Abe, Singh ink statement on nuclear deal

by Reiji Yoshida
Staff Writer
http://www.japantimes.co.jp/news/2013/05/30/national/abe-singh-ink-statement-on-nuclear-deal/#.UaZg0NhBpg4

India moved a step closer Wednesday to acquiring Japanese nuclear technology and equipment when its prime minister, Manmohan Singh, and his Tokyo counterpart, Shinzo Abe, signed a joint statement to promote talks to conclude a cooperation pact to this end.

In addition to talks on nuclear power cooperation, the statement issued in Tokyo also supports expanded joint naval exercises.

"I'm very pleased that I'm able to hold a summit with you . . . as the prime minister of Japan again," Abe said at the outset a summit session with Singh, going on to praise Singh for developing a strategic and global bilateral partnership.

A subsequent pact would allow Japanese firms to export nuclear technologies and equipment to India, which is struggling to meet energy demand to sustain the country's rapid economic growth.

However, because it's not a party to the Nuclear Non-Proliferation Treaty, there is concern that India could use Japanese technologies and equipment to further develop nuclear weapons.

Japanese diplomats say New Delhi has pledged strict nonmilitary use of Japanese nuclear know-how and hardware. A future pact would lay out specific conditions and measures to ensure the peaceful use of nuclear exports, they say.

"The two prime ministers reaffirmed their shared commitment to the total elimination of nuclear weapons," the two leaders declared in their joint statement.

On Wednesday Singh also reiterated his country's commitment to its unilateral and voluntary moratorium on nuclear weapons tests.

The two countries also agreed to promote talks on the Fissile Material Cutoff Treaty, a proposed international pact prohibiting further production of weapons-grade uranium and plutonium.

Pressure to restart talks on a nuclear cooperation pact, which reportedly hit a snag following the meltdowns at the Fukushima No. 1 nuclear power plant in 2011, have increased due to growing Indian energy demands and Abe's ambition to export more Japanese infrastructure technologies, including nuclear reactors and related equipment.

At a ceremony at the Prime Minister's Office, the two leaders also agreed to conduct more frequent and regular joint sea exercises by the Indian Navy and the Maritime Self-Defense Force. They also hailed drills held last year by the two nations' coast guards.

The two countries will work together to secure "the freedom of navigation and unimpeded commerce based on the principles of international law," Singh and Abe said in the statement.

Abe meanwhile pledged to continue providing official development assistance "at a substantial level" to India, including for social infrastructure.

Since his first stint as prime minister in 2006 and 2007, Abe has regarded India as a key strategic partner for Japan, particularly as a counterbalance to China's growth.

May 29, 2013

Japan, India to work toward civil nuclear deal
http://www3.nhk.or.jp/nhkworld/english/news/20130529_32.html

The leaders of Japan and India say they will speed up negotiations for the early signing of a civil nuclear pact.

Japanese Prime Minister Shinzo Abe and Indian Prime Minister Manmohan Singh signed a joint statement after their meeting in Tokyo on Wednesday.

The statement calls for accelerating talks for an early signing of a nuclear deal that would allow Japanese firms to export atomic power-related technology. India is planning to build more nuclear power plants.

The joint statement also calls for bilateral efforts for the total abolition of nuclear weapons.

The statement says Japan and India will promote joint exercises between Japan's Maritime Self-Defense Force and India's navy. The move comes at a time when China has been increasing its maritime activities.

The prime ministers also agreed to set up a joint working group and continue to discuss exports of Japan's US-2 amphibious rescue aircraft to India.

Japan has agreed to help develop India's infrastructure, by offering loans worth 71 billion yen or about 700 million dollars to build a subway line in India's western city of Mumbai. The 2 countries will also conduct a joint survey on a project to build a high-speed railway system in western India.

The 2 governments will also arrange a visit to India by Japan's Emperor and Empress between late November and early December.

Speaking at a joint news conference with Singh, Abe expressed his wish to strengthen Japan's ties with India based on a strategic global partnership, on the occasion of the Indian leader's current visit.

Singh said he will work to expand trade and private investment and continue their cooperative bilateral relationship for development, especially in India's infrastructure.
May 29, 2013 - Updated 12:25 UTC

Japan, India seek early agreement on civil nuclear pact

http://ajw.asahi.com/article/behind_news/politics/AJ201305290115

REUTERS

Prime Minister Shinzo Abe and his Indian counterpart agreed on May 29 to speed up talks on a deal to allow Japan to export nuclear plants and to strengthen security cooperation as both sides keep a wary eye on China's military clout.

The Indo-Japanese summit meeting follows Chinese Premier Li Keqiang's visit last week to India, which has been shaken by a recent border spat with China and is cautious about Beijing's friendship with rival Pakistan.

Japan, for its part, has been locked in a territorial dispute with China over a group of East China Sea islets. "In the political and security area, maritime security cooperation will further be strengthened ... On civil nuclear cooperation, negotiation will be accelerated toward the early conclusion of the agreement," Abe told a ceremony alongside India's Manmohan Singh.

Unable to rely on a coal sector crippled by supply shortages and mired in scandals, India is pushing ahead with constructing nuclear reactors despite global jitters over safety. Hundreds of millions of Indians still live without power and factories suffer frequent blackouts.

A civil nuclear energy pact with India would give Japanese nuclear technology firms such as Toshiba Corp. and Hitachi Ltd. access to India's fast-growing market when they search for opportunities overseas to offset an anti-nuclear backlash at home in response to the Fukushima nuclear crisis.

India operates 20 mostly small reactors at six sites with a capacity of 4,780 MW, or 2 percent of its total power capacity, according to the Nuclear Power Corporation of India Limited. New Delhi hopes to lift its nuclear capacity to 63,000 MW by 2032 by adding nearly 30 reactors.

Abe and Singh welcomed expanding defense cooperation and decided to hold regular joint naval exercises. The first such exercise was held last June.

Faced with China's maritime expansion, Singh and Abe said they were committed to freedom of navigation and unimpeded commerce, and agreed to promote cooperation on maritime issues.

In a separate move, Japan agreed to extend up to 71 billion yen ($694 million) in official development assistance for a subway project in Mumbai, India's financial capital.

"Our discussions were guided by the fundamental belief that at the time of global uncertainties, change and challenges, India and Japan are natural and indispensable partners," Singh said.

"We attach particular importance to intensifying political dialogue and strategic consultation and progressively strengthening defense relations."

UNEASE OVER CHINA

India has often been nervous about Chinese agreements with its neighbors that are not strictly military but could be leveraged in a conflict.

Indians sometimes refer to these as a "string of pearls," which include China's ties with Pakistan, access to a Myanmar naval base, Chinese construction of a deep-water port in Sri Lanka, and its deepening ties with Nepal and the Maldives.

India and Japan also agreed to strengthen cooperation in renewable energy, energy conservation, clean coal technologies and liquefied natural gas.

Singh expressed interest in working with Japan in extraction of natural gas from undersea methane hydrate deposits.
State-run Japan Oil, Gas and Metals National Corp. said in March it extracted gas from offshore methane hydrate deposits for the first time in the world, as part of an attempt to achieve commercial production within six years.

30 trillion yen over 10 years for Japan's electricity - A very unclear investment plan

June 7, 2013

Abe plan lifts renewables at utilities' expense

Power companies fear government will weaken monopoly after July election

http://www.japantimes.co.jp/news/2013/06/07/business/abe-plan-lifts-renewables-at-utilities-expense/#.UbDm0dhBpg4

by Chisaki Watanabe and Tsuyoshi Inajima
Bloomberg

Shinzo Abe's pledge to spur **¥30 trillion of investment in Japan's electricity industry** opens the way for a surge in clean energy projects at the expense of traditional utilities.

The prime minister endorsed proposals to deregulate an industry that produces power mostly from fossil fuels, as well as to boost competition among generators and make it easier for wind and solar energy to be distributed to consumers. His speech Wednesday in Tokyo didn't mention restarting nuclear reactors idled since the earthquake-tsunami disaster in 2011.

Utility shares in Japan tumbled, led by Tokyo Electric Power Co., which owns the plant in Fukushima that suffered three meltdowns after the earthquake-tsunami double-punch two years ago.

Abe's remarks raise the chances the government will move to weaken the monopoly power producers now enjoy after the July Upper House election. That would benefit Marubeni Corp. and Softbank Corp., both of which are planning renewable energy investments.

"His push to liberalize power markets is a bold attempt to increase competition and bring in new market players," said Nathaniel Bullard, an industry analyst at Bloomberg New Energy Finance in Hong Kong.

Abe said in the speech: "For 60 years after the war, one giant power company in each region has dominated from power generation to transmission to retail. The times are changing. We are in the age where consumers themselves produce power."

He discussed the emergence of fuel cells and power storage batteries and the "need to create more innovation" that would use those technologies to help integrate variable supplies of renewable energy into the transmission grid.

He said he "will bring about the potential for such innovations" by "unbundling transmission and distribution" — two businesses that currently are mostly integrated at utilities.

To be sure, Japan has made four previous attempts to restructure its electric utility industry, which has remained little changed since World War II, according a panel that advised the government in February. It was led by Motoshige Itoh, an economics professor at the University of Tokyo.

Abe also indicated coal would benefit from his policy, with the nation funding cutting-edge coal-fired power plants at home with technology that can be exported.

The Fukushima nuclear crisis that started in March 2011 led to an outcry among voters and the halt of all but two of the nation's reactors, changing the government's stance on energy policy to shift the nation toward cleaner sources of energy. More than 70 percent of respondents in an opinion poll by the Asahi Shimbun in February said Japan should scrap atomic power.

The government wants to pass the power reforms bill, which has been submitted to the Diet, "by all possible means," Abe said. Investment in wind, geothermal and other renewable sources will be accelerated by "drastically" speeding up environmental assessment processes, he added.

His speech was short on detail, since the government is working on a review of its energy policy due later this year. Abe's Liberal Democratic Party, which came to power in December, is seeking to consolidate its grip on power in the July 21 Upper House poll.

The suggestion that Abe is moving to restructure the power generation business is a threat to the utilities, which were hoping the government would allow them to restart their nuclear plants.

All except two of Japan's 50 reactors remain offline. When they were all running, they provided more than a quarter of the nation's electricity.

Instead, Abe signaled his support for the recommendations of the government advisory panel, which in February said ministers should push utilities to spin off their distribution networks. Japan's 10 regional

power companies own more than 70 percent of the nation's generation capacity and control transmission and distribution networks.

One result is average power prices twice as high as in the U.S. Japan's households paid 23.2 cents per kilowatt-hour in 2010, compared with 11.6 cents in the U.S., the Ministry of Economy Trade and Industry said in a November 2012 report.

Since the Fukushima crisis started, fossil fuels such as coal and natural gas have replaced nuclear power, driving up Japan's trade deficit and making it more difficult for the nation to reduce the pollution blamed for global warming. Japan's previous administration said it wouldn't sign on to the next round of worldwide emissions curbs under the Kyoto Protocol.

Abe said renewables such as wind and geothermal may be part of the solution, giving environmental campaigners hope that clean energy technology will get a boost. Japan is forecast to rival China as the world's biggest market for solar power this year, boosting sales for panel manufacturers such as Canadian Solar Inc. and Sharp Corp. Marubeni is pushing to revive long-dormant geothermal drilling projects in Japan.

"Unless Japan pushes through power industry reform, the country won't have the ground to develop clean energy," said Masako Konishi, climate and energy project leader for the environmental group WWF Japan.

The ¥30 trillion in investment in the power industry as outlined by Abe will take place over the next 10 years and represents a 50 percent increase from levels in the past decade. **No details were provided on where the money will be spent or how much of the investments will go to clean energy.**

Masayoshi Son's Softbank may also benefit, since the company has pledged to invest as much as ¥20 billion with investors in renewable energy project. Mitsubishi UFJ Financial Group Inc., Mizuho Financial Group Inc. and Sumitomo Mitsui Financial Group Inc. expect Japan's solar market to be worth as much as ¥1.8 trillion in the next three years, spurring the institutions to write loans for developers.

Abe's target may include investment in storage batteries, said Mika Ohbayashi, director of the Japan Renewable Energy Foundation. Japan has been promoting the development of storage batteries to help stabilize power generation that depends on the sun shining and wind blowing.

"Rather than storage batteries that are still expensive, we need to invest in new transmission lines to strengthen power infrastructure," Ohbayashi said.

A pillar of power industry reform is the establishment of an independent system operator for power grids, said Hiroshi Takahashi, a senior fellow at Fujitsu Research Institute.

Setting up such an institution will help control the demand and supply of power, which in turn can help expand the market for clean energy, he said Tuesday. Takahashi sat on the government-appointed committee that recommended the reform earlier this year.

Japan aims to capture a total ¥26 trillion worth of energy technology sales home and abroad by 2020, from the current ¥8 trillion, according to a draft strategy paper released by the Industrial Competitiveness Council after Abe's speech.

Japan will further strengthen areas the country excels in so that investment in renewable energy will not weaken the economy, but instead strengthen it, according to the document.

Japan intends to become the first country to commercialize floating offshore wind power technology by around 2018, according to a timetable also released by the council. As for solar, the country aims to lower the generation cost to less than ¥7 per kwh after 2030 from more than ¥30 currently, according to the timetable.

Reform, without specific commitments and targets for renewables, may not be enough, WWF Japan's Konishi said.

"It's possible to set ambitious targets for renewable energy and energy saving without setting targets for nuclear," Konishi said. "Such targets will have an impact on investment by companies."

A super collider for Japan?

June 13, 2013

Japan a candidate to house planned super-collider

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201306130067

By AKIRA HATANO/ Staff Writer

An international physicist group plans to build an $8.75 billion (830 billion yen) particle accelerator with Japan as a leading candidate to be home to the 31-kilometer, next-generation super-collider.

The Linear Collider Collaboration project team released a technical design report on June 12 for the International Linear Collider project in the hope of unraveling more mysteries of the universe using a huge particle accelerator.

According to its report, the length of the planned collider is 31 kilometers, which would make it the longest in the world.

Japan and the United States, along with nations in Europe and elsewhere, will discuss the feasibility of the collider construction based on the report.

At issue is where to construct the collider and what proportion of construction costs each nation will have to bear.

The project would allow researchers to accelerate electrons and positrons to more than 99 percent the speed of light, and turn them each into a beam.

After causing a head-on collision of the two beams, they will be able to catch Higgs bosons and other particles generated by the collision to see their characteristics. The Higgs boson, often referred to as the "God particle," is an elementary particle that scientists believe allows all substances to acquire mass.

The construction costs are current estimates. The United States and European nations have shown less appetite for building the collider within their borders, citing severe fiscal constraints.

The LCC has high expectations for Japanese assistance.

Candidate sites for the particle accelerator in Japan include the Kitakami Mountains straddling Iwate and Miyagi prefectures, and the Sefuri Mountains straddling Saga and Fukuoka prefectures.

Japanese researchers plan to choose a final candidate by the end of July for submission to the government for approval.

Particle collider project possible for Japan

http://www3.nhk.or.jp/nhkworld/english/news/20130614_03.html

The head of an international group promoting the building of an advanced particle collider says he hopes Japan will bid to host the huge experimental facility.

A plan is underway to complete the International Linear Collider, or ILC, in the mid-2020s. It would allow physicists to smash electrons and positrons in a 30-kilometer straight tunnel, at close to the speed of light.

The goal is to create an environment similar to that just after the birth of the universe, and shed more light on its origin.

Lyn Evans is director of the international science organization, Linear Collider Collaboration. He held an exclusive interview with NHK on Thursday.

Evans stressed his group is working on the premise that Japan will host the collider, and take the lead in building an international research facility like the Large Hadron Collider near Geneva. Scientists at the European Center for Nuclear Research, known as CERN, are presently using the Geneva facility for particle physics research.

Evans noted that it is difficult to construct the ILC in Europe as the region already has the Geneva experimental facility. He added that the United States will join the project but will not be able to play a leadership role.

Constructing the ILC is estimated to cost about 830 billion yen, or nearly 9 billion dollars. The host country will have to bear half the cost of the facility.

The Japanese government will decide whether to bid for the particle collider based on a report from the Science Council of Japan.

Japan currently has 2 candidate sites. One is the Kitakami mountain region in Iwate Prefecture in the northeast. The other is the Sefuri mountain area straddling Fukuoka and Saga prefectures in the southwest.

Local governments, businesses and academia are pushing to host the ILC. The project is expected to bring thousands of researchers from around the world together, creating major economic benefits.

Japan plans to decide on one candidate site in July. The final location will be selected after talks among participating nations.

How much state involvement in decommissionning?

EDITORIAL: Special agency needed to accelerate decommissioning of reactors

http://ajw.asahi.com/article/views/editorial/AJ201306130046

The Fukushima nuclear disaster convinced many Japanese they urgently needed to **build a new energy future that is not dependent on nuclear power.**

But scrapping a nuclear power plant is a costly and complicated endeavor. It takes a great deal of time and money to dismantle structures contaminated with high levels of radiation and dispose of spent nuclear fuel. The process also entails many tough technological challenges. Electric power companies tend to hesitate to decommission their reactors because of the heavy burden that such work requires.

CONCERNS ABOUT DELAYS IN DISMANTLING RISKY REACTORS

It is against this background that the Ministry of Economy, Trade and Industry (METI), which supervises the electric power industry, has embarked on creating an environment that will make it less burdensome for utilities to decommission reactors. The ministry plans to relax the accounting rules concerning losses incurred through reactor decommissioning in order to provide financial incentives to take the step.

We regard this as a move in the right direction. But such measures alone will not lead to quick progress toward the dismantling of nuclear plants.

The current system concerning decisions to decommission reactors, and the management and disposal of radioactive waste, needs to be changed so that the government will take the leadership in these matters. At the same time, the establishment of **a new expert institution** responsible for related operations should be considered.

In Japan, nuclear power plants have been built and operated by private-sector companies under the government's policy of promoting the use of atomic energy. Nuclear power plants are assets of their operators, which are primarily responsible for decommissioning and dealing with the problem of spent nuclear fuel.

This system is based on the assumption that utilities can use their nuclear plants for as long as possible in order to recoup the huge construction costs while putting aside money for future decommissioning.

But the devastating accident that unfolded at the Fukushima No. 1 nuclear power plant in 2011 dramatically changed the situation.

The Nuclear Regulation Authority has endorsed an expert panel's conclusion that a seismic fault running underneath the No. 2 reactor at Japan Atomic Power Co.'s Tsuruga nuclear power plant in Fukui Prefecture is active.
In due course, more reactors will likely have to be decommissioned after scientific findings show that they fail to meet the new safety standards.

Complicating the situation are deteriorating earnings of most electric utilities due to the suspension of reactor operations following the nuclear disaster. Eight of the nine regional electric power suppliers that own nuclear power plants reported losses in the year through March, according to their financial results. Their bottom lines were dented by increased fuel costs due to expanded use of thermal power generation to compensate for the loss of nuclear power. Their combined net loss came to nearly 1.6 trillion yen ($16.52 billion).

The situation raises concerns that utilities may be tempted to postpone dismantling reactors due to their financial problems.

Such concerns prompted METI's decision to apply special accounting rules to losses related to decommissioning.
When an operator shuts down a nuclear power plant earlier than it had anticipated, the company will be allowed to spread out certain related losses for tax purposes over a period of years. The rule will be applied to losses caused by a shortage of reserves for the costs of decommissioning or a decline in the value of the assets.

DECOMMISSIONING AROUND THE WORLD

Globally, the governments of many countries are involved in dealing with matters related to the closure of nuclear power plants. That is partly because nuclear plants were state-run enterprises.

State involvement is necessary because the process includes steps that require lengthy and difficult negotiations and cooperation both domestically and internationally, such as selecting candidate sites for final disposal of spent nuclear fuel and measures to deal with the risks of nuclear proliferation and terrorist attacks.

Britain, for instance, established the Nuclear Decommissioning Authority (NDA) in 2005 to integrate policies and monitoring systems related to the dismantling of nuclear power facilities.

In actual projects to decommission reactors, Britain selects the contractors through international bidding and gives them licenses and targets. This is intended to ensure that the operations don't become inefficient.

The NDA is also in charge of managing and disposing of plutonium generated through recycling of spent nuclear fuel.

In Germany, major electric utilities are, in principle, required to pay all the costs of decommissioning the nuclear plants they own. After the government of Chancellor Angela Merkel decided to phase out nuclear power generation, some energy firms sued the government for damages. They assert that the policy change will cause them heavy losses due to the costs of decommissioning reactors earlier than planned.

There is also a state-run specialized corporation called Energiewerke Nord GmbH (EWN), which is mainly engaged in decommissioning and dismantling aged nuclear reactors in the former East Germany. The EWN's operations are financed by the government.

In making decisions on actual projects to decommission reactors, major German utilities are weighing two options: contracting out the work to the EWN, which is trying to expand its operations in expectations of growing demand for its services in the future, or tackling the tasks on their own.

USE OF TAXPAYER MONEY AS AN OPTION

Relaxing the accounting rules alone won't be enough to get Japanese utilities to act swiftly to decommission and dismantle nuclear reactors.

The Fukushima nuclear disaster has highlighted the need to close reactors in areas where it is extremely difficult to ensure swift evacuation of local residents in emergencies, even if the reactors meet the new safety standards.

But there is no hope that utilities will move quickly toward decommissioning as long as they have the right to decide whether to close down specific reactors.

First of all, the government needs to lay down clear rules concerning decommissioning. Then, it should set up an expert institution that shares knowledge and information with similar

organizations abroad. By commissioning the new entity to deal with decommissioning, the government will be able to accelerate the process of reducing Japan's dependence on atomic energy.

There are, of course, many knotty questions that must be answered, such as who should foot the bill in what ways and how the new entity should take over reactors which are assets of the utilities.

There are various possible ways to cover the necessary costs. Since utilities set aside money for decommissioning from electricity charges they collect from consumers, one idea worth consideration is to use taxpayer money to quicken the pace of decommissioning. Another possible option would be to operate a minimum number of reactors for the time being and transfer them to the new expert body so that profits from selling electricity generated by the reactors can be used to cover decommissioning costs.

The electric power industry may have good reason to establish the entity on its own, given the possibility that the body could give the industry a leg up in entering the global decommissioning business in the future.

Another possible option would be to reorganize Japan Atomic Power, a company specializing in nuclear power generation that is mostly owned by utilities, into such an entity.

The government should set up a formal forum for discussions on this topic and sort out related issues for national debate.

What nuclear phase-out?

June 14, 2013

Gov't white paper on energy barely refers to nuclear phase-out goal

http://mainichi.jp/english/english/newsselect/news/20130614p2g00m0bu046000c.html

TOKYO (Kyodo) -- Japan's annual energy report released Friday barely refers to the fact that the previous government upheld a goal to phase out nuclear power generation in the 2030s, reflecting the pro-nuclear stance of the current government.

The latest Energy White Paper covers a period between August 2012 and around March this year, during which the previous government led by the Democratic Party of Japan compiled a new energy strategy following the 2011 Fukushima Daiichi nuclear power plant disaster.

The most controversial part in the strategy was a pledge to "devote all policy resources to enable zero nuclear power plant operation in the 2030s," but the white paper does not use the phrase in explaining the strategy.

"The three pillars (of the strategy) were the achievement of a society that does not rely on nuclear power at the earliest possible date, the realization of green energy revolution and stable supply of energy," the report says.

The strategy has come under review after the Liberal Democratic Party, which supports the use of nuclear power even after the Fukushima crisis, replaced the DPJ as the ruling party in the general election in December.

An official in charge of the white paper denied that the government intentionally dropped the key phrase, insisting that the report records what was written in the strategy "as is."

The zero-nuclear goal shows up in the white paper once, but only as part of Prime Minister Shinzo Abe's quoted statement, which criticizes the energy strategy for stirring concerns and distrust among the local governments hosting nuclear power plants and the business industry.

The goal, if maintained, would have marked a massive shift in Japan's decades-long promotion of nuclear power. Before the Fukushima disaster, triggered by a huge earthquake and tsunami on March 11, 2011, nuclear power supplied about 30 percent of Japan's total electricity.

The white paper also touches on a poll conducted by the previous government to grasp public opinions on energy policy, but does not mention the fact that the government at that time concluded that at least a majority of people are hoping for a society that does not rely on nuclear power.

Of the 50 commercial reactors, only two in western Japan are currently online. Abe's government has said it will push for the resumption of reactors that are deemed safe by the country's new nuclear regulatory authority.

Poland, Czech Republic, Slovakia, Hungary, (France, India, UAEs) and now Brazil

June 20, 2013

Japan, Brazil to restart talks on nuclear deal stalled since Fukushima crisis

JIJI

http://www.japantimes.co.jp/news/2013/06/20/national/japan-brazil-to-restart-talks-on-nuclear-deal-stalled-since-fukushima-crisis/#.UcK169hSb9k

Japan and Brazil are expected to agree at a bilateral summit meeting next week to resume negotiations on concluding a nuclear cooperation accord, a government source said.

The two sides began the talks in January 2011 but they have remained suspended since the nuclear meltdowns at the Fukushima No. 1 complex in March 2011.

The plan to restart them will be included in a joint statement to be issued after Prime Minister Shinzo Abe's meeting with Brazilian President Dilma Rousseff in Tokyo on June 27, the source said Wednesday.

A bilateral nuclear agreement confirming the peaceful use of atomic energy must be concluded before any bilateral trade in nuclear technologies can take place. The Abe administration regards exports of nuclear plant equipment as a pillar of its economic growth strategy.

Brazil currently has two nuclear reactors in operation and aims to secure a more stable electricity supply by building more. Energy demand in the country is projected to rise further on the back of rapid economic growth.

Abe signed bilateral nuclear pacts with the United Arab Emirates and Turkey in May, Japan's first such deals since the Fukushima No. 1 plant was crippled by the March 11, 2011, 9.0-magnitude quake and tsunami. Later that month, Japan and India agreed to resume bilateral nuclear talks that also had been suspended since the Fukushima disaster.

During his current visit to Europe, Abe agreed with the leaders of countries including the Czech Republic on bilateral cooperation in the atomic energy sector.

Japan, Brazil likely to agree to resume talks on nuclear development

http://mainichi.jp/english/english/newsselect/news/20130620p2g00m0dm080000c.html

TOKYO (Kyodo) -- Japan and Brazil will likely agree to resume talks on a civil nuclear cooperation pact at a summit meeting next week, a Japanese government source said Thursday, paving the way for Japanese companies to export atomic power generation technology and equipment.

The agreement is expected to come when Prime Minister Shinzo Abe and Brazilian President Dilma Rousseff meet next Thursday in Tokyo to discuss enhancing bilateral economic ties, according to the source.

With two nuclear power plants currently online, Brazil is hoping to increase the number and shift its focus from hydropower to nuclear energy.

Japan and Brazil began talks in January 2011 with an eye to signing a civil nuclear cooperation pact for the peaceful use of nuclear energy.

The talks, however, have been stalled since the nuclear crisis in Fukushima Prefecture, triggered by the devastating earthquake and tsunami in March 2011.

A civil nuclear cooperation pact sets a legal framework for the peaceful use and transfer of atomic-power technologies and equipment as well as nuclear materials to ensure nonproliferation.

Abe hopes to boost exports of nuclear power technologies and equipment as one of the key areas in Japan's growth strategy.

In May, Japan signed civil nuclear power cooperation pacts with the United Arab Emirates and Turkey, and agreed to accelerate talks on such an accord with India.

Japan agreed on Sunday to deepen cooperation in the field of nuclear power with the so-called Visegrad Group of Eastern European nations -- Poland, the Czech Republic, Hungary and Slovakia.

June 17, 2013

Japan to cooperate with 4 central European nations on nuclear energy

http://ajw.asahi.com/article/behind_news/politics/AJ201306170051

THE ASAHI SHIMBUN

WARSAW--In a first-ever summit, Prime Minister Shinzo Abe on June 16 agreed with leaders of four central European nations to advance cooperation in the energy sector in an attempt to boost exports of nuclear reactors.

"Closer ties with the V4 will lead to infrastructure exports, a goal under Japan's economic growth strategy," Abe said after a summit with the Visegrad 4 (V4) regional cooperation framework, consisting of Poland, the Czech Republic, Slovakia and Hungary.

A joint statement released after the summit said Japan needs to contribute to nuclear safety based on lessons learned from the accident at the Fukushima No. 1 nuclear power plant in 2011.

Japan has upgraded its relationship with the V4 from the foreign minister's level, given the fast economic growth of the four member countries. Visegrad is a Hungarian city where Poland, Hungary and the former Czechoslovakia agreed on the grouping in 1991.

The four countries plan to build nuclear reactors in an effort to lessen dependence on Russia for energy resources.

The International Atomic Energy Agency estimates that nuclear power generation capacity in East Europe will increase 1.6 to 2 times in 2030 from the current 49 million kilowatts.

The figure means that 30 to 50 new reactors will likely be built by 2030, putting the region on par with Asia and the Middle East.

The Czech Republic is expected to select a contractor to build two additional reactors at the Temelin nuclear power plant in September at the earliest.

The team of Toshiba Corp. and its U.S. subsidiary, Westinghouse Electric Co., is competing with a Russian company for the contract.

Japanese and French companies are bidding for two reactors in Hungary, while contractors from Japan and five other countries are vying for two reactors in Poland.

When it exports a nuclear reactor, Japan needs to conclude a nuclear energy agreement, which limits the technology to civilian use.

But no such pact will be required for V4 countries because they are members of the European Atomic Energy Community, with which Japan has already concluded a nuclear energy agreement.

In May, Japan basically agreed with Turkey to build a nuclear plant on the Black Sea, the first export of the technology since the Fukushima disaster. It also in May signed a nuclear energy agreement with the United Arab Emirates. However, Abe's push to resume exports of nuclear reactors is not fully supported by the public.

According to an Asahi Shimbun survey in June, 59 percent of respondents said they are opposed to using nuclear reactors proactively to promote economic growth. A midlevel lawmaker of the ruling Liberal Democratic Party warned if Abe pushes exports of nuclear reactors too strongly, it could affect the Upper House election in July.

Apart from the nuclear energy cooperation, the joint statement released after the Japan-V4 summit also called for accelerating negotiations on an economic partnership agreement between Japan and the European Union.

Abe and his counterparts agreed to make preparations for a foreign ministers' meeting on the sidelines of a session of the Asia-Europe Meeting in November. The leaders also agreed to designate 2014 as the year for promoting exchanges between Japan and the V4.

Prior to the summit with the grouping, Abe met with Polish Prime Minister Donald Tusk and agreed to hold a bilateral meeting of defense officials in autumn.

(This article was written by Takayuki Hayashi in Warsaw and Hajime Horiguchi in Tokyo.)

Poland?

June 21, 2013

Poland may delay nuclear reactor operation
http://www3.nhk.or.jp/nhkworld/english/news/20130621_06.html

Polish Prime Minister Donald Tusk says his country may delay the planned operation of the country's first nuclear reactors. A major Japanese company is aiming to win a contract to build the units.

Tusk held a news conference in the capital Warsaw on Wednesday. He said he is not ruling out nuclear in Poland's energy mix, but it would be later than planned.

Tusk cited the high cost of building reactors and the ongoing domestic development of shale gas as reasons.

Constructing the reactors would cost about 15 billion dollars.

Leading Japanese electronics maker Hitachi is seeking to win the deal to build the reactors.
Japanese Prime Minister Shinzo Abe met Tusk on Sunday in Warsaw to promote Japan's nuclear technology.

Poland abandoned building nuclear plants after the Chernobyl accident. The country now relies on coal-fired plants for more than 80 percent of its power.

But the government decided to build 2 nuclear plants on 2 sites due to an expected decrease in domestic coal production and the need to combat global warming. It plans to start operating the reactors in 2024.

"We will enhance the safety of nuclear power plants"

June 20, 2013

Abe states intention to promote nuclear power via energy market, safety reform

Kyodo
http://www.japantimes.co.jp/news/2013/06/20/national/abe-states-intention-to-promote-nuclear-power-via-energy-market-safety-reform/#.UcK2HNhSb9k

LONDON – Prime Minister Shinzo Abe has clarified his intention to promote nuclear power despite the crisis at the Fukushima No. 1 plant, pledging to make efforts to enhance safety at atomic energy facilities.

"The tragedy that hit Fukushima has yet to end. I can't stand still when I think of the difficulties the victims have been facing," Abe said Wednesday during a speech in London. "But we should change the greatest crisis (postwar Japan has faced) into an opportunity to reform the energy market."

"We will enhance the safety of nuclear power plants and continue to contribute to nuclear nonproliferation. Japan, which has led the world in (this field), will not choose a way to retreat" in the face of the March 2011 meltdowns, said Abe, who stopped by the City of London financial district after attending the Group of Eight summit in Northern Island.

[Abe also promised....]

MOX - But what for?

June 27, 2013

Japan unlikely to use MOX fuel in nuclear reactors

http://mainichi.jp/english/english/newsselect/news/20130627p2a00m0na014000c.html

The government is highly unlikely to go ahead with the use of uranium-plutonium mixed oxide, or MOX fuel, in nuclear reactors as it had planned, even though a freighter carrying nuclear fuel reprocessed in France has arrived back to Japan.

Japan possessed 44.3 tons of plutonium, including that stored in Britain and France, as of the end of 2011, according to the Cabinet Office's Atomic Energy Commission (AEC). If used for power generation, each reactor would spend only 0.4 tons of MOX fuel a year.

Therefore, Japan will likely fail to keep an international pledge it made not to possess plutonium that cannot be used because such fuel could be converted to nuclear arms.

Prior to the outbreak of the Fukushima nuclear crisis in 2011, the government had intended to introduce MOX fuel -- produced by extracting plutonium from spent nuclear fuel -- at 16 to 18 reactors by fiscal 2015. However, it is particularly difficult for the use of such fuel in 26 boiling-water reactors, the same type as those at the tsunami-hit Fukushima No. 1 plant, to meet new safety requirements.

Four utilities are expected to apply to the authorities for permission to reactivate 12 of their idled nuclear reactors beginning in July. All of them are pressurized water reactors.

MOX fuel could technically be used in only four of these reactors, according to government officials. The four reactors are the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Takahama power station, the No. 3 reactor at Shikoku Electric Power's Ikata plant and the No. 3 reactor at Kyushu Electric Power's Genkai plant.

Before the outbreak of the Fukushima nuclear crisis, utilities had gained consent from local communities for the use of MOX fuel in 10 reactors, including J-Power's Oma power plant that is under construction. Such fuel had actually been used at four of the reactors including the No. 3 reactor at the Fukushima No. 1 plant until the nuclear disaster.

But the Fukushima reactor was stopped following the disaster and the three others have been suspended for regular inspections. The three still cannot be reactivated in the aftermath of the nuclear crisis.

The use of MOX fuel is an important part of the government's nuclear fuel cycle project in which spent nuclear fuel is reprocessed and reused. While the use of such fuel allows efficient and effective use of plutonium, there are technical problems, such as a decline in the efficiency of control rods used in the operation of the reactors, according to experts.

The Monju prototype fast-breeder reactor, which produces electric power by causing the nuclear fission of plutonium and generates more plutonium than it consumes, had previously been the core of the nuclear fuel cycle project.

However, there is no prospect that the reactor, whose operation had been suspended following a sodium leak in 1995, will be resumed in the foreseeable future because it has come to light that since November last year workers failed to examine more than 10,000 parts of the reactor.

Komeito on nukes

June 29, 2013

Komeito urges caution for nuclear tech exports

http://www3.nhk.or.jp/nhkworld/english/news/20130628_40.html

The leader of Japan's junior coalition partner is expressing caution about exporting nuclear power plant technology.

New Komeito chief Natsuo Yamaguchi told NHK on Friday that the government can decide whether to export the technology if other countries need Japan's expertise and strict safety standards.

But he said the public will not approve of the government taking the initiative in sales promotions.

He also said many people are still unable to return to their homes since evacuating after the accident at the Fukushima Daiichi nuclear power plant in 2011.

Yamaguchi says exporting nuclear technology requires thorough and careful consideration.

Prime Minister Shinzo Abe is eager to promote exports of civilian nuclear technology.

He and Indian Prime Minister Manmohan Singh agreed last month to speed up negotiations on a nuclear cooperation pact that will enable Japan to transfer its technology to India.

Japan has also signed similar deals with Turkey and the United Arab Emirates.

June 28, 2013

Komeito to campaign for nuke phaseout, denies disconnect with LDP

http://www.japantimes.co.jp/news/2013/06/28/national/komeito-to-campaign-for-nuke-phaseout-denies-disconnect-with-ldp/#.UcyP4NhSb9k

by Ayako Mie
Staff Writer

New Komeito, the junior coalition partner of the ruling Liberal Democratic Party, pledged Thursday to push for a nuclear phaseout at the earliest possible date and bolster the Constitution by adding more provisions, a sharp contrast to the LDP's desire to promote atomic power and rewrite the national charter.

But New Komeito officials said the party aims to maintain policy consistency with the LDP while sticking to its core stands, including opposition to revising the war-renouncing Article 9, only to be vague on aspects of nuclear energy and constitutional revision.

Thursday's policies are New Komeito's campaign pledges for the upcoming Upper House election. The party already hammered out the first set of key policies earlier this month.

On atomic power, New Komeito retained its stance from December's Lower House campaign, saying it will strive to achieve a nuclear-free society as soon as possible, including not allowing new nuclear plants to be built.

Asked about the discrepancy with LDP policy, the party stressed that it is in line with the coalition agreement that the government will gradually decrease reliance on nuclear power by capitalizing on renewable energy.

Yet the LDP's platform says the party will scrap the target set by the Democratic Party of Japan, which was in power when the Fukushima meltdown catastrophe started, to phase out all nuclear power by the 2030s. The LDP also pledged to push for the export of nuclear power technology and other infrastructure.

Asked about this gap within the coalition, New Komeito policy chief Keiichi Ishii dodged the question, saying the government is in charge of diplomacy to export atomic power. Ishii also emphasized that New Komeito has not taken a stance on nuclear exports, even though he said earlier this month that exporting nuclear technology could be one way for Japan to make an international contribution.

On the Constitution, New Komeito said it will push to add more provisions, including environmental rights and a clause to achieve decentralization. Yet the party remained vague about Article 96, saying revising this provision should be discussed only within the context of overall reform.

The LDP plan to rewrite the Constitution starts with weakening Article 96, which requires a two-thirds majority vote in both Diet chambers to revise the charter before putting proposed changes before voters.

LDP sole proponent of nuclear future

July 1, 2013

LDP alone in fighting nuclear power exit

JIJI, Kyodo
http://www.japantimes.co.jp/news/2013/07/01/national/ldp-alone-in-fighting-nuclear-power-exit/#.UdB0ZdhSb9k

OSAKA – The ruling Liberal Democratic Party was the sole opponent of abolishing nuclear power in a policy debate involving the secretaries-general of nine major political parties Saturday.

While the representatives of the eight other parties backed ridding Japan of atomic energy generation, LDP Secretary-General Shigeru Ishiba said lawmakers should not mislead the public by calling for a zero-nuclear option. Ishiba said the LDP will aim to reduce the nation's dependence on atomic energy but underscored his party's plans to push for a restart of idled reactors once they are deemed safe.

"If we don't (suggest) ways to reduce dependence on nuclear power, it is not responsible politics," said Ishiba. "(Other parties) should not delude the public by using phrases like 'zero nuclear power.' "

But Ishiba found himself in a minority of one, as the secretaries-general of New Komeito, the LDP's junior coalition partner, and opposition groups including the Democratic Party of Japan and Your Party voiced support for the elimination of all nuclear power plants.

During the debate, held in Osaka ahead of the Upper House election, the secretaries-general were asked to hold up a board with either a circle or a cross to indicate their support or opposition for the zero-nuclear power goal. Ishiba was the only one to hoist a cross in the air.

Among the proponents, Japanese Communist Party Secretary-General Tadayoshi Ichida said it would be inconceivable to restart reactors or export Japan's nuclear technologies given that the disaster at the Fukushima No. 1 plant has yet to be resolved. His Your Party counterpart, Kenji Eda, said it would be irresponsible to bring reactors back online when locations for disposal facilities for spent nuclear fuel have yet to be decided.

Among other issues likely to dominate campaigning for the July 21 House of Councilors poll, the party representatives debated Prime Minister Shinzo Abe's proposed constitutional revision and his government's promotion of nuclear-related exports.

On Abe's plan to water down Article 96 to make it easier to amend the Constitution, the LDP's Ishiba and his Nippon Ishin no Kai (Japan Restoration Party) counterpart voiced support.

But DPJ Secretary-General Goshi Hosono slammed Abe and said efforts should be made to retain the two-thirds majority requirement needed in both chambers of the Diet for any constitutional amendment, as currently stipulated by Article 96.

New Komeito's Yoshihisa Inoue supported him, saying that altering the charter should not be proposed before the public has thoroughly debated the issue.

June 30,2013

LDP only party opposed to moving toward zero nuclear plants

http://ajw.asahi.com/article/behind_news/politics/AJ201306300018

THE ASAHI SHIMBUN

OSAKA--The ruling Liberal Democratic Party separated itself from the nine parties that participated in a public debate on June 29, being the only one that supports the continued use of nuclear power far into the nation's future.

Party executives of the nine major parties that will compete in the Upper House election to be held on July 21 gathered in Osaka to debate various issues, such as economic policy and constitutional revision.

At one point, the nine lawmakers were asked whether they favored moving toward a future when Japan had no nuclear plants in operation.

LDP Secretary-General Shigeru Ishiba was the only one who voted "No."

He pointed out that unless operations were resumed at nuclear reactors "energy costs would increase, carbon dioxide emissions would increase and trade balance would worsen."

Only two reactors are now online as the remaining 48 have suspended operations in the wake of the March 2011 accident at the Fukushima No. 1 nuclear power plant. Four electric power companies plan to apply to the Nuclear Regulation Authority to restart 12 nuclear reactors soon after new stricter safety standards take effect on July 8.

Ishiba criticized the move to eliminate all nuclear plants. "Unless the negative aspects are taken into consideration before thinking about how to reduce the weight of nuclear power generation, we cannot make responsible political decisions," he said.

Even junior coalition partner New Komeito favored moving toward a nuclear power-free future.

All the opposition parties also supported such a goal.

"After the decision is made to eliminate nuclear plants, efforts should be made to encourage research and development as well as other efforts by companies," said Yasuko Komiyama, the Diet affairs committee chairperson for the People's Life Party.

Tadatomo Yoshida, acting secretary-general for the Social Democratic Party, also criticized the LDP's moves toward allowing electric power companies to resume operations at nuclear reactors.

"Last summer demonstrated that electricity could be supplied without operating any nuclear reactors," he said.
Ishiba stressed the progress made by the Abe administration in the six months it has been in office on the economic front through its package of measures, commonly known as Abenomics.

No intention whatsoever to do away with nukes

July 6, 2013

Japanese power firms have no plans to scrap more nuclear reactors: poll

JIJI
http://www.japantimes.co.jp/news/2013/07/06/national/japanese-power-firms-have-no-plans-to-scrap-more-nuclear-reactors-poll/#.UdhrW6xSb9k

Although tighter nuclear safety standards will be implemented Monday, none of the nation's 10 atomic power plant operators is planning to retire any reactors other than those already destined for the scrap heap, a survey showed Saturday.

Due to the huge costs of meeting the new regulations drawn up in light of the Fukushima meltdowns in 2011, the operators had been expected to designate more aging reactors for decommissioning. But some of the operators are even planning to apply for permission to continue running reactors beyond the maximum 40-year limit, the Jiji Press survey found.

Japan's 50 commercial reactors are operated by nine regional utilities and Japan Atomic Power Co. Of this total, seven units are in the process of being dismantled, including reactors 1 to 4 at the crippled Fukushima No. 1 power station.
The operators' reluctance to retire reactors is apparently due to the sky-high decommissioning costs, which are estimated at around ¥55 billion for a 1.1 million kw unit.

The operators would thus have to book huge impairment losses if they decided to scrap more reactors. The oldest reactor in the nation, unit 1 at Japan Atomic Power's Tsuruga plant in Fukui Prefecture, would cost a projected ¥23 billion to dismantle.

"Generally, older reactors have higher risks," said Hideyuki Ban, co-director of the Citizens' Nuclear Information Center.
"If power firms put off decommissioning reactors to secure short-term profits and avoid (massive) losses, that could see the recurrence of a (major) nuclear accident," he warned.

Further away from renewables

July 7, 2013

Japan's growth in renewable energy dims as nuclear strives for comeback

http://ajw.asahi.com/article/behind_news/politics/AJ201307070012

By MARI FUJISAKI/ Staff Writer

The shining light that was once Japan's renewable energy industry is beginning to dim as reality sets in and it faces competition from a rejuvenated nuclear power industry.

The green energy industry was buoyed by the nation's distrust and fear of nuclear power triggered by the 2011 earthquake and tsunami disaster that crippled the Fukushima No. 1 nuclear power plant.

According to a February nationwide survey by the Japan Renewable Energy Foundation, 34 of the 79 solar energy producers who responded said they had given up on at least one solar power project. Roughly 45 percent of those respondents cited difficulties in land procurement, followed by 25 percent who said they had problems joining the power grid.

One such project in Hokkaido, located near the New Chitose Airport, called for a 100-hectare solar power generation facility. The site adjacent to the Abiragawa river remains covered in weeds to this day.

"We call it an April 17 crisis," said Hiroaki Fujii, the 43-year-old executive vice president at SB Energy Corp., a Tokyo-based company that designed the plans.

On that date this year, Hokkaido Electric Power Co. said it would only purchase a total of 400 megawatts of electricity as part of the feed-in tariff system from the so-called mega-solar power plants, each with a generation capacity of 2 megawatts or more. That amounts to turning down as many as 70 percent of the 87 applications to sell it power, filed through March, with a combined output capacity of 1.568 gigawatts.

One Hokkaido Electric official justified the decision: "Our power grid has a limited capacity. Accepting too much power from solar plants, where output levels fluctuate wildly depending on the weather, compromises a stable supply of electricity."

One Sapporo-based real estate company lost money speculating. The company purchased two plots of land to host solar power plants that never materialized. "We were taken in by a renewable energy bubble," the company's president lamented.

Hokkaido is one of the prime choices for hosting renewable energy plants, with solar power in the south of the island and wind power in the north.

"No growth target for renewable energy would be feasible without Hokkaido," said Toru Suzuki, chairman of the nonprofit Hokkaido Green Fund.

The renewable energy feed-in tariff system was introduced in July 2012. It obligates utilities to purchase electricity generated by solar and wind plants at predetermined prices. The then-ruling Democratic Party of Japan initiated the system in a bid to bolster the nation’s renewable energy production, which accounted for less than 2 percent of the total power generation at the time, to 30 percent.

The regional utility's decision to limit its purchases of solar power cannot be assigned to grid capacity alone. The decision was taken in large part due to Hokkaido Electric's expectations that all three idled reactors at its Tomari nuclear power plant will eventually go back online.

Power demand in Hokkaido at its minimum is just 3 gigawatts. The three Tomari reactors have a combined power generation capacity of 2.07 gigawatts, leaving a difference of roughly 1 gigawatt if they

are returned to service. But if utilities revert to relying on nuclear power to levels before the Fukushima disaster, that could leave very little room for the emerging renewable energy industries to grow.

Enter the savior of Japan's nuclear energy sector: Prime Minister Shinzo Abe's growth strategy. The Abe administration is eager to export Japan's nuclear technologies and expertise. Not only did his government help secure a contract to build nuclear reactors in Turkey, but Abe himself, acting as the country's top salesman, visited Saudi Arabia, India and Central Europe to promote Japanese nuclear capabilities.

In late March, a group representing the Japan Atomic Industrial Forum (JAIF) also visited the Sizewell nuclear power plant 160 kilometers northeast of London. The forum's constituent members include power utilities and manufacturers dealing in nuclear technologies.

There are plans to build two more nuclear reactors on the grounds of the Sizewell site.

"Expanding our nuclear operations overseas has come to play a larger role in our perspective since the Abe administration came to power," said Akihiro Matsuzaki, an official in the JAIF Department of International Affairs and a member of the mission to Sizewell. Foundation work is already under way there.

Hitachi Ltd., which acquired Britain's Horizon Nuclear Power Ltd., said it also hopes to boost the annual sales of its nuclear business division from the current 160 billion yen ($1.64 billion) to 360 billion yen by fiscal 2020.

"We will be part of Abenomics (Abe's economic policy)," Hitachi Senior Vice President Tatsuro Ishizuka told a briefing session for investors on June 13.

Parties positions on nuclear power differ

July 9, 2013

Election: Parties are differed on nuclear policy

http://www3.nhk.or.jp/nhkworld/english/news/20130709_15.html

Parties contesting in the July 21st Upper House election have clarified their positions on Japan's nuclear energy policy.

All 50 of Japan's nuclear power reactors are offline except for 2 after the meltdown at the Fukushima Daiichi plant in March 2011. The country's nuclear regulator will decide whether to allow the reactors to resume based on its new safety guidelines. Four power companies applied for the early restart of 5 nuclear plants on Monday.

The ruling Liberal Democratic Party says the government is responsible for providing a steady supply of cheap energy. It says it will make utmost effort to seek understanding of host municipalities to restart the reactors on condition the reactors pass the new safety standards.

The party says it will reduce dependence on nuclear power generation by promoting renewable energy resources.

New Komeito, the LDP's ruling coalition partner, says it will decide whether to restart the reactors after receiving approval from citizens and residents near the reactors. It says it will disapprove the construction of new reactors and will seek a nuclear-free society.

The largest opposition Democratic Party says the opinions of host communities need to be taken into consideration when restarting the reactors. It says all possible measures should be used to halt all reactors in Japan by the 2030s.

The Japan Restoration Party also seeks to reduce dependence on nuclear energy and turn all existing reactors offline by the 2030s.

Your Party says it will also seek to reduce dependence on nuclear power by the 2020s by banning the construction of new reactors and making better use of renewable energy.

The People's Life Party says it will oppose both the resumption of existing reactors and the construction of new ones. It says it will seek to abolish all reactors by 2022 at the latest.

The Japanese Communist Party says it will seek to suspend the resumption of reactors and reactor exports. It is calling for a drastic shift to renewable energy.

The Social Democratic Party opposes resumption of reactors. It says the government should work on a complete resolution of the Fukushima accident and relief of the victims first and foremost.

Green Wind says it won't seek the resumption of reactors and plans to start decommissioning all reactors by 2023.
Jul. 9, 2013 - Updated 03:25 UTC

New emission targets - after restart

July 9, 2013

Japan to study new emissions cut target

http://www3.nhk.or.jp/nhkworld/english/news/20130709_14.html

The Japanese government plans to work out a new target for cutting greenhouse gas emissions, following applications by some nuclear plant operators to restart their reactors.

The Environment Ministry and other bodies plan to come up with a draft emissions target around September. They hope to finalize the plan in time for a UN climate change conference in November.

Japan previously set a target of cutting emissions by 25 percent from 1990 levels by 2020. But the target was scrapped following the March 2011 nuclear disaster at the Fukushima Daiichi power plant.

The country has been relying more on thermal power generation, as all but one nuclear plant in Japan remain offline after the disaster.

On Monday, the operators of 5 nuclear plants, including the one in operation, applied for government screening under new safety guidelines that took effect the same day.

Environment Ministry officials are taking the move into account as they work out the new emissions target. They will estimate the operational status of the plants in 2020 and calculate the emissions target from there.

But some government officials are cautious about setting an emissions target without clear prospects for restarting nuclear plants. Operators need to pass rigorous safety screening and obtain local consent to restart their reactors.

Nuclear deterrence very risky

July 8, 2013

Deterring an Asia nuke race

by Michael Richardson
http://www.japantimes.co.jp/opinion/2013/07/08/commentary/deterring-an-asia-nuke-race/#.UdsySKxSb9k

SINGAPORE – How many nuclear weapons and delivery systems does a country need as an effective deterrent against the threats of attack? Finding an acceptable balance is critically important in Asia, where four of the world's nine nuclear-armed states are located.

The Stockholm International Peace Research Institute (SIPRI) reported in June that all four Asian nations with nuclear weapons — China, India, Pakistan and North Korea — appeared to be expanding their arsenals while the United States, Russia, France, Britain and Israel were either reducing them or holding the number static.

Asia may be sliding into a nuclear arms race, aggravated by underlying tensions and mistrust. As one nuclear weapons state enlarges its arsenal, other regional atomic powers do the same. SIPRI estimated that China, India and Pakistan had each added about 10 warheads to their operational stockpiles in 2012.

Meanwhile, as the SIPRI report noted, each is improving delivery systems: the ballistic or cruise missiles or bomber aircraft that could carry nuclear warheads.

Without mutual restraint in Asia, other regional countries with civilian nuclear reactor experience and the necessary resources and skills could also decide to protect themselves by developing their own nuclear arms. Such potential "threshold" countries include South Korea, Japan, Taiwan, Australia, Indonesia and Vietnam.

Former U.S. Sen. Sam Nunn, a driving force for a nuclear threat reduction group of security specialists and former senior officials from 18 countries, cautions that **when "a large and growing number of nuclear-armed adversaries confront multiple perceived threats, the risk that deterrence will fail and that nuclear weapons will be used rises dramatically."**

Another prominent member of the group, former U.S. Secretary of Defense William Perry, says that there is only a short time left to pull back from the edge of a nuclear precipice. "Asia is an important backdrop for this discussion, as a nuclear-armed North Korea threatens regional stability and could spark a new wave of proliferation," he warns.

Their comments follow a recent call by U.S. President Barack Obama for America and Russia to open new arms control talks to further cut their deployed long-range nuclear arms by as much as one-third.

The last bilateral Strategic Arms Reduction Treaty (START), signed by Moscow and Washington in 2010, requires each nation by 2018 to cap its stockpile of fielded nuclear warheads at 1,550. So under Obama's proposal, a new ceiling could become approximately 1,000 deployed strategic warheads apiece.

Under the current START pact, the two former Cold War adversaries also agreed to limit fielded nuclear delivery vehicles, including bombers and missiles based on land and at sea, to 700, with an additional 100 allowed in reserve.

But the START deal does not cover all nuclear warheads or delivery systems, only those classed as long range. Nor does it encompass all nuclear armed states, although at least 90 per cent of atomic arms belong to the U.S. and Russia.

The SIPRI report estimates that at the start of 2013, eight of the nine nuclear armed nations had approximately 4,400 operational atomic weapons, with nearly 2,000 "in a state of high operational alert."

North Korea was assessed to have perhaps six or eight nuclear bombs, none of them operational. This evidently means they cannot yet be made small enough to be carried by North Korean missiles or bombers.

SIPRI said that if all the nuclear warheads held by the nine nations with atomic weapons were counted, the total would amount to **approximately 17,270 nuclear weapons**, with a variety of short-, medium- as well as long-range delivery systems. The total warhead count includes spares, those in both active and inactive storage, and intact warheads set to be dismantled, as well as operational warheads.

Obama also called for the reduction of U.S. and Russian nonstrategic, or tactical, nuclear weapons in Europe. These have never been officially counted or limited by any international treaty.

One reason Russia gives for being reluctant to negotiate further bilateral nuclear cuts with the U.S. is that some other nuclear-armed countries are strengthening their warhead and missile capabilities. This is an

evident reference to China among others, even though Moscow and Beijing have formed a “strategic partnership” to oppose U.S. and Western domination.

China’s position is that the U.S. and Russia have the overwhelming majority of strategic nuclear weapons and delivery systems, meaning those capable of traveling intercontinental distances and causing massive destruction. So Washington and Moscow should continue to make “drastic” cuts in their stockpiles in a verifiable and irreversible manner.

Cheng Jingye, China’s top envoy to a U.N. nuclear nonproliferation conference, said last year that once this was done, “other nuclear-weapon states, when conditions are ripe, should also join the multinational negotiations on nuclear disarmament.”

But when might that be?

One of the concerns of U.S. critics of Obama’s latest proposals is that China could use any extended new round of START negotiations that involve only America and Russia to enlarge and modernize its own nuclear arsenal in secret. Some U.S. analysts say that this is already happening.

The critics argue that if the size of the U.S. and Russian arsenals keep dropping, China might be able to achieve numerical parity, or near-parity, quite quickly with the today’s two dominant nuclear powers.

Nonnuclear Asian states, such as South Korea and Japan, look to their ally, the U.S., to protect them from nuclear attack under Washington’s extended deterrence policy. If U.S. nuclear strength and resolve appears to be weakening, they might become so alarmed at the heightened nuclear threats they face, whether from North Korea or China, that they would make their own dash for atomic arms.

Supporters of Obama’s proposals dismiss such concerns, saying that Beijing would not want to incur the heavy financial costs of moving beyond minimum credible deterrence and risk triggering a full-scale nuclear arms race in Asia that would threaten China’s own security.

SIPRI estimates that China has about 250 nuclear warheads, compared with 300 for France and 225 for Britain. It reckons that India has 90 to 110 atomic warheads, Pakistan has 100 to 120, and Israel 80.

These are well within minimum credible deterrence limits. Keeping them there will be the key to preventing a post-Cold War nuclear arms race in Asia.

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Crucial vote

July 11, 2013

CRUCIAL VOTE: Parties clearly divided on nuclear policy as overall emphasis in campaign declines

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http://ajw.asahi.com/article/0311disaster/fukushima/AJ201307110061

By ATSUSHI HIROSHIMA/ Staff Writer

The nuclear issue is losing energy among candidates of the major parties running in the July 21 Upper House election.

While a clearer division of opinion on nuclear energy policy has emerged, the overall emphasis on that issue during the campaign has also decreased sharply, according to a recent survey of candidates.

The survey was conducted jointly by The Asahi Shimbun and a research team at the University of Tokyo led by Masaki Taniguchi, a professor of Japanese politics.

The results of the survey were compared with a similar one conducted of candidates who ran in December's Lower House election.

That comparison found that candidates of the ruling Liberal Democratic Party have become more inclined toward promoting nuclear energy, while those from the Democratic Party of Japan and New Komeito have become more cautious about resumption of operations at idle nuclear reactors.

Candidates were asked to give their position on a five-grade ranking on two issues related to nuclear policy: the resumption of operations at reactors that have been offline for periodic inspections and the goal of zero-percent electric power generation through nuclear energy by the 2030s.

LDP candidates both in the December Lower House election and this time leaned in favor of resuming operations and opposed the zero-percent objective. However, in the recent survey, there was an increase in the percentages of those who favor resuming operations as well as those who are cautious about pursuing the zero-percent goal.

That finding likely reflects the fact that the LDP has clearly stated in its Upper House campaign platform that it will work toward resumption of nuclear reactor operations.

Candidates for the Japan Restoration Party still tend to oppose resumption of operations and tend to favor a zero-percent goal for nuclear energy. However, like the LDP, candidates for the Japan Restoration Party have moved closer to promotion of nuclear energy this time around.

There has been a major shift among DPJ candidates. While their position on resumption of operations was more neutral in the December Lower House election, a much clearer stance in opposition to resumption has been taken for this election.

The previous stance was a reflection of the fact that the DPJ-led government of then Prime Minister Yoshihiko Noda had approved resumption of operations at two reactors at the Oi nuclear plant in Fukui Prefecture. However, now that the DPJ is in the opposition, candidates have been freed up to take a clear stance that differs markedly from that of the ruling LDP.

New Komeito candidates have become more cautious about a resumption of operations. Candidates from Your Party and New Party Daichi have also strengthened their opposition.

Candidates from the Japanese Communist Party and Social Democratic Party have been consistent in their opposition. All candidates from the People's Life Party and Green Wind are also opposed.

The survey also asked candidates to select the three policy issues they would emphasize during the campaign.
Compared with the December Lower House election, the overall percentage of candidates who said "nuclear power and energy policy" declined from 47 percent to 30 percent.

While only 6 percent of LDP candidates chose that policy issue in the Lower House election, the figure dropped to 4 percent this time.

Even among DPJ candidates, emphasizing nuclear policy has declined from 36 percent to 19 percent, while among New Komeito candidates there has been a decline from 22 percent to 5 percent.

Among Your Party candidates, the number has fallen from 78 percent to 47 percent, while for Japan Restoration Party candidates there has been a decline from 16 percent to 5 percent.

With the much lower interest in nuclear policy, there does not appear to be much discussion of it during the campaign.

Is Masako Mori avoiding the issue of nukes?

July 13, 2013

Reactor restarts haunt Fukushima race

LDP candidate in a jam over Abe reactivation plan

JIJI

http://www.japantimes.co.jp/news/2013/07/13/national/reactor-restarts-haunt-fukushima-race/#.UeGO-qxSb9k

FUKUSHIMA – Masako Mori is concerned about her party's pledge to restart nuclear reactors in Japan.

Mori is facing a bruising battle as the ruling Liberal Democratic Party's candidate for the Fukushima prefectural district in the July 21 House of Councilors election.

The prefecture is home to the No. 1 nuclear plant crippled by the March 2011 earthquake and tsunami. Her rivals include Emi Kaneko of the main opposition Democratic Party of Japan, which pledged to reduce the country's dependence on nuclear energy to zero by the 2030s.

The two women are both incumbent Upper House lawmakers. But only one seat is being contested in the constituency this time as a result of electoral reform.

"This is a tough election, as only one candidate can win," Mori said in a speech in front of JR Fukushima Station on July 4, when campaigning for the election kicked off.

Prime Minister Shinzo Abe, also LDP president, visited the prefecture that day to rally support for Mori. "In a bid to accelerate reconstruction of Fukushima and other parts of the country, I want you all to empower Mori," Abe said.

Before the number of seats in the Fukushima constituency shrank, Mori's re-election was considered a near certainty because she is a member of the Abe Cabinet. In the election six years ago, Kaneko came in first with a margin of 130,000 votes against Mori, who won the other seat in second place.

In addition to the reduction of seats, the Abe government's intention to restart nuclear plants is also casting a shadow over Mori's re-election bid, though strong public support for Abe himself is working in her favor.

Currently, only two of the country's 50 commercial atomic reactors are in operation, while the other 48 have been idled due to safety concerns following the 2011 crisis.

With Fukushima still reeling from the nuclear meltdowns, the LDP's Fukushima chapter pledged to abolish all reactors in the prefecture in its own campaign platform.

While calling for stronger measures to deal with the accident, Mori has refused to state clearly where she stands on the issue of firing up reactors.

"She is attempting to avoid the nuclear reactor restart issue," a senior official on her campaign team said.

Kaneko, for her part, is facing the backlash of public disdain for the DPJ, which relinquished power to the LDP in the House of Representatives election last December.

"The key is how to hold onto the 500,000 votes she won six years ago," a senior official from Kaneko's campaign said.

She has highlighted the DPJ's pledge to reduce the country's dependence on nuclear power in order to set her apart from Mori and win the support of fence-sitters.

Kaneko is also going after the LDP by criticizing gaffes made by the party's policy chief, Sanae Takaichi, who last month said nobody has died due to the Fukushima disaster.

"The country's future cannot be left to the (LDP-led) government, which disregards human life in such a way," Kaneko said in a stump speech in the city of Fukushima on July 4.

Among other candidates, Tomo Iwabuchi, who is running on the Japanese Communist Party ticket, is urging the government to immediately eliminate all nuclear reactors nationwide.

Risks of nuclear terrorism out of control

Beyond Control: Our Loosening Grasp on Nuclear Security

July 12, 2013

http://akiomatsumura.com/2013/07/beyond-control-our-loosening-grasp-on-nuclear-security.html

To most, nuclear security means Iran and North Korea. While these do present global security threats, the intersection of many under-discussed components of nuclear power, such as nuclear waste, reprocessing, and more power plants in the developing world, has the ability to cause major global crisis if not immediately prepared for by military and civilian leaders.

In early July, the UN International Atomic Energy Agency concluded a week long ministerial conference on nuclear security where analysts found, *Bloomberg*'s Jonathan Tirone reported, "Japan's Fukushima Dai-Ichi nuclear plant, whose 2011 meltdowns dislocated 160,000 people, **may provide a new blueprint for terrorists seeking to inflict mass disruption**."

The nuclear industry is burgeoning worldwide. Some 100 new reactors have been proposed to be constructed in coming years, bringing the world total near 600 reactors. This proliferation of nuclear power will tip the balance so the security risks outweigh the benefits and place the world's people in harm's way.

The big business opportunities that go with plant construction and the prestige that comes with being a nuclear power generator cause companies and countries to gloss over potential disaster and proliferation risks.

Many of these new plants will be in developing countries — first-time owners of nuclear power with relatively unstable governments, uncertain security capacities, and higher percentages of unskilled labor. Developed countries — with strong regulatory frameworks, good training programs, and competent engineers, managers, and scientists — have proven several times over that their plants are susceptible to human error or natural disaster. To put it differently, how much do we trust in the disaster response teams of the developing world?

The risks associated with more fissile material in less stable hands are obvious. Terrorists can more easily obtain the material from weaker governments and its greater availability will inevitably lead to less oversight and greater chance of it falling into the wrong hands. Nuclear power plants themselves are also a prime target for terrorists. With more plants under less security, the likelihood of an attack goes up.

All of these risks are surely adequately discussed within the government; they are clear dangers and part of the traditional proliferation conversation.

The security risk I consider greatest, and one that will only multiply as new plants come online, is that presented by spent fuel. Since the inception of nuclear power, governments have faced the conundrum of nuclear waste: no one can find a politically and environmentally sound solution of where to dispose of the highly radioactive material that the electricity-generating process produces. In the United States, much of this highly radioactive material is cooling in pools at the plants or in offsite storage warehouses. Why these pools have not been major terrorist targets remains a mystery.

Fuel reprocessing, which Japan hopes to resume, does not solve the problem and only increases the chance of attack or theft through the shipping of radioactive materials between countries (much of Japan's radioactive material that it would reprocess is held in Europe) and by creating additional plutonium.

The best options for waste disposal are dry casks or burial deep underground. While burying our nuclear fuel is a savvy short term political maneuver, passing our issues onto future generations is highly irresponsible and no real solution at all. Again, if the United States and Europe are still bogged down with the dilemma of waste disposal, will the inchoate democracies of the developing world be able to do better?

There is still a certain awe and mystery shrouding the true impact of nuclear power and a conviction that the short term economic and energy benefits are worthwhile. The main lesson I've taken from the Fukushima accident is the permanence of our current decisions. Any nuclear accident, whether through human error, natural disaster, or terrorist attack, will leave us with radiation and other health risks for a minimum of several hundred years. The nuclear issue we've constructed in the last 70 years will impact our society for hundreds of generations.

When will the United States and international communities recognize the irreversible nature of our actions and mistakes? Frankly, we have let the nuclear issue already get out of control.

Why haven't world political leaders yet asked this simple question?

In democratic system, the military leaders are supposed to be independent from the views of short term of political party line or economic and energy benefits, instead focused solely on national and international security issues. As a military leader, the general is always walking on a tightrope between being a winner or a loser, leading in war and peace. They carry their nation's destiny on their shoulders. It is a time for military leaders to look at the permanence of our current decisions.

Sir Brian Flowers, a prominent British nuclear physicist, pointed out that if nuclear power plants had been built and deployed in Europe before WWII, then large parts of Europe would be uninhabitable today because of conventional warfare and conventional sabotage directed against those nuclear plants.

An insufficient power supply to the plant, whether through terrorism, natural disaster, or human error, would deliver the same end.

Fukushima Shows Nuclear-Terrorism Risks at UN Meeting

http://www.bloomberg.com/news/2013-07-01/fukushima-shows-nuclear-terrorism-risks-at-un-meeting.html

By *Jonathan Tirone - Jul 3, 2013 6:55 PM GMT+0200*

Japan's Fukushima Dai-Ichi nuclear plant, whose 2011 meltdowns dislocated 160,000 people, may provide a new blueprint for terrorists seeking to inflict mass disruption, security analysts said at a United Nations meeting.

The UN's International Atomic Energy Agency convened a weeklong meeting of 1,300 diplomats, scientists and security analysts today in Vienna to examine ways to boost protection against nuclear terrorism. It is the IAEA's first ministerial conference on nuclear security.

"Fukushima sent a message to terrorists that if you manage to cause a nuclear power plant to melt down, that really causes major panic and disruption in a society," Matthew Bunn, a Harvard University professor and former White House adviser, said at a briefing. "All you need to do to do that is cut off the power for an extended period of time."

World leaders have pledged to secure the world's loose nuclear material by 2014 to reduce the likelihood of an atomic attack by terrorists. While national nuclear facilities endeavor to track the millions of pounds of uranium and plutonium that are unaccounted for, some focus has shifted to the threat posed by power plants.

Fukushima "has provided a number of findings and lessons that are also useful for preparations for an incident caused by human hand, such as a terrorist attack at a nuclear power station," said Shunichi Suzuki, Japan's envoy to the meeting.

'Security Problem'

Japan's Atomic Energy Agency will present steps it's taken to boost security against terrorism tomorrow in Vienna. Most of the IAEA conference is taking place behind closed doors.

"Fukushima is a nuclear security problem as much as it was a nuclear safety problem," Kenneth Luongo, who with the U.S. Department of Energy helped secure atomic material in Russia after the Soviet Union disintegrated, said at a briefing.

The IAEA has projected nuclear power is set to expand worldwide even after the March 11, 2011, earthquake and tsunami caused meltdowns and radiation leaks at Tokyo Electric Power Co.'s Fukushima plant.

A nuclear-armed terrorist attack on the port in San Jose, California, would kill 60,000 people and cost as much as $1 trillion in damage and cleanup, according to a 2006 Rand study commissioned by the U.S Department of Homeland Security.

Decommissioned Material

Even a low-level radiological or dirty-bomb attack on Washington, while causing a limited number of deaths, would lead to damages of $100 billion, according to Igor Khripunov, the former Soviet arms-control envoy to the U.S, who's now at the Athens, Georgia-based Center for International Trade and Security.

Because a terrorist needs only about 25 kilograms (55 pounds) of highly-enriched uranium or 8 kilograms of plutonium to improvise a bomb, the margin of error for material accounting is small. There are at least 2 million kilograms of stockpiled weapons-grade nuclear material left over from decommissioned bombs and atomic-fuel plants, according to the most recent estimates by the International Panel on Fissile Materials, a nonprofit Princeton, New Jersey, research institute that tracks nuclear material.

That's enough to make at least 100,000 new nuclear weapons on top of the 20,000 bombs already in state stockpiles.

"The threat of nuclear terrorism is real and serious, and it will endure for the foreseeable future," U.S. Secretary of Energy Moniz Ernest said today in prepared remarks.

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New book on nuclear terrorism

On Nuclear Terrorism

Author: Michael A. Levi, David M. Rubenstein Senior Fellow for Energy and the Environment and Director of the Program on Energy Security and Climate Change

Download Now

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Publisher A CFR Book. Harvard University Press
Release Date November 2007
Price $24.95
224 pages
ISBN 978-0-674-02649-0

Overview

Nuclear terrorism is such a disturbing prospect that we shy away from its details. Yet as a consequence, we fail to understand how best to defeat it. Michael Levi takes us inside nuclear terrorism and behind the decisions a terrorist leader would be faced with in pursuing a nuclear plot. Along the way, Levi identifies the many obstacles, large and small, that such a terrorist scheme might encounter, allowing him to discover a host of ways that any plan might be foiled.

Surveying the broad universe of plots and defenses, this accessible account shows how a wide-ranging defense that integrates the tools of weapon and materials security, law enforcement, intelligence, border controls, diplomacy, and the military can multiply, intensify, and compound the possibility that nuclear terrorists will fail. Levi draws from our long experience with terrorism and cautions us not to focus solely on the most harrowing yet most improbable threats. Nuclear terrorism shares much in common with other terrorist threats--and as a result, he argues, defeating it is impossible unless we put our entire counterterrorism and homeland security house in order.

As long as we live in a nuclear age, no defense can completely eliminate nuclear terrorism. But this book reminds us that the right strategy can minimize the risks and shows us how to do it.

Nukes proliferation

July 15, 2013

Kennedy's nuke prediction more applicable now than ever

http://mainichi.jp/english/english/perspectives/news/20130715p2a00m0na004000c.html

The spread of nuclear weapons is unstoppable, as is the construction of nuclear power plants. We are entering an age of the highest risk of nuclear war, nuclear terrorism, or a nuclear accident in history.

Recently, at a speech in Berlin, U.S. President Barack Obama quoted a part of former President John F. Kennedy's famous Berlin speech from June 26, 1963. It was at the peak of a nuclear war crisis that Kennedy showed a will to overcome the problem and encouraged the people of West Berlin. Obama followed this example, repeating an April 2010 proposal to cut back on nuclear weapons and a call for the eventual end worldwide to such deadly devices.

Speaking of Kennedy, there is a little-known story about him. During the famous 1960 presidential debate where he defeated Richard Nixon, he predicted that "10, 15, or 20 nations will have a nuclear capacity... by the end of the presidential office in 1964." Post-election, he revised his prediction, saying, "I see the possibility in the 1970s of the president of the United States having to face a world in which 15 or 20 or 25 nations may have these weapons."

These predictions proved not to be true. This is because of the Nuclear Non-Proliferation Treaty that went into effect in 1970, which only permitted nuclear weapons to be held by the United States, Russia, Great Britain, France and China, and gradually came to have the agreement of 190 nations.

Four nations -- India, Pakistan, Israel and North Korea -- went on to acquire nuclear weapons, but the total number of nations with the weapons today is only nine. However, the shadow of a possible 10th has appeared -- Iran. This could cause a domino effect of nuclear armament in the Middle East, for Saudi Arabia, Egypt, Turkey, the United Arab Emirates and other countries.

Meanwhile, in the Far East, there are those who say that North Korea could force South Korea and Japan to possess nuclear weapons. It is also possible that forces belonging to the black nuclear market, which was led by Pakistan's nuclear scientist Abdul Qadeer Khan, could help the nuclear armament of more

developing nations or even terrorist groups. Kennedy's prediction of "15 or 20 or 25 nations" possessing nuclear weapons could now come true.

Before Obama's speech, Prime Minister Shinzo Abe met with state leaders from Poland, the Czech Republic, the Slovak Republic and Hungary in Warsaw. He promised technological help to these countries in their plans for more nuclear plants. Since a visit to Vietnam in January, Abe has been singularly focused on selling Japan's nuclear technology.

This cannot be said to be completely without relation to the ongoing international proliferation of nuclear weapons. Take India, for example. Looking into the peaceful use of nuclear technology, this country built nuclear power plants with technology from Canada and other nations. In 1974 it tested a nuclear weapon produced using that very power plant technology, advancing on the road to nuclear armament. The common explanation is that it was prompted by China's nuclear tests and wanted to make a display of force toward neighboring Pakistan.

I do not believe that Abe is the only one trying to export nuclear plant technology. It is also the strategy of the governmental-industrial complexes of Japan, the U.S., France and other countries. If Japan, the U.S. and France do not sell the technology, Russia, China or another country will.

Nuclear weapons and nuclear power plants are inseparable technologies. The peaceful and military uses of the technology are connected. Currently, there are over 400 nuclear reactors operating around the world. Add in those under construction or planned for construction, and there will be almost 600. A policy of exporting more nuclear technology is also a policy that increases the chances of nuclear arms proliferation.

Furthermore, while nuclear power is called a peaceful use of the technology, it generates waste that is beyond people's ability to manage. Can we fully control the nuclear power plants we have sold to the world? The time has come to review from the ground up the assumption that nuclear technology is fine as long as it is used peacefully. (By Takao Yamada, Expert Senior Writer)

Exporting to Jordan

Japanese FM to promote nuclear tech in Jordan

http://www3.nhk.or.jp/nhkworld/english/news/20130715_02.html

Japan's Foreign Minister Fumio Kishida will promote the country's nuclear technology to help Japanese companies win contracts in Jordan.

Kishida plans to visit Israel, Palestine and Jordan later this month to discuss Middle East peace and Japan's economic cooperation with the region.

A Japanese-French consortium is competing with a Russian firm to build a nuclear power plant in Jordan.

Kishida plans to explain to Jordanian ministers that Japan has top-level nuclear technology.

He will also stress that the government and the private sector have been improving the safety of nuclear power generation since the Fukushima Daiichi accident in 2011.

Prime Minister Shinzo Abe is eager to help Japanese firms export their nuclear technology.

When he toured the Middle East in May, he agreed with leaders from Turkey and United Arab Emirates to conclude agreements to transfer nuclear power technology.

Where do nukes stand in the future image of Japanese society?

July 19, 2013

Parties' campaigns should show new society with less nuclear power

http://mainichi.jp/english/english/perspectives/news/20130718p2a00m0na002000c.html

The United States has recently seen a string of decisions to have nuclear reactors decommissioned even though their life-spans have yet to expire. There have been some setbacks to building the first new nuclear plants in more than 30 years in the country. On top of the so-called "shale gas revolution," the Fukushima nuclear disaster has cast a shadow over those plans, with reinforcement of safety measures making nuclear generation more costly than before.

If such a matter-of-course market principle worked in Japan, decisions to decommission reactors may have seen progress by now. **Considering risks faced by Japan as an earthquake-prone country, the future image of a society in which nuclear plants are cut back on should have been the focal point of contention during campaigning for the July 21 House of Councillors election.**

In reality, however, the focus of campaign debates has boiled down to the Liberal Democratic Party (LDP)'s promotion of nuclear plant reactivation versus the opposition camp's "zero nuclear power" policy,

with discussions far from being deepened. Part of the responsibility may lie with the governing party, which has been narrow-minded and obscured the whole picture of the country's energy policy.

If Japan is to observe the 40-year limit defined in the revised Nuclear Reactor Regulation Law and decommission nuclear reactors in Fukushima Prefecture, the country could drastically slash the number of its reactors. There are only a few reactors that could be reactivated under the LDP's policy, considering the risks of earthquakes and locations hosting multiple reactors and repercussions in the event of accidents. Reactor safety of a global-leading standard, which has been sought by the Abe administration, is also costly. If liberalization of electricity and the separation of power generation and transmission progress, the competitiveness of nuclear power generation would further deteriorate.

Faced with these challenges, how many reactors are needed to be reactivated while the public is forced to coexist with the risk of accidents? How are they going to deal with massive amounts of nuclear waste, which would continue to pile up as long as reactors remain online? Isn't the LDP skirting the focal point of contention by not presenting these issues in its campaign debates?

On top of market principles, it is also important to facilitate sufficient investment in energy reforms without underestimating the risks involved in nuclear power generation. Because the "zero nuclear power" policy advocated by opposition parties, if set with target years, should encompass a potential to bring that about, those parties should focus more on that point in their debates.

In spite of many members of the public hankering for zero nuclear power, they can't eradicate misgivings about its possible effects on their lives and the economy apparently because it is hard to imagine the future of alternative energy. However, it is natural for them to find it difficult to envisage a new energy society compared to that with nuclear power, in which colossal amounts of funds and human resources have been invested for so many years.

Opposition parties are urged to highlight the potential of renewable energy, which has been rapidly growing across the globe, the path for nurturing such energy and the effect of energy-saving -- all with conviction. To that end, it may be necessary to ask the public to settle for an increased burden for a certain period of time. Voters, on the other hand, should envisage Japan in the future, instead of only focusing on the near-term economy dependent on nuclear power.

It is also the role of politics to improve a system to rationally proceed with the decommissioning of reactors in case reactors are found to face such risks as being located above active faults. Politicians must also pave the way for drawing the curtain on stalled nuclear fuel cycle programs and dealing with nuclear waste disposal. If the postponement of such issues as the decommissioning of reactors and nuclear waste disposal resulted in helping prolong the lives of aging nuclear reactors it would be an injustice to society. (By Yuri Aono, Editorial Writer)

Mitsubishi won't take the blame in US

July 20, 2013

Mitsubishi to fight nuke plant negligence claim

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201307200018

THE ASSOCIATED PRESS

LOS ANGELES--Mitsubishi Heavy Industries Ltd. will fight Southern California Edison's allegations of gross negligence in the design and manufacture of steam tubes built for the San Onofre nuclear power plant, which has been permanently shut down due to excessive wear in the tubes.

Mitsubishi sent a reply on July 18 to a contract dispute filing from Southern California Edison that said the company “grossly failed to appropriately model” conditions in the steam generators it designed and built, leading to the early retirement of the power plant.

Edison argues that Mitsubishi is liable for costs that could run into the millions or even billions of dollars.

In a statement, Mitsubishi called SCE's contentions “factually incorrect, legally unsound and inappropriate.” The company said it will defend itself through a dispute resolution process.

The steam generators “were designed and manufactured with SCE's full supervision and approval and in accordance with well-established and accepted codes and standards along with our own knowledge and experience plus that of outside experts,” Mitsubishi said.

The plant was shut down last year because of premature wear on thousands of steam generator tubes that carry radioactive water from the plant's twin reactors.

The steam generators were installed in a $670 million overhaul in 2009 and 2010. SCE announced last month that it will be closing the plant for good.

In legal documents, the utility claims Mitsubishi Heavy Industries Ltd. and Mitsubishi Nuclear Energy Systems are liable for the defective generators, along with costs ranging from buying replacement power to the investment in the now-shuttered plant that the company earlier estimated at over $2 billion.

Majority owner SCE and co-owners San Diego Gas & Electric and the city of Riverside “continue to incur significant financial harm as a result of Mitsubishi's total and fundamental failure to meet its obligations,” the filing said.

Mitsubishi said that its contract with SCE limits its liability to around $137 million.

The action represents an early step in what could be a protracted battle over blame for the plant's closure and who should cover the losses.

In a separate case, state utility regulators are considering who should pay for Mitsubishi's replacement generators, ratepayers or shareholders.

A decision could be months, or years, away. Any money Edison recovers from Mitsubishi could reduce the exposure of ratepayers.

What to expect after victory by (pro-nuke) LDP

July 21, 2013

What can be anticipated after the pro nuclear government stands

Posted by **Mochizuki** on July 21st, 2013 ·
http://fukushima-diary.com/2013/07/column-what-can-be-anticipated-after-the-pro-nuclear-government-stands/

House of Councillors election just ended today. Now Japanese people are waiting for the definitive result.

The prompt report says anti nuclear activist, Yamamoto Taro won, at the same time, the pro nuclear party LDP is going to win over half of the seats with the clean government party.

I've not been posting about the political issues on Fukushima Diary because I know what the readers want to know the most is not there.

However, this is a very important thing so I'd like to make one post.

Taro's winning is a bright side but generally the election result is going to be devastating as expected.

Since last election, LDP has been attempting the amendment of national constitute.

Now it is possible for them to do it with the support of a couple of other political parties.

Also, they are forward to restart all the nuclear plants in Japan. It would cause the serious shortage of the plant workers in Fukushima.

The amendment of national constitution enables them to start conscription for the supply of the workers.

Fukushima Diary has been warning about this since last year, and now legally and officially, it's 99% in real.

You may say most of the Japanese people asked for the pro nuclear government.
but they are not aware of the possibility of the conscription.

Moreover, even if they didn't vote for LDP, they must follow their order.

Bukowski said, in democracy, you obey after voting, but in communism, the voting process is curtailed. Fukushima Diary will continue to update the world.

Dashed hopes

July 22, 2013

Utilities cheer LDP victory, nuclear opponents disappointed

http://ajw.asahi.com/article/economy/business/AJ201307220068

THE ASAHI SHIMBUN

The ruling coalition's overwhelming election victory will likely further accelerate moves toward restarting Japan's idle nuclear reactors while dashing hopes for the movement to make the country nuclear-free.

The Liberal Democratic Party, which has been pushing for reactor restarts, and junior coalition partner New Komeito were widely expected to win the Upper House election. Still, those opposed to nuclear energy felt the sting when results were announced on July 21, two years and four months after the start of the crisis at the Fukushima No. 1 nuclear power plant.

"The central government's policy on nuclear power generation will return to the pre-disaster one," said Tatsuya Murakami, mayor of Tokai village in Ibaraki Prefecture, on July 21. "By postponing a solution to the problems resulting from the nuclear accident, the government will do what it wants to do.

"It is disappointing that Japan will not be able to change itself despite the serious accident it caused," he said.

Before the election, Murakami watched moves being made over his objections to restart the only reactor at the Tokai No. 2 nuclear power plant in the village. That reactor started operations in 1978, but it was shut down after being flooded by the tsunami caused by the Great East Japan Earthquake on March 11, 2011.

The quake and tsunami also led to the meltdowns at the Fukushima No. 1 plant, a disaster that prompted the Tokai government to demand the decommissioning of the reactor in the village.

However, the Tokai No. 2 plant's operator, Japan Atomic Power Co., has ignored that demand and started work to bring the reactor online without notifying the village government.

Last month, Japan Atomic Power began installing filter-attached vent equipment and erecting sea walls to meet the Nuclear Regulation Authority's new safety rules on nuclear power generation that took effect on July 8.

On July 11, the company announced its plan to apply to the NRA to restart the reactor.

Four other electric power companies-- Hokkaido Electric Power Co., Kansai Electric Power Co., Shikoku Electric Power Co. and Kyushu Electric Power Co.--have applied to the NRA to restart 12 reactors at six nuclear power plants.

If approved, the first restart will be the No. 3 reactor at Shikoku Electric's Ikata nuclear power plant in Ehime Prefecture.

Prime Minister Shinzo Abe's LDP pledged during the election campaign to restart reactors that are confirmed safe by the NRA. It said it will make the utmost efforts to obtain the understanding of local governments that host nuclear power plants.

If all 12 reactors are restarted, about 10 percent of Japan's electricity supply will be generated by nuclear power.

"The victory by the LDP will have a positive effect (on the restarts)," said an executive of Kansai Electric Power, which applied to the NRA to restart four reactors at its Takahama and Oi nuclear power plants in Fukui Prefecture. Two reactors at the Oi plant are currently the only ones in the nation that are operating.

After the Fukushima nuclear accident, the Democratic Party of Japan-led government vowed to phase out nuclear energy in Japan by the end of the 2030s.

However, the DPJ was dumped from power in December, replaced by an LDP-led administration that scrapped the nuclear phaseout policy and incorporated "utilization of nuclear power generation" in its economic growth strategy.

The "nuclear power village" of close relations and vested interests among industries, bureaucrats and academics was partly blamed for the measures that failed to prevent the Fukushima disaster. The "village" will regain momentum after reactors are restarted.

Even Tokyo Electric Power Co., the harshly criticized utility that continues to have problems dealing with its crippled Fukushima plant, is trying to join the move toward restarts.

This month, TEPCO announced plans to hasten the restarts of reactors at its Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture. The company did not offer any advance explanation to the local governments hosting the plant.

The LDP's pro-nuclear stance could also start the ball rolling on construction of new nuclear power plants, such as Chugoku Electric Power Co.'s planned Kaminoseki plant in Yamaguchi Prefecture.

The Abe administration plans to compile its basic energy plan by the end of this year. However, the plan will not include the expected ratio of nuclear power generation to the entire electricity needs.

The government, in fact, said it will spend about 10 years to decide how much of Japan's electricity needs should be supplied by nuclear energy. During that period, operations of nuclear reactors will be restarted throughout the country.

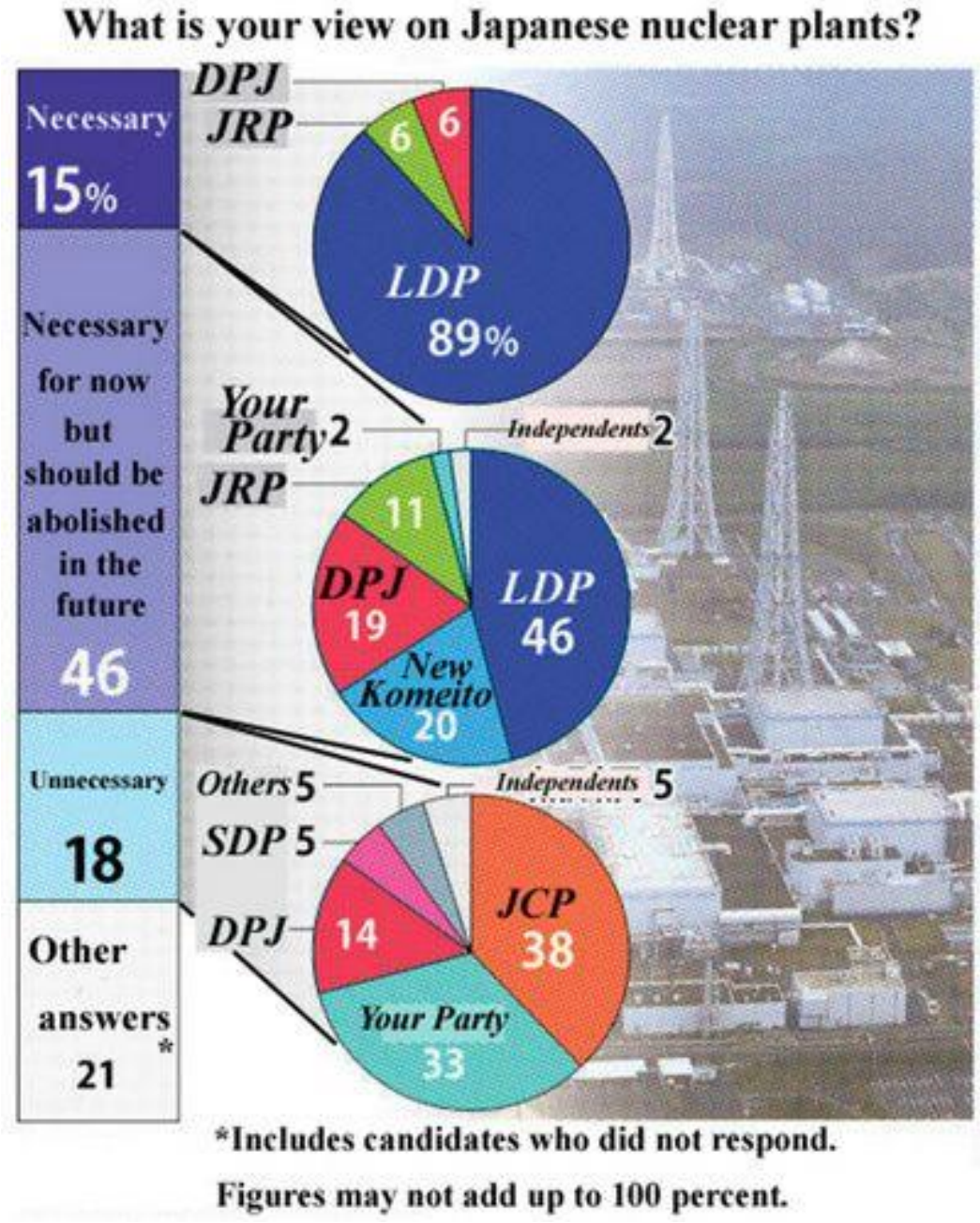
The administration also has yet to examine whether reactors should be decommissioned or whether the costs of nuclear power generation are really lower than those of other methods.

About 150,000 people in Fukushima Prefecture are still living as evacuees from the nuclear disaster.

Nukes - What's behind the elections

July 23, 2013

Only 15% of election winners support need for nuclear plants: Mainichi survey



http://mainichi.jp/english/english/newsselect/news/20130723p2a00m0na015000c.html

Only 15 percent of winners of the July 21 House of Councillors election said Japan needs nuclear power stations, according to a Mainichi Shimbun survey.

Nearly half, 46 percent, said nuclear plants should be eliminated in the future although they need to be retained for now.

The ruling Liberal Democratic Party (LDP) is the only political party that has stopped short of clearly calling for the future elimination of nuclear plants, but only 25 percent of individual LDP winners said Japan needs nuclear plants. Forty percent said nuclear plants should be done away with in the long run although Japan needs to rely on them for the time being.

Only 7 percent of the winners on the ticket of the largest opposition Democratic Party of Japan (DPJ) said nuclear power stations are necessary for Japan, while 67 percent said such power stations should be abolished in the future. Twenty percent said nuclear plants are unnecessary.

All the successful candidates fielded by New Komeito, the LDP's coalition partner, and 75 of those on the ticket of the Japan Restoration Party (JRP) said nuclear plants should be retained for now but abolished in the long run.

All the Japanese Communist Party (JCP) and Social Democratic Party (SDP) winners as well as 88 percent of those on the ticket of Your Party responded that Japan does not need nuclear power plants.

The government intends to review the basic plan on energy, which outlines the nation's energy policy, possibly by the end of this year. The "Japan Revitalization Strategy -- Japan is Back," which the Cabinet of Prime Minister Shinzo Abe approved in June, calls for active use of nuclear reactors whose safety has been confirmed.

Four utilities have applied with the Nuclear Regulation Authority (NRA) for safety inspections on 12 reactors at their six nuclear plants in preparation to restart them. The NRA has already begun inspection procedures.

The government is required to determine how it will characterize nuclear power as its future energy strategy will be called into question.

In the meantime, successful candidates in the upper house election are split over whether Japan should promote the export of nuclear reactors -- with 32 percent calling for the promotion of sales of nuclear reactors overseas and 37 percent opposing the idea.

By party affiliation, 48 percent of LDP winners called for the promotion of nuclear plant exports, well above the 11 percent who were opposed. Similarly, just half of the JRP winners called for the promotion of nuclear reactor exports, while 25 percent were opposed. Nearly half, or 47 percent of the DPJ successful

candidates and 73 percent of New Komeito winners as well all the JCP and SDP winners were opposed to exporting nuclear reactors.

New Komeito leader Natsuo Yamaguchi has suggested the party will approve the export of nuclear reactors with some conditions attached while many of its legislators are wary of such a move. Since Prime Minister Abe is actively promoting the sale of nuclear reactors overseas, New Komeito is expected to support the move to prevent a split within the coalition government.

The survey has also hinted that the upper house is gradually leaning toward considering the possession of nuclear weapons.

Over half, or 64 percent of the overall winners, said Japan should not consider possessing nuclear arms both now and in the future, down 13 points in a survey on winners of the 2010 upper house poll. Nearly one in three successful candidates -- 28 percent -- said Japan should consider arming itself with nuclear weapons depending on the international situation, an increase of 10 points from 2010.

Of successful candidates in the LDP that scored a landslide victory in the election, 46 percent said Japan should consider possessing nuclear arms depending on the international situation, slightly above the 43 percent who were opposed to the idea. Of the 2010 LDP winners, 34 percent are supportive of the idea. The increase apparently reflects the increasingly severe security environment surrounding Japan as a result of the progress in North Korea's nuclear weapons development.

All New Komeito winners said Japan should not consider possessing nuclear arms, highlighting a wide gap in nuclear policy within the ruling coalition.

Among opposition parties, an overwhelming majority, or 93 percent of successful candidates fielded by the DPJ, as well as all Your Party, JCP and SDP winners said Japan should not consider possessing nuclear bombs.

In contrast, over 60 percent of JRP candidates who won the July 21 poll called for considering whether Japan should possess nuclear arms

Editorial: Election result not an endorsement for nuclear power

http://mainichi.jp/english/english/perspectives/news/20130723p2a00m0na010000c.html

Some people might be led to think the landslide victory the Liberal Democratic Party (LDP) registered in the July 21 House of Councillors election gives the party the go-ahead to promote nuclear power. They would be wrong.

Admittedly, the LDP was the only party that did not advance a zero-nuclear policy during its election campaign. The party said it would restart nuclear reactors that had cleared new safety standards, and would do its utmost to win understanding from local bodies in areas where these reactors are located.

But looking at opinion polls to date, there is no mistaking the fact that many people desire a society free from reliance on nuclear power. In a poll by the Mainichi Shimbun before the election, the majority of respondents said they thought that nuclear reactors should not be restarted even if they had passed new safety standards.

In the upper house election, the parties that could accommodate people seeking a society free of nuclear power plants or free from reliance on nuclear power were scattered about. This, and the LDP's failure to bring the full scope of its energy policy into the light, meant there was no deep debate between the ruling and opposition parties over nuclear power. As a result, the public's preferences weren't consolidated.

Still, Japanese Communist Party (JCP) newcomer Yoshiko Kira, and independent newcomer Taro Yamamoto, who both campaigned on a platform of getting rid of Japan's nuclear power plants, won seats in the Tokyo electoral district -- a sign that a significant number of voters were focusing on eliminating nuclear power.

We should remind ourselves that the LDP itself is not actively promoting nuclear power. In the lead-up to the election, Prime Minister Shinzo Abe stated he wanted to "reduce Japan's reliance on nuclear power." And the LDP's coalition partner New Komeito, has called for an end to nuclear power.

That being the case, the LDP now needs to show the public its energy policy in its entirety, and indicate how it will reduce the nation's reliance on nuclear power. It also needs to decide on a course for the nation's nuclear fuel cycle and the disposal of nuclear waste. One starting point is basic policy on energy to be compiled at the end of the year.

The LDP maintains that it will set out to introduce the greatest possible degree of renewable energy over the next three years and decide on the best ratio of nuclear power and other energy sources within the next 10 years. But if it takes 10 years to reach a decision, the party's stance can neither be called a "project" nor a "policy"; it is simply an "outcome."

First the party should unveil its vision for nuclear power and present targets for other sources of energy to fit this mold. If it fails to do this, the desire for renewable energy, highly efficient forms of thermal power and energy conservation will grow weak. Energy and power reforms, such as liberalization of the power market and the separation of power generation and transmission, will also languish. The LDP needs to let the public know that in order to reverse the nuclear power promotion policies that have stood to date, Japan will face a heavier burden for a certain period.

Naturally, the government must avoid rushing to restart nuclear reactors or interfering in the decisions of the Nuclear Regulation Authority. We must not forget that restarting a nuclear reactor is naturally accompanied by a degree of risk.

Diet's recommandations have been ignored (NHK video)

July 26, 2013

Atomic bombing: Never again!

August 5, 2013

Yoroku: In a world drifting toward atomic confrontation, remember Hiroshima and Nagasaki

http://mainichi.jp/english/english/perspectives/news/20130805p2a00m0na004000c.html

Late last month, we saw something ominous during an enormous North Korean military parade in Pyongyang: soldiers in three open-top trucks, backpacks emblazoned with the black and yellow nuclear symbol sitting on their laps. Were those portable atomic bombs?

Until the end of the 1980s, the United States military stocked portable nuclear bombs called SADM, or Special Atomic Demolition Munitions. They each weighed nearly 70 kilograms, but were small enough for a person to wear on their back, if not comfortably. So, were those backpacks we saw during the Pyongyang parade North Korean SADM? South Korea has said that its northern neighbor "doesn't have the technology to make bombs so small," but that unit showing off those nuclear symbols was surely established with nuclear war in mind.

These days, the danger of nuclear war once again feels realistic. North Korea detonated a test warhead in February this year. Soon after, some in South Korea were calling for their own nation to acquire nuclear weapons. During joint U.S.-South Korean military maneuvers in March, the U.S. Air Force deployed B52 and B2 warplanes -- heavy bombers perfectly capable of carrying nuclear weapons if needed.

The North's February A-bomb test brought down the wrath of Pyongyang's only real ally China, which had never criticized similar actions in the past. Meanwhile, the Stockholm International Peace Research Institute has estimated that North Korea built 10 nuclear warheads in 2012. To make matters worse, the institute has also said that the North is steadily increasing its stockpile of ballistic missiles capable of carrying those warheads.

Is humanity really moving closer to nuclear war? In mid-June, U.S. President Barack Obama told a Berlin audience that the world would never be safe as long as nuclear weapons existed, and that the U.S. would

reduce its own atomic arsenal by 1,000 warheads. Obama's call for an end to nuclear arms in his famous speech in Prague four years ago was met with enthusiasm. His Berlin statement, however, mostly failed to resonate.

On Aug. 6 in Hiroshima, and on Aug. 9 in Nagasaki, we will once again remember two days of atomic fire. **Meanwhile, the rest of the world seems increasingly numb to the idea of all-out nuclear warfare**. **And so, 68 years after the destruction of those cities, Japan must redouble its efforts to tell the world what happened on those August days in 1945, what horrors are contained in those terrible weapons.** ("Yoroku," a front-page column in the Mainichi Shimbun)

Abe against nuclear arms?

August 6, 2013

Abe vows pursuit of world free of nuclear arms; Hiroshima mayor skeptical

Kyodo

http://www.japantimes.co.jp/news/2013/08/06/national/abe-vows-pursuit-of-world-free-of-nuclear-arms-hiroshima-mayor-skeptical/#.UgCbnaxSab0

HIROSHIMA – At a ceremony Tuesday marking the 68th anniversary of the U.S. atomic bombing of Hiroshima, Prime Minister Shinzo Abe vowed to do whatever he could to realize a world without nuclear arms and to offer better support to atomic-bomb survivors fighting radiation-caused health problems.

In his speech at the ceremony at Peace Memorial Park near ground zero, Abe also said Japan will maintain its three nonnuclear principles of not producing, possessing or allowing the entry of nuclear weapons into its territory.

This year's commemoration comes as Abe's ruling Liberal Democratic Party, which won a landslide victory in last month's Upper House election, seeks to restart nuclear power plants, sell Japanese nuclear technology abroad and change the nation's pacifist Constitution.

Hiroshima Mayor Kazumi Matsui expressed worries over the government's drive to strike a civil nuclear cooperation deal with nuclear-armed India, saying even if such an agreement "promotes their economic relationship, it is likely to hinder nuclear weapons abolition."

Matsui also urged the central government to strengthen its ties to nations pursuing the abolition of nuclear weapons, noting more and more countries have issued this call.

Matsui made the remark after Japan recently declined to back a statement urging that nuclear weapons never again be used under any circumstances. The statement was prepared in April at a preparatory committee session in Geneva for the next Nuclear Non-Proliferation Treaty review meeting.

Antinuclear groups and other peace campaigners have criticized the government stance, which they believe stems from Japan's reliance on the deterrence offered by the U.S. nuclear umbrella.

But Matsui stopped short of clarifying the city's stance on the appropriateness of nuclear power as an energy source and on amending the Constitution.

He only said, "Hiroshima is a place that embodies the grand pacifism of the Japanese Constitution," and "We urge the central government to rapidly develop and implement a responsible energy policy that places priority on safety and the livelihoods of the people."

Nearly all of Japan's 50 commercial nuclear power reactors remain offline because of the Fukushima plant crisis that began in March 2011.

A moment of silence was observed at 8:15 a.m., the time the atomic bomb detonated over Hiroshima at an altitude of about 600 meters, ultimately killing an estimated 140,000 people by the end of 1945. A second atomic bomb was dropped on Nagasaki on Aug. 9 that year, and Japan surrendered six days later, bringing World War II to an end.

The ceremony was attended by representatives of about 70 countries, including U.S. Ambassador to Japan John Roos as well as Vuk Jeremic, president of the U.N. General Assembly.

Other planned participants included Tamotsu Baba, mayor of Namie, Fukushima Prefecture, Oscar-winning U.S. filmmaker Oliver Stone, who made a documentary series examining why the bombs were dropped, and representatives of nuclear powers Britain, France and Russia. China was not represented at the event for the fifth consecutive year.

Abe, who attended the annual ceremony in 2007 during his first stint as prime minister, said Japan bears responsibility to keep conveying the cruelty of atomic weapons to future generations and beyond the country's borders.

A message from U.N. Secretary General Ban Ki-moon was read out by his proxy, saying, "Together, let us reaffirm our commitment to create a world free of nuclear weapons." It added that would be the "most meaningful way" to pave the way for a better future for all. Ban in 2010 became the first U.N. chief to attend the Hiroshima ceremony, but he has not come since.

Among those who took part from Fukushima Prefecture, Maki Nitto, 30, said that while she had learned about the bombing at school, until the Fukushima disaster caused her to temporarily evacuate, she had "never thought it had anything to do with me."

"Although nuclear power plants and nuclear bombs are different, both nuclear issues have the same roots," said Nitto, who came to the event with friends.

Many hibakusha and others started gathering before daybreak around the park to offer prayers for their relatives and other victims.

One of the early visitors to the memorial monument, a 70-year-old Hiroshima man who identified himself only as Toshikazu, said he lost his uncle, who was 12.

"When I was a child, I didn't like to hear my mother talking about what it was like after the bombing and ran away. But now I think I should have listened to her more. I regret it," he said.

Terumi Manno, 86, who lost "many" of her family members, said she wants to continue to come to pray on Aug. 6 at the memorial "as long as I have breath."

"No matter what happens, I don't want war again. I want people to solve (issues) with words," she said. "We went through the bombing. There is something that can never be understood unless you experience it."

The number of hibakusha from both bombings stood at 201,779 as of March, down 9,051 from a year before. Their average age was 78.80.

See also:

Abe vows utmost efforts for elimination of nuclear weapons

http://mainichi.jp/english/english/newsselect/news/20130806p2g00m0dm032000c.html

Nagasaki mayor Tomihiza Taue: Nuclear weapons "inhumane"

August 9, 2013

Nagasaki mayor calls on Japan to ink statement denouncing nuke weapons

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201308090070

By YASUSHI SAITO/ Staff Writer

NAGASAKI--In a ceremony on Aug. 9 marking the 68th anniversary of the atomic bombing of Nagasaki, Mayor Tomihisa Taue criticized the central government for not signing a joint international statement declaring nuclear weapons "inhumane."

In his Peace Declaration, Taue criticized the failure to sign the international document.

"This stance contradicts the resolution that Japan would never allow anyone else to become victims of a nuclear bombing," the Nagasaki mayor said.

At a session of the Preparatory Committee for the 2015 Nuclear Nonproliferation Treaty Review Conference, held in Geneva in April and May, 80 nations signed the joint declaration, but Japan refused on the grounds it would contradict its policy of reliance on the U.S. nuclear umbrella for national security.

Taue said that refusal was "betraying the expectations of the global society" and pointed out "the government would approve of (the use of nuclear weapons) under some circumstances."

He said such a position goes against the fact that Japan is the only nation to have suffered a nuclear bombing.

Taue also criticized the resumption of negotiations with India for a nuclear energy agreement that would allow Japan to export such technology to India, which has not joined the Nuclear Nonproliferation Treaty.

Taue also touched upon the fact that of the 17,000 nuclear warheads in the world, about 90 percent are possessed by the United States and Russia. He called on the presidents of those two nations to commit "to a speedy, drastic reduction" of their nuclear arsenals.

Taue also quoted from the preface of the Constitution, which states the Japanese people have "resolved that never again shall we be visited with the horrors of war through the action of government" and said that reflected the firm resolution of the people to work for world peace. He said in order to not forget that desire for peace, it would be important to continue to hand down the experiences of war and the atomic bombing.

Taue also mentioned Senji Yamaguchi, a Nagasaki atomic bomb survivor who was a leader in the campaign against nuclear weapons. Yamaguchi died in July. Taue said that highlighted the fact that hibakusha were decreasing in number as their average age has exceeded 78.

Recalling Yamaguchi's speech in which he called for "no more hibakusha," Taue asked young people to listen to what the survivors of the atomic bomb have to say.

A moment of silence was observed by participants at the ceremony at 11:02 a.m., the exact time the atomic bomb detonated over Nagasaki on Aug. 9, 1945.

Prime Minister Shinzo Abe also gave a speech in which he pledged to uphold the three non-nuclear principles and to work toward the abolition of nuclear weapons and for the realization of eternal world peace.

About 5,800 people attended the ceremony. For the first time, India sent a representative. A total of 44 nations were represented, matching the record high.

U.S. Ambassador John Roos attended for the second straight year. The United States has now sent a representative for three straight years.

Over the past year, 3,404 of those who experienced the bombings died, bringing the total number of victims to 162,083.

August 9, 2013

Nagasaki mayor criticizes gov't's refusal to demand that nuclear powers shun nuclear weapons

NAGASAKI -- As Nagasaki marked the 68th anniversary of the atomic bombing in a ceremony on Aug. 9, the city's mayor Tomihisa Taue criticized the national government for its passive attitude toward nuclear disarmament.

In the Nagasaki Peace Declaration presented at the ceremony, Mayor Taue pointed out that during the Preparatory Committee for the 2015 Nuclear Non-Proliferation Treaty (NPT) Review Conference, which was held in Geneva in April, Tokyo had stopped short of signing a joint statement urging that nuclear weapons not be used.

"The Japanese government did not sign (the statement), betraying the expectations of global society," Taue said. "If the Japanese government cannot support the remark that 'nuclear weapons (should never be) used again under any circumstances,' this implies that the government would approve of their use under some circumstances."

Taue also expressed worries about Japan's resumption of negotiations on nuclear power cooperation with India, which is not a party to the NPT.

"Cooperating on nuclear power with India, who has not signed the NPT, would render the NPT meaningless as its main tenet is to stop the increase of the number of nuclear-weapon states," he said. "Japan's cooperation with India would also provide North Korea, which withdrew from the NPT and is committed to nuclear development, with an excuse to justify its actions."

The mayor then urged the central government to take proactive measures to fulfill its duty as the only nation to have suffered an atomic bombing.

Moreover, Mayor Taue expressed grave concern about the moves to revise the war-renouncing Constitution, citing a phrase from the Constitution's preamble which reads, "Japanese people have resolved that never again shall we be visited with the horrors of war through the action of government."

Taue underscored the importance of not forgetting the terrible experiences of war and atomic-bombing. "In order not to forget this original desire for peace, it is essential to impart the experiences of war and atomic devastation to succeeding generations."

He also talked about Senji Yamaguchi, an atomic-bombing survivor, or hibakusha, who died in July this year at the age of 82. Yamaguchi had previously visited the United Nations, where he called for the abolition of nuclear arms, saying, "No more hibakusha."

"Listen to their (hibakusha's) voices," Mayor Taue said, noting that the average age of the hibakusha now surpassed 78. "Please consider whether or not you will allow the existence of nuclear weapons in the world today, and in the future world of your children."

In his address, Prime Minister Shinzo Abe vowed to stick to the three non-nuclear principles of not producing, possessing or introducing nuclear arms, and also promised to contribute to lasting world peace. He stopped short of saying that his government will abide by provisions in the Constitution, however, which he had mentioned in his 2007 Nagasaki speech while he was previously in power.

Moreover, Abe made no mention of his government's nuclear power policy, although prime ministers Naoto Kan and Yoshihiko Noda had declared at the 2011 and 2012 Nagasaki peace ceremonies that their administrations would seek to end Japan's reliance on atomic power.

The ceremony began at 10:35 a.m. at the Peace Park in Nagasaki. It was attended by about 6,300 people, including hibakusha and bereaved families of atomic-bombing victims, as well as representatives from 44 countries.

The attendees offered a silent prayer at 11:02 a.m., when the atomic bomb was dropped in the city on Aug. 9, 1945.

A total of 3,404 hibakusha are confirmed to have died over the past year, bringing the number of Nagasaki atomic-bombing victims to 162,083.

Nagasaki mayor urges government to do more to eliminate nuclear weapons

Kyodo

http://www.japantimes.co.jp/news/2013/08/09/national/nagasaki-mayor-urges-government-to-do-more-to-eliminate-nuclear-weapons/#.UgSeuKxSab0

NAGASAKI – As Prime Minister Shinzo Abe vowed to push for the abolition of nuclear weapons on the 68th anniversary of the U.S. bombing of the city of Nagasaki, Mayor Tomihisa Taue criticized the government Friday for its recent inaction in opposing nuclear weapons and urged it to show leadership as the world's only atomic-bombed country.

"I call on the Japanese government to consider once again that Japan is the only country to have suffered a nuclear bombing," Taue said twice in his latest Peace Declaration delivered at a ceremony in the city's Peace Park, attended by representatives from over 40 countries.

He also said Tokyo's failure to sign a statement rejecting the use of nuclear weapons under any circumstances at an international meeting in April is "betraying the expectations of global society" and "implies that the government would approve of their use under some circumstances."

Taue also expressed worries over the resumption of Japan-India negotiations for a nuclear cooperation agreement, saying such cooperation with India, a de facto nuclear power which has not signed the Nuclear Non-Proliferation Treaty, would render "meaningless" the NPT regime and give North Korea "an excuse to justify" its nuclear development.

Abe, for his part, pledged Japan will make every effort to eradicate nuclear weapons, as he did during a ceremony Tuesday in Hiroshima commemorating the 1945 atomic bombing of the city.

On the government's decision not to endorse the joint statement, which was supported by 80 countries at the preparatory committee session in Geneva for the next NPT review meeting, Abe told a press conference in Hiroshima that "the severe reality in which North Korea has been implementing nuclear development" had an influence.

The speeches at Friday's ceremony came after participants offered silent prayers for the victims at 11:02 a.m., the time the bomb detonated over Nagasaki.

Representing hibakusha, Shohei Tsuiki, 86, who was then 18, said what he saw after the bombing was "just a scene from hell" filled with people without ears and noses, with burned skin dangling from their bodies, or holding their dead children.

"It is obvious that nuclear power and human beings cannot coexist," he said, referring to the Fukushima nuclear crisis as well as the bombings of the two cities. "I ask the government to take action sincerely and proactively toward the elimination of nuclear weapons and nuclear power plants."

Nuclear powers Britain, France and the United States were represented. India was a first-time attendee among de facto nuclear powers that are not NPT signatories.

U.S. Ambassador to Japan John Roos, who became the first U.S. ambassador to attend Hiroshima's memorial ceremony in 2010, also attended the Nagasaki ceremony for the second time.

Three days after Hiroshima was devastated by an atomic bomb dropped by a U.S. B-29 bomber, the United States dropped another on Nagasaki on Aug. 9, 1945. An estimated 74,000 people were killed in the blast and its immediate aftermath in a city with a population of about 240,000.

In his speech, Taue said Nagasaki "supports" U.S. President Barack Obama's desire to seek a nuclear-free world, expressed in Prague in April 2009, and his statement in June this year to work toward a reduction of nuclear arsenals.

But touching on the reality that at least 90 percent of over 17,000 nuclear warheads still in existence belong to either the United States or Russia, Taue said, "President Obama, President (Vladimir) Putin, please commit your countries to a speedy drastic reduction of your nuclear arsenal."

Taue highlighted the importance of imparting the experience of atomic devastation to future generations and called on the government to provide better support for aging hibakusha, while pledging Nagasaki's continued support for the people of Fukushima Prefecture following the meltdowns at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant that began in March 2011.

Other attendees included Oscar-winning U.S. filmmaker Oliver Stone, who made a documentary series examining why the bombs were dropped, and Foreign Minister Fumio Kishida, a Hiroshima native, who was the first foreign minister to attend the Nagasaki ceremony.

As of the end of March, the number of survivors, or hibakusha, officially recognized by the city stood at 37,574. They had an average age of 78.2 years.

Nagasaki officials confirmed that a total of 3,404 hibakusha died over the past year, raising the official total of registered deaths to 162,083.

Japan's Gov't clearly not ready to sign anti-nuke declarations

August 11, 2013

Japan's reluctance to condemn nukes shows in refusal to sign anti-nuclear declarations
http://mainichi.jp/english/english/newsselect/news/20130811p2a00m0na007000c.html

HIROSHIMA -- By refusing to sign joint declarations against nuclear weapons usage at United Nations meetings since last year, the Japanese government has shown that its reliance on the United States' nuclear umbrella keeps it from taking stronger action against the weapons.

Since 1994, every year at U.N. General Assembly meetings the Japanese government has proposed a resolution for a worldwide end to nuclear weapons. However, it has been unenthusiastic about efforts in recent years, primarily by non-nuke-holding countries, to make concrete progress in eliminating nukes.

According to Yokohama-based NPO Peace Depot, of 21 resolutions at the 2012 U.N. General Assembly that involved nuclear weapons, Japan abstained from voting on four, including one that called for the start of talks to create a nuclear weapons convention. The Japanese government argued that "to accomplish sure

progress on nuclear arms reduction, realistic measures are needed," as it pointed out that nuclear-armed countries were not agreeing to the convention resolution.

Joint declarations calling for work to illegalize nuclear weapons were announced at both the Preparatory Committee for the Review Conference on the Nuclear Non-Proliferation Treaty (NPT) in May last year and at an arms reduction committee at the General Assembly in October. Sixteen countries signed the first declaration and 34 the second, but Japan refused to sign either, as the declaration's call for an immediate end to nuclear weapons is at odds with Japan's defense strategy of using the U.S. nuclear umbrella.

Later, at the second NPT review preparatory committee in April this year in Geneva, Switzerland, a new joint declaration against nuclear weapons was released. In deference to countries relying on nuclear deterrence, this one limited its scope to denouncing the morality of the weapons' use. It received the signature of 80 nations, but Japan again refused to sign.

The Ministry of Foreign Affairs explained that, while it "agrees with the general argument" of the declaration, it had disagreements over some of the particular language. At an April press conference, Chief Cabinet Secretary Yoshihide Suga revealed that Japan had wanted the phrase "under any circumstances" removed from the declaration's sentence, "It is in the interests of the very survival of humanity that nuclear weapons are never used again, under any circumstances."

Associate professor at the Hiroshima Peace Institute of Hiroshima City University and Korean national Kim Mikyoung, 49, views the Japanese response as "overreacting to the threat of North Korea."

"Hiroshima and Nagasaki view peacefulness and an anti-nuke stance as important messages, but I get the impression that is not getting through to the Japanese government," she says.

Other foreigners familiar with Hiroshima were also asked for their opinion. Visiting professor at Hiroshima University, American Suri Jeremy Avril, 40, defended the Japanese government, saying he could understand its reluctance to sign a declaration that conflicted with its reliance on the U.S. nuclear umbrella.

Meanwhile, Arthur Binard, 46, an American-born poet who has written many works about the atomic bomb victims, suggested that people around the world trying to get rid of nuclear weapons may no longer bother to deal with Japan after its refusals to sign the declarations

LDP committee : construction of new reactors should be halted

August 16, 2013

LDP panel to recommend freezing construction of new nuclear plants

http://mainichi.jp/english/english/newsselect/news/20130816p2a00m0na015000c.html

A Liberal Democratic Party (LDP) subcommittee probing the Fukushima nuclear disaster is set to recommend that Japan freeze construction of any new nuclear power plants until it decides how to deal with its spent nuclear fuel.

The subcommittee, part of the LDP's strategic research council on resources and energy, included the suggestion in a proposal it plans to submit to Prime Minister Shinzo Abe this month. The proposal, which also calls to shut down nuclear power plants whose operation is not financially viable, is likely to cause a stir within the Abe administration.

A subcommittee member pointed out that Japan had no final disposal site for the highly radioactive spent nuclear fuel that nuclear plants generate.

"It is not possible for the government to fulfill its responsibility to provide an explanation to the public if it builds new nuclear plants when there is still no final disposal site for spent nuclear fuel -- which is like having an 'apartment with no toilet,' " the member said.

The subcommittee was formed after the outbreak of the ongoing crisis at the Fukushima No. 1 nuclear plant operated by Tokyo Electric Power Co. (TEPCO). Its proposal expresses reservations about the way TEPCO has struggled to handle the disaster, with contaminated water escaping into the sea. It makes a wide range of proposals, from those governing the handling of contaminated water to the nation's future nuclear power policy.

At its outset, the proposal points out that high radiation levels at the Fukushima plant have hindered inspections of the reactors and associated buildings, and asks the government to further probe the cause of the nuclear disaster.

The tsunami following the March 2011 Great East Japan earthquake has been cited as the direct cause of the nuclear disaster, but the subcommittee's proposal says that **the effects of the temblor on the nuclear disaster should be further investigated**, with specialists on commercial reactors becoming involved in the nuclear regulation agency.

Regarding nuclear policy, the proposal says the construction of new reactors should be frozen, and that operations of reactors that are too expensive to manage due to the high costs of tsunami countermeasures should be halted.

Nuclear deterrence an illusion

August 18, 2013

Global threat of nuclear deterrence

by Ramesh Thakur
http://www.japantimes.co.jp/opinion/2013/08/18/commentary/global-threat-of-nuclear-deterrence/#.UhG6a39Sab0

BEIJING – Nuclear weapons are uniquely destructive and hence uniquely threatening to all our security. There is a compelling need to challenge and overcome the reigning complacency on the nuclear risks and dangers, and to sensitize policy communities to the urgency and gravity of the nuclear threats and the availability of nonnuclear alternatives as anchors of national and international security orders.

The transformation of anti-nuclear movements into coalitions of change requires a shift from street protest to engagement with politics and policy.

A nuclear catastrophe could destroy us anytime. Because we have learned to live with nuclear weapons for 68 years, we have become desensitized to the gravity and immediacy of the threat.

The tyranny of complacency could yet exact a fearful price if we sleepwalk our way into a nuclear Armageddon. It really is long past time to lift the shroud of the mushroom cloud from the international body politic.

Witnessing the first successful atomic test on July 16, 1945, Robert Oppenheimer, director of the Manhattan Project, which developed the A-bomb, recalled the sacred Hindu text the Bhagvad Gita: "If the radiance of a thousand suns were to burst at once into the sky, that would be like the splendor of the mighty one."

Birth and death are symbiotically linked in the Hindu cycle of life. So Oppenheimer recalled too the matching verse from the Gita: "Now I am become Death, the destroyer of worlds."

Let me put seven propositions regarding the role of nuclear weapons for defense and deterrence:

(1) The normative taboo against this most indiscriminately inhumane weapon ever invented is so comprehensive and robust that under no conceivable circumstances will its use against a nonnuclear state compensate for the political costs. We know this from the fact that nuclear powers have accepted defeat at the hands of nonnuclear states rather than escalate armed conflict to the nuclear level.

(2) Against nuclear-armed rivals, they cannot be used for defense. The mutual vulnerability of such rivals to second-strike retaliatory capability is so robust for the foreseeable future that any escalation through the nuclear threshold really would amount to mutual national suicide. Their only purpose and role is mutual deterrence.

(3) However, here too national security strategists face a fundamental and unresolvable paradox. In order to deter a conventional attack by a more powerful nuclear adversary, each nuclear-armed state must convince its stronger opponent of the ability and will to use nuclear weapons if attacked.

But if the attack does occur, escalating to nuclear weapons will worsen the scale of military devastation even for the side initiating nuclear strikes.

Because the stronger party believes this, the existence of nuclear weapons may add an extra element or two of caution, but does not guarantee complete and indefinite immunity for the weaker party.

If, for example, Mumbai or Delhi was hit by another major terrorist attack that the Indian government believed had Pakistan connections, the pressure for some form of retaliation across the border might well prove stronger than the caution about Pakistan having nuclear weapons.

(4) The role of nuclear weapons in having preserved the long peace among the major powers during the Cold War is debatable. How do we assess the relative weight and potency of nuclear weapons, West European integration and West European democratization as explanatory variables in that long peace?

Nor has there been any evidence produced to show that either side had the intention to attack the other at any time during the Cold War, but was deterred from doing so because of nuclear weapons held by the other side.

What is beyond dispute is that the Soviet Union's dramatic territorial expansion across Eastern and Central Europe behind Red Army lines took place in the years of U.S. atomic monopoly, 1945-49; and that the Soviet Union imploded after, but not because of, gaining strategic parity. Therefore, the putative security benefits of nuclear deterrence have to be assessed against the real risks, costs and constraints, including human and system error.

(5) To those who nonetheless profess faith in the essential logic of nuclear deterrence, let me pose a simple question: Would they prove their faith by supporting the acquisition of nuclear weapons by Iran in order to contribute to the peace and stability of the Middle East which at present has only one nuclear-armed state?

The late professor Kenneth Waltz was one of the very few who had the courage of his intellectual conviction to argue that because nuclear weapons contribute to the stability of deterrence, a world of more nuclear-weapon states would be a generally safer world.

(6) It is equally contestable that nuclear weapons buy immunity for small states against attack by the powerful.

It seems highly plausible to postulate that the biggest elements of caution in attacking North Korea — that is, if anyone has such intention in the first place — lies in uncertainty and anxiety about how China would respond, followed by worries about North Korea's conventional capability to hit Seoul and other parts of South Korea. Pyongyang's current arsenal of nuclear weapons and the capacity to deploy and use them credibly is a distant third factor in the deterrence calculus.

(7) Against the contestable claims of utility, there is considerable historical evidence that we averted a nuclear catastrophe during the Cold War as much owing to good luck as to wise management, with the 1962 Cuban missile crisis being the most starkly graphic example of all.

Moreover, compared to the sophistication and reliability of the command and control systems of the two Cold War rivals, those of some of the contemporary nuclear-armed states are dangerously frail and brittle.

Almost half a century after the Nuclear Nonproliferation Treaty was signed, the world is still perched precariously on the edge of the nuclear precipice.

As long as anyone has nuclear weapons, others will want them; as long as nuclear weapons exist, they will be used again some day by design, accident, miscalculation or rogue launch; any nuclear exchange anywhere would have catastrophic consequences for the whole world.

We need authoritative road maps to walk us back from the nuclear cliff to the relative safety of a less heavily nuclearized, and eventually a denuclearized, world.

Ramesh Thakur is director of the Center for Nuclear Non-Proliferation and Disarmament, Australian National University. This is based on a paper delivered at the “Arms Control and Strategic Stability” conference in Beijing. Email: ramesh.thakur@anu.edu.au

Maybe Ukraine can help

August 24, 2013

Japan foreign min. visits Chernobyl to apply insight to Fukushima

http://mainichi.jp/english/english/newsselect/news/20130826p2g00m0dm002000c.html

CHERNOBYL, Ukraine (Kyodo) -- Japanese Foreign Minister Fumio Kishida visited Chernobyl, site of the 1986 nuclear disaster in Ukraine, on Sunday to observe the nuclear power plant and areas surrounding it.

Kishida is expected to apply the lessons of the postdisaster work being conducted there to Japan's ongoing efforts to deal with the aftermath of the crisis at the Fukushima Daiichi nuclear power plant in northeastern Japan, triggered by the massive earthquake and tsunami in March 2011.

"I directly saw that the battle to contain the accident still continues 27 years after the disaster. Ukraine's experience and knowledge serve as a useful reference for workers coping with the Fukushima nuclear crisis," Kishida told reporters accompanying him.

Japan and Ukraine signed an agreement in April last year to cooperate in dealing with nuclear disasters.
The foreign minister viewed the No. 4 reactor at the Chernobyl plant, which exploded in April 1986 and is now enclosed in a concrete sarcophagus, from a distant point guided by the head of the plant.
He also visited a deserted town near the plant from which around 50,000 people evacuated following the disaster.
Kishida heard from the plant chief and other Ukrainian officials about the country's decontamination efforts and measures to ensure nuclear safety.
He is scheduled to meet with his Ukrainian counterpart Leonid Kozhara in Kiev on Monday. He is due to return to Japan on Tuesday.
See also :

Kishida visits Chernobyl for insights into bungled Fukushima cleanup

http://www.japantimes.co.jp/news/2013/08/25/national/kishida-visits-chernobyl-for-insights-into-bungled-fukushima-cleanup/#.Uhr0TH9Sab0

Kyodo
CHERNOBYL, UKRAINE – Foreign Minister Fumio Kishida on Sunday paid a visit to Chernobyl, site of the 1986 nuclear disaster in Ukraine, to tour the wrecked nuclear power plant and areas around it. ....

Japan's Foreign Minister visits Chernobyl

http://www3.nhk.or.jp/nhkworld/english/news/20130826_04.html

Japan's Foreign Minister has visited the site of 1986 Chernobyl nuclear accident in Ukraine.

Fumio Kishida said he wants to increase cooperation with Ukraine in the reconstruction of areas affected by Fukushima Daiichi nuclear accident two years ago.

Kishida was shown the concrete and metal sarcophagus that covers the No. 4 reactor.

Ukrainian officials and engineers explained to Kishida how difficult it was to contain radioactive substances immediately after the accident. They said highly radioactive materials are still inside.

Kishida inspected the construction of a dome-like structure that will cover the sarcophagus.

He also visited a deserted town where nuclear plant workers once lived.

Kishida told reporters that he realized the fight to contain the Chernobyl accident continues and that Japan is learning much from what Ukrainians experienced after the accident.

In April 1986, an explosion at the No. 4 reactor of the Chernobyl Nuclear Power Plant became the worst nuclear accident in history.

Soon after the accident, workers built a metal and concrete cover called a sarcophagus to stop radioactive materials from spreading.

In April last year, the Ukrainian government began constructing a new structure to envelop the aging sarcophagus.

The arch is more than 250 meters wide and 105 meters tall. Workers are assembling it about 300 meters from the sarcophagus. Once completed in 2015, the structure will be moved into position on rails.

The cost is estimated at more than a billion dollars. Ukraine is getting support from Japan, the United States and other countries.

Engineers plan to disassemble the reactor in a project that's expected to take 50 years.

27 years have passed since the accident, but radiation levels are still high around the plant. A no-entry zone extends 30 kilometers from the site.

More than 160,000 people were forced to move out of contaminated areas. They live on subsidies from the government.

About 30 firefighters and plant workers died soon after the accident due to acute radiation exposure.

A UN survey suggests many children in the area have developed thyroid cancer. Others have developed heart and circulatory diseases. Some complain of physical disorders, including headaches and dizziness.

The Ukrainian government provides free health checks and other support to about 2 million people.

Cooperation Japan-Ukraine on nukes

August 27, 2013

Japan, Ukraine to jointly tackle nuclear disasters
http://www3.nhk.or.jp/nhkworld/english/news/20130827_07.html

The foreign ministers of Japan and Ukraine have agreed to step up cooperation in studying the effects of the nuclear disasters each country has experienced.

Leonid Kozhara received Fumio Kishida on Monday in Kiev.

The ministers agreed to share knowledge on the disasters at Chernobyl nuclear power plant in 1986 and Fukushima Daiichi plant in 2011.

They also agreed to promote a plan to study the spread of radioactive material in Fukushima using Japanese micro satellites launched with Ukrainian rockets.

Kishida told reporters he hopes Japan and Ukraine can work together to face their challenges.

International help

August 26, 2013

Outside help offered to deal with Tepco debacle

U.S., French experts also ready; water woes escalate

Bloomberg

http://www.japantimes.co.jp/news/2013/08/26/national/outside-help-offered-to-deal-with-tepco-debacle/#at_pco=tcb-1.0&at_ab=-&at_pos=3&at_tot=8

Russia repeated an offer first made two years ago to help Japan clean up its radiation-ravaged Fukushima No. 1 nuclear station, welcoming Tokyo Electric Power Co.'s decision to seek outside help.

As Tepco pumps thousands of tons of water through the wrecked Fukushima station to cool the melted cores of three reactors, the tainted runoff was found to be leaking into groundwater and the ocean. The approach to cooling and scrapping the plant will need to change and include technologies developed outside Japan if the cleanup is to succeed, said Vladimir Asmolov, first deputy director general of Rosenergoatom, Russia's state-owned nuclear utility.

"In our globalized nuclear industry, we don't have national accidents, they are all international," Asmolov said. Since the Liberal Democratic Party took power in December and Shinzo Abe became the prime minister, talks on bilateral cooperation on the Fukushima cleanup have turned "positive" and Russia is ready to offer its assistance, he said from Moscow last week.

After 29 months of trying to contain the radiation from Fukushima's molten atomic cores, Tepco said last week it will reach out for international expertise in handling the crisis. The water leaks alone have so far sent more than 100 times the annual usual release of radioactive elements into the sea, raising concern it will enter the food chain through fish.

The latest leak of 300 tons of highly radioactive water prompted the Nuclear Regulation Authority to label the incident "serious" and question Tepco's ability to deal with the crisis, echoing comments Abe made earlier this month. Zengo Aizawa, a vice president at Tepco, made the call for help at an Aug. 21 briefing in Tokyo.

"It was clear for a long time that Tepco was not adequately coping with the situation," Asmolov said. "It looks like Tepco management were the last to realize this," he said. "Japan has the technologies to do this, but they lacked a system to deal with this kind of situation."

The Fukushima crisis, which started in March 2011, is the world's biggest nuclear disaster since the Soviet Union faced the explosion at Chernobyl in 1986.

Tepco's solution to cooling melted nuclear rods at No. 1 that otherwise could overheat into criticality, or a self-sustained nuclear chain-reaction, has been to pour water over them. That's left more than 330,000 tons of radioactive water in storage tanks at the site, and the amount is growing daily. The water is treated to remove some of the cesium particles in it, which in turn leaves behind contaminated filters.

The sheer quantity of water used is the most involving a crippled nuclear plant since the 1972 London convention banned the dumping of waste and radioactive water into the sea, said Peter Burns, formerly Australia's representative on the United Nations scientific committee on the effects of atomic radiation.

"Until they figure out how to deal with such vast volumes of water, how to manage it, the problem, including leaks, will persist," Burns, a retired radiation physicist, said from Melbourne.

Retaining thousands of tons of radioactive water in tanks was the wrong strategy from the start and Tepco's handling of the task is a "textbook picture of a failure of management," said Michael Friedlander, who has 13 years of experience running U.S. nuclear stations.

The idea of pumping water for cooling was never going to be anything but a "machine for generating radioactive water," Asmolov said. Other more complex methods, such as the use of special absorbents like thermoxide to clean contaminated water and the introduction of air cooling, should be used, he said.

Russia's nuclear company, Rosatom, of which Rosenergoatom is a unit, sent Japan a 5 kg sample of an absorbent that could be used at Fukushima almost three years ago, Asmolov said. It also formed working groups ready to help Japan on health effect assessment, decontamination and fuel management, among others, Asmolov said. **The assistance was never used,** he said.

"Since the arrival of the new Japanese government, the attitude's changed," he said. "So far the talks have been on a diplomatic level, but they are much more positive. And we remain open to working together on this issue. To follow developments, I monitor Fukushima news every morning."

Japan can tap experts in France and the U.S. as well as Russia to help it tackle the situation at Fukushima, he said.

America's long history with atomic research, including the nuclear weapons site at the Hanford Engineer Works in Washington state, has provided expertise in cleaning up contaminated sites, said Kathryn Higley, who heads the nuclear engineering and radiation health physics department at Oregon State University in Corvallis.

"We have individuals that are working on groundwater contamination and using technology and developing new technologies to clean up strontium in groundwater, for example, at the Hanford site," she said. "So there are individuals around the world that have been doing this and certainly they would be more than willing to help in this process."

France's Areva SA had designed a radiation filtration system that was used for several months at the Fukushima site as temporary cover before Tepco installed its own facilities.

Tepco is in talks with a team of retired U.S. government officials who worked on water management after the Three Mile Island accident in 1979, according to Dale Klein, chairman of an advisory panel to Tepco and a former head of the U.S. Nuclear Regulatory Commission

Japan needs global assistance

August 30, 2013

Japan under increasing pressure to accept outside nuclear help

by Eric Johnston
Staff Writer

http://www.japantimes.co.jp/news/2013/08/30/national/japan-under-increasing-pressure-to-accept-outside-nuclear-help/#.UiDFxn9Sb9k

OSAKA – Prime Minister Shinzo Abe, just back from a trip to the Middle East and Africa, where he promoted Japanese nuclear technology, faces mounting international criticism that his administration is not taking the Fukushima crisis seriously and growing calls both at home and abroad for long-term global assistance.

Since Tokyo Electric Power Co. admitted on July 22, the day after Abe's Liberal Democratic Party won a landslide Upper House victory, that radioactive groundwater was reaching the Pacific from the Fukushima No. 1 plant, international media attention has been intense.

Reporters, commentators and a wide range of experts have speculated on worst-case scenarios and warned that the leaks demonstrated the massive problems still to be resolved in dismantling the crippled plant.

For many abroad, the latest revelations only demonstrate yet again that the crisis is too big for either Tepco or the government to handle, and that consulting international experts has to mean going outside Japan's "nuclear power village" or the International Atomic Energy Agency, which, they note, also has a mandate to promote nuclear power.

"Expertise in the areas of hydrology, reactors and civil engineering is needed. But the issue is not whether it's domestic or international. What is needed is nonvested-interest expertise, not the IAEA, Areva (the French nuclear conglomerate) or (companies like) Bechtel. Contractors should come later after deciding what needs to be done," said nuclear opponent Aileen Mioko Smith of the Kyoto-based group Green Action.

Japan recently announced it would seek Russian assistance and advice regarding the recent leaks. Mycle Schneider, a Paris-based energy and nuclear policy consultant who opposes nuclear power, said he welcomes the decision but added that it carries its own problems.

"First, there are too many political and economic biases involved. Second, the complexity of the challenges are such that Japan should make sure it reaches out to the most competent individuals in water management, spent-fuel handling and storage, waste disposal, building integrity and radiation protection," he said.

Last year, Schneider offered a detailed proposal for an international task force for Fukushima. While noting three basic challenges, including site stabilization, protection from radiation and ensuring food safety, his proposal focused only on assistance for stabilizing the reactors.

His proposed task force would be led by two people, one Japanese and the other non-Japanese. There would be a core group of a dozen experts working full time on the project for a minimum of two years. At least half would have no links to the nuclear industry.

Charles Ferguson, president of the Washington-based Federation of American Scientists, agrees Japan should include more experts from other countries. He added that while there is a need to be concerned about the water leaks, it was also important to keep matters in perspective.

"We need to recognize that although 300 tons of contaminated water sounds very serious, it's only about 80,000 gallons, which is much less than the 660,250 gallons used in an Olympic-sized swimming pool. Once this contaminated water has gotten past the plant, there's a substantial dilution of the contamination," Ferguson said.

"Nonetheless, there are concerns fish caught near the stricken nuclear reactor plant could ingest strontium-90 or cesium-137. Monitoring of fish in the surrounding waters needs to be continued. There are many scientific experts in countries like Russia and Norway who have experience in examining marine life in radioactive-contaminated waters."

Ferguson said the role of his organization has been to collaborate with the Maureen and Mike Mansfield Foundation and the Sasakawa Peace Foundation in forming the U.S.-Japan Nuclear Working Group, which published its recommendations about Fukushima earlier this year.

"The U.S. has a special role to play in supplementing Japanese decommissioning and decontamination expertise, given the long American experience in radiological remediation and the unique level of trust

and interoperability between the American and Japanese governments and nuclear industries," the report says.

Japan's reluctance to engage the international community more broadly on Fukushima is the subject of much conjecture. Numerous critics say it is because Tepco and the pro-nuclear LDP are concerned that admitting the problem will make restarting other reactors more difficult.

And many who oppose the Tokyo Olympic bid charge that nobody in the government or the media wants to draw international attention to Fukushima and risk giving the International Olympic Committee an excuse to reject the Japanese bid.

Former Ambassador to Switzerland Mitsuhei Murata, who has written to Abe and U.N. Secretary-General Ban Ki-moon calling for more international involvement in Fukushima and protesting the Olympic bid, sees these reasons as valid.

"The nuclear dictatorship in Japan persists. There's an international strategy to consider that Fukushima did not happen. Japan's media seems to be fulfilling its duty in a way that does not indispose the strong nuclear dictatorship, and has succeeded in creating a 'business as usual' atmosphere," Murata said.

Collider good for Japan - or not ?

August 30, 2013

Collider project needs consensus

http://www.japantimes.co.jp/opinion/2013/08/30/editorials/collider-project-needs-consensus/#.UiGSwX9Sb9k

A panel of a group of scientists who want to invite the International Linear Collider to Japan have decided to promote the Kitakami area of Iwate and Miyagi prefectures as a candidate site. The particle accelerator will cost an estimated ¥830 billion, and the total including particle detection equipment and research will exceed ¥1 trillion.

Particle accelerators have helped expand the frontier of physics. But scientists and politicians who want Japan to host the ILC must present convincing reasons — including the expected economic, scientific, educational and social benefits — to the public and the government to justify the cost. At present the government and the Science Council of Japan are lukewarm about the idea.

The Large Hadron Collider at the European Organization for Nuclear Research (CERN) in the suburbs of Geneva is the largest and most powerful particle accelerator. It consists of a 27 km ring of superconducting magnets with a number of accelerating structures to boost the energy of the particles along the way. In 2012, the LHC helped discover Higgs boson particles. It is theorized that soon after the universe formed, Higgs boson particles filled space and clung to other weightless particles moving at the speed of light— an interaction thought to have made the latter acquire mass.

The ILC will feature a straight, 31 km tunnel. From each end, beams of electrons and positrons will be accelerated to close to the speed of light by means of a series of superconducting accelerating tubes before they are made to collide. The collision will recreate the high-energy environment that existed one-trillionth of a second after the universe was formed 13.7 billion years ago by the Big Bang. The ILC's first task is expected to be accurate measurement and analysis of Higgs bosons. Scientists at the High Energy Accelerator Research Organization in Tsukuba, Ibaraki Prefecture, have accumulated substantial amount experience by running an accelerator that makes electrons and positrons collide.

The ILC is an enormous international project that will require time-consuming negotiations so construction won't begin for five years. Its construction will involve the participation of some 1,000 engineers and researchers from both Japan and abroad, and take 10 years. If research and improvement are taken into account, 40 years will be needed, and there is also a plan to extend the ILC tunnel to 50 km. The project will result in the formation of a community of some 10,000 people, including scientists and their family members.

The panel expects that Japan will have to cover about half the total cost of more than ¥1 trillion, with the remaining shouldered by other countries. But the Science Council of Japan fears that Japan's share of the expenses will reach 80 percent. Given the project's enormous financial cost, the weak state of Japan's economy and the soaring size of its national debt, scientists and politicians must discuss the merits and demerits of hosting the ILC in Japan in a concrete and transparent manner before any final decision is made.

Only one reactor left online

September 2, 2013

Oi reactor halt leaves just one unit still online

Kyodo

http://www.japantimes.co.jp/news/2013/09/02/national/oi-reactor-halt-leaves-just-one-unit-still-online/#.UiR2qn9Sb9k

TSURUGA, FUKUI PREF. – Japan moved closer to another period without nuclear power as one of the nation's two operating reactors was set to be taken offline for routine checks late Monday.

Reactor 3 at Kansai Electric Power Co.'s Oi plant in Fukui Prefecture was scheduled to go offline at around 11 p.m., while reactor 4 at the same plant will be taken offline for checks on Sept. 15.

Kansai Electric Power, serving the region centering on Osaka Prefecture, said Friday that the halt of reactor 3 is unlikely to create an energy shortage this week as the high summer temperatures are expected to ease.

Reactors must undergo periodic inspections every 13 months.
Once the two reactors are halted, all of the nation's 50 commercial reactors again will be offline, repeating a situation that only happened previously after the 2011 start of the Fukushima No. 1 disaster.
For two months starting in May 2012, the nation experienced a period of no nuclear power for the first time in more than 40 years.
Kepco has already applied for the restart of reactors 3 and 4 at the Oi plant after their routine checks end.
But it is not clear when or if the two units can restart, because it is necessary to check to determine if they sit atop active faults, a scenario that could render their further operation illegal.

All Japanese reactors offline in 14 months

September 2, 2013
Japan's online nuclear reactors to be halted
http://www3.nhk.or.jp/nhkworld/english/news/20130902_43.html

The only 2 nuclear reactors online in Japan will soon be shut down for regular inspections. That means all nuclear power generators in the country will be offline for the first time in about 14 months.

Due to the nuclear disaster at the Fukushima Daiichi power plant in 2011, all of Japan's nuclear reactors were offline at one point in the past 2 years.

But last year, Kansai Electric Power Company, the operator of the Ohi nuclear power plant on the Sea of Japan, restarted the facility's Number 3 and Number 4 reactors.

The 2 are the only reactors currently online in Japan.

On Monday afternoon, Kansai Electric began lowering the power output of the Number 3 reactor for regular inspections. The reactor will come to a halt on Tuesday morning.

The plant operator also plans to halt the Number 4 reactor for a regular check on September 15th.

To gain approval for the restart of their offline reactors, Ohi and 5 other nuclear plants are undergoing assessments by the Nuclear Regulation Authority.

How to justify exporting nukes

September 9, 2013

Reactor makers look abroad as home market fizzles

by Kazuaki Nagata
Staff Writer

http://www.japantimes.co.jp/news/2013/09/09/reference/reactor-makers-look-abroad-as-home-market-fizzles/#.Ui4H0H9Sb9k

The Fukushima meltdowns and the continuing radiation crisis may have turned the public off of atomic energy at home, but it's full steam ahead for Prime Minister Shinzo Abe and Japan's heavy industries when it comes to exporting that technology to power-hungry economies abroad.

The marketing push being led by Abe and his Liberal Democratic Party, which brought Japan into the nuclear age, has angered nuclear protest groups, which, like many members of the public, blame the party's cozy ties with big business for setting the stage for the Fukushima meltdown debacle.

Here are some questions and answers about Japan's nuclear technology exports:

How does the process of exporting nuclear plants work?

Landing a contract to build an atomic plant overseas is more complex than a typical business deal because it requires political involvement: The governments of the exporting and host nations must conclude a nuclear cooperation pact to ensure the technology will only be used for peaceful purposes.

Because nuclear technology has weapons potential, strict international laws are applied to its export and import. This means reactor manufacturers must have politicians on their side to pave the way for entering overseas markets.

Once an accord is signed, it is basically an open bid. But in some cases, especially with countries that do not have their own advanced technology, national leaders get involved in the process to offer safety assurances and special deals to boost their companies' bids.

What nuclear cooperation pacts has Japan joined?

The country to date has entered accords with the United States, the United Kingdom, Canada, Australia, France, China, the European Atomic Energy Community (consisting of 28 EU members), Kazakhstan, South Korea, Vietnam, Jordan and Russia.

Abe has recently signed pacts with Turkey and the United Arab Emirates that will be finalized once they are approved by the Diet.

Japan is also approaching Brazil, South Africa and India.

Has Japan been exporting reactors?

Not yet. Japan hasn't exported a single domestically built reactor yet because it's a late-comer to the global nuclear power market.

That changed quickly in October 2006, when Toshiba Corp. succeeded with its blockbuster acquisition of U.S.-based reactor maker Westinghouse Electric Co., kicking off a string of other tie-ups with Japanese companies.

In 2009, Toshiba won an order for two reactors in Texas. In 2010, Vietnam effectively chose Japan for a roughly ¥1 trillion nuclear plant project, although the manufacturer hasn't been selected yet. Hitachi Ltd. subsidiary Horizon Nuclear Power plans to build two or three reactors on Anglesey Island in Wales in the early 2020s.

In May, Abe visited Turkey and signed a deal to build a sprawling nuclear plant on the Black Sea coast. The deal will be given to a Japanese-French consortium that includes Mitsubishi Heavy Industries Ltd, which also builds reactors.

Who are Japan's rivals?

Because nuclear power is complex and sensitive, there are not many competitors.

Japan has three major reactor makers — Toshiba, Hitachi and MHI, who are all looking to expand overseas. The three firms are partnering with overseas makers to get ahead of the competition.

Toshiba bought Westinghouse, Hitachi is allied with U.S. giant General Electric Co., and Mitsubishi Heavy is working with Areva SA, France's biggest nuclear power company.

South Korea has Doosan Heavy Industries, while Russia runs the state-owned Rosatom Nuclear Energy State Corp.

Is nuclear power use expected to grow on a global scale?

Apparently, yes. There are about 400 reactors worldwide, and the Ministry of Economy, Trade and Industry projects that 90 to 370 new reactors will be built by 2030 to support rapid economic growth in emerging countries.

Given the expected increase, is exporting nuclear plants a promising business?

That's actually debatable.

"I think it will be very challenging (for Japanese makers) to keep their nuclear power business strong," said Hitoshi Ikuma, an executive and energy expert at Japan Research Institute.

Ikuma noted that the number of nuclear power plants is expected to grow worldwide, and if Japanese makers compete successfully, it will benefit the nation. But the situation for the domestic nuclear industry has changed drastically since the Fukushima crisis.

In the five decades before the Fukushima disaster, 54 reactors had been built to achieve the government's goal of securing stable sources of affordable energy to ease its dependence on overseas energy imports. Things were going relatively well, Ikuma said.

Three meltdowns later, the nation now faces the prospect of having to cut its dependence on atomic power.

Since there is little likelihood of new reactors being built, reactor makers are looking to sell their technology abroad while maintaining state-of-the-art equipment, but this means engaging in more atomic diplomacy to forge cooperation pacts.

Then there's the matter of competition, not only among themselves but from their Korean and Russian rivals as well.

"It's hard for the manufacturers to predict for certain that they can land deals even if the government backs them," said Ikuma.

A Toshiba spokesman said that his group now feels confident it can be a major global player with world-renowned Westinghouse under its wing.

In light of the Fukushima fiasco, some may question why anyone would want to import reactors from Japan, but Ikuma said Japan was exporting other electricity generating technology, including thermal power plants, long before the disaster, proving their quality and earning buyers' trust.

The crisis at the poorly protected 40-year-old Fukushima plant was more a failure of governance than manufacturing, he said.

What are the risks involved in exporting plants and reactors?

Ikuma expressed concern that if more and more atomic plants are built in emerging economies, there is a greater risk of crises.

He noted that Chernobyl, Three Mile Island and Fukushima all happened in countries whose nuclear technology was considered top class.

"I think that exporting plants and reactors to countries that do not have their own technology to build such equipment increases the risk of accidents," he said.

When signing contracts with overseas customers, the Japanese side will probably have to stipulate the extent to which it will bear liability in the event of a crisis, but this may not cover any notion of moral responsibility, Ikuma said.

The Weekly FYI appears Tuesdays. Readers are encouraged to send ideas, questions and opinions to

hodobu@japantimes.co.jp

Future of nukes as unclear as ever

September 15,2013

ANALYSIS: Future of nuclear energy still clouded even as all reactors go offline

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201309150020

THE ASAHI SHIMBUN

Japan is on the verge of being without nuclear power again with the scheduled shutdown of Kansai Electric Power Co.'s No. 4 reactor at the Oi power plant for a regular safety inspection.

With the facility set to go offline late on Sept. 15, all 50 nuclear reactors in Japan will be out of operation.

Given that this will be the first time in 14 months that Japan is fully without nuclear power, questions inevitably are being raised about the future of nuclear energy in this country.

However, the Abe administration has made clear it will allow reactors to resume operations as long as they pass safety inspections. The Nuclear Regulation Authority is now in the process of appraising 12 reactors at six nuclear plants to determine if they meet new stringent standards put in place after the 2011 Fukushima disaster that forced all reactors to shut down in Japan.

The uncertainty about the future of nuclear energy stems mainly from the fact the Abe administration has yet to offer a clear picture of the extent to which Japan will depend on this form of power generation in years to come.

What it has done is to move away from the goal set by the previous Democratic Party of Japan-led government to stop operations at all nuclear plants by the 2030s.

Prime Minister Shinzo Abe has also pitched Japan's nuclear energy technology during trips abroad and helped a consortium of Japanese companies win an order for a 2 trillion yen ($20 billion) contract to build a nuclear facility in Turkey.

At the same time, after Tokyo was awarded the right to host the 2020 Summer Olympics at an International Olympic Committee meeting held in Buenos Aires, Abe said at a news conference: "We will reduce the ratio of electric power generated by nuclear energy. Over about three years, we will make every effort to accelerate the spread of renewable energy sources and promote energy conservation."

But before the government can set a goal for the dependence on nuclear energy, it will first have to secure alternative energy sources. It won't be able to do that until at least next year.

The administration faces an even more immediate challenge: the leakage of radiation-contaminated water from the crippled Fukushima No. 1 nuclear power plant.

After the reactor meltdowns in Fukushima, the electric power industry said that unless other nuclear plants were put back in operation it would be unable to provide the electricity needed, especially during the summer.

The unprecedented nature of the nuclear disaster drove home to households and companies the need to conserve energy. Even though this past summer saw record high temperatures, no blackouts occurred due to an electricity shortage.

As a result, electric power companies were forced to shift the focus of their arguments for resuming operations at nuclear plants. The utilities are now pointing to increases in electricity fees to cover the increased use of thermal power plants to argue that nuclear plants are needed to reduce the cost burden on households.

The higher fuel costs brought about by the shift to thermal plants led six electric power companies to raise rates. Tokyo Electric Power Co. raised the standard monthly rate for households to above 8,000 yen in September, a 30-percent increase from the level before the Fukushima disaster.

Higher fuel costs caused eight of the 10 utilities to record a total net loss of 1.6 trillion yen in fiscal 2012.

Even as electric power companies call for the resumption of operations at nuclear plants to alleviate the burden on households, heightened public concern about nuclear safety coupled with strong opposition to nuclear power generation will make it more difficult to authorize a return to the way things were before the disaster.

Of the 12 reactors for which operators have applied for inspections as a first hurdle to resuming operations, eight have proceeded fairly smoothly in the appraisal process. The evaluation for the No. 3 reactor at the Ikata nuclear plant in Ehime Prefecture could be completed as early as this winter, which might make it the first to resume operations.

However, even if the reactor does pass the evaluation process, the electric power company will still have to gain the consent of the municipalities that host the plant.

In July, TEPCO tried to submit applications for inspections at the No. 6 and 7 reactors at the Kashiwazaki-Kariwa nuclear plant in Niigata Prefecture. However, Niigata Governor Hirohiko Izumida criticized the rush to resume operations. He also was critical of the new safety standards established by the Nuclear Regulation Authority on grounds the screening was meaningless in the absence of a thorough analysis and evaluation of what caused the Fukushima disaster.

After the 2011 accident, the central government expanded the area for disaster management measures to a radius of 30 kilometers from any single nuclear plant. That means there are now more municipal governments that fall within that radius from which consent has to be gained by utilities before they can resume operations at nuclear plants.

Japan capable of doing without nukes, says Jaczko

September 24, 2013

Ex-top U.S. nuclear regulator counsels end to atomic power

by Kazuaki Nagata
Staff Writer
http://www.japantimes.co.jp/news/2013/09/24/national/ex-top-u-s-nuclear-regulator-counsels-end-to-atomic-power/#.UkHcylM0_9k

The ongoing crisis at the Fukushima No. 1 plant is a sign that the world needs to seriously rethink nuclear safety and consider possibly ending its dependence on atomic power, the former chairman of the U.S. Nuclear Regulatory Commission said Tuesday in Tokyo.

"When you look at what happened around the Fukushima Daiichi (No. 1) area, it's simply unacceptable," as tens of thousands of people have been unable to return to their homes due to radioactive contamination, said Gregory Jaczko, who served as the top U.S. nuclear regulatory official for nearly three years until July 2012.

Given that Japan is extremely prone to earthquakes and tsunami, among other disasters, using nuclear power poses serious risks unless some kind of new technology is created to completely eliminate the possibility of severe accidents, Jaczko told reporters at the Foreign Correspondents' Club of Japan.

However, Jaczko also said that creating such zero-risk technology is next to impossible.

Instead, Jaczko said, he hopes Japan pours its resources and energy into coming up with ways to function without atomic power.

"I think the Japanese people have the ability to do that," he said.

While Japan's atomic watchdog, the Nuclear Regulation Authority, is now examining requests from utilities to restart reactors, Jaczko stressed the importance of getting the public actively involved in the process.

"There needs to be a thorough public debate and a public dialogue to ensure that those decisions" have received as much support from the public as possible, said Jaczko, who headed the NRC when the Fukushima crisis erupted on March 11, 2011.

As for the ongoing issue of tainted groundwater flowing into the ocean at the No. 1 plant, Jaczko expressed befuddlement that the issue has only recently come under the spotlight.

"This was known from the beginning that there would potentially be these contamination problems," he said.

If they say so...

25.09.2013_No234 / News in Brief

Nuclear Growth To Continue Despite Fukushima, Says IAEA

Plans & Construction
http://www.nucnet.org/all-the-news/2013/09/25/nuclear-growth-to-continue-despite-fukushima-says-iaea

25 Sept (NucNet): Growth in nuclear energy following the Fukushima-Daiichi nuclear accident is expected to continue, but at a rate lower than estimated before the March 2011 accident, the International Atomic Energy Agency has said.

In its latest projections for nuclear energy generating capacity the IAEA said this year's low projection indicates 17 percent growth in world total nuclear power capacity by 2030, while the high projection suggests a 94 percent growth, or nearly a doubling in global generation capacity.

The annual projections made since 2011 have indicated that growth has slowed, but not reversed. The 2013 updates, taking into account developments until April 2013, reinforce this conclusion, the IAEA said.

In the 2013 updated low projection, the world's installed nuclear power capacity grows from 373 gigawatts (GW) today to 435 GW in 2030. In the updated high projection, it grows to 722 GW in 2030.

The strongest projected growth is in regions that already have operating nuclear power plants, led by Asian countries, including China and South Korea. From 83 GW at the end of 2012, capacity grows to 147 GW in 2030 in the low projection and to 268 GW in the high projection.

Eastern Europe, which includes Russia, as well as the Middle East, India and Pakistan, also shows strong growth potential. Nuclear capacity grows from 48 GW in 2012, to 79 GW in the low projection and 124 GW in the high projection.

Western Europe shows the biggest difference between the low and high projections. In the low projection, Western Europe's nuclear power capacity drops from 114 GW at the end of 2012 to 68 GW in 2030. In the high projection, nuclear power grows to 124 GW.

In North America, the low case projects a small decline, to 101 GW in 2030, while the high projection shows an increase from 116 GW at the end of 2012 to 143 GW, or a 24 per cent increase.

The IAEA said that over the short term, the low price of natural gas and the promotion of renewable energy sources in some energy policies are expected to impact nuclear growth prospects in several regions of the developed world.

The agency said that over the past year, most countries have finalised their post-Fukushima nuclear safety reviews, providing greater clarity with respect to nuclear power development. "Nevertheless, challenges remain, given that policy responses to the Fukushima-Daiichi accident are still evolving in some key regions," a statement said.

"Once greater certainty about the policy and regulatory responses is established, these projections will likely need to be refined."

For full details: www.iaea.org/OurWork/ST/NE/Pess/assets/rds1-33_web.pdf

The Economist on Japanese nuke future

Electricity in Japan

Power struggle

The shadow of Fukushima, the world's worst nuclear disaster after Chernobyl, hangs over Japan's energy future

http://www.economist.com/news/asia/21586570-shadow-fukushima-worlds-worst-nuclear-disaster-after-chernobyl-hangs-over-japans-energy

Sep 21st 2013 | TOKYO

THIS week Japan's last working nuclear reactor was switched off. At Oi, on the west coast of the country's main island, the closure was supposedly for routine maintenance and safety checks. Yet no firm date is in sight for reopening Oi or any other of Japan's 50 reactors, shut in the wake of the triple meltdown at the Fukushima Dai-ichi plant. Before the earthquake and tsunami of March 2011 turned so much of Japan's world upside down, the country counted on nuclear power for 30% of its electricity—one of the highest proportions in the world. Now it is entirely without nuclear power for only the second time since 1970.

In government since December, the Liberal Democratic Party (LDP) warns of the economic costs of mothballed plants. The industry ministry says that the need to import extra oil, gas and coal to fire conventional power stations will have cost Japan an extra ¥9.2 trillion (about $93 billion) by the end of 2013. A sharply weaker yen and higher oil prices have not helped, and Japan is now running trade deficits for the first time in three decades. Businesses and consumers face much higher electricity costs in Japan than in many countries.

The cosy community of electricity utilities, bureaucrats, academics and heavy industry, known in Japan as the "nuclear village", is urging the LDP to restart the reactors. The prime minister, Shinzo Abe, would love to oblige. Earlier this year his government purged an energy-policy board of anti-nuclear types. The street demonstrations in Tokyo against nuclear power that took place in the wake of the Fukushima disaster were dwindling. The way had seemed open to fire up the reactors again.

It will not prove so simple. For one, a new, strengthened nuclear agency, the Nuclear Regulation Authority (NRA), must declare any plant safe before it starts—and several sit on or near active faults (Japan accounts for a fifth of the world's big earthquakes). In addition, the law gives towns and villages a say over nearby plants, and most Japanese want to ditch nuclear power for good. To cap it all, news of the mess at the stricken Fukushima plant gets no better. Recently, it transpired that hundreds of tonnes of radioactive water were leaking each day into the Pacific.

So Mr Abe has to tread carefully. If the NRA rules that Japan's oldest and riskiest plants may not reopen, the LDP can do nothing about it. Although the understaffed agency has come under political pressure, including to speed up the publication of new safety rules, it is making a stand over reactors on active faults.

Nor can the prime minister easily overcome public opposition. Local towns that play host to nuclear plants are not the problem: in the past, the government and the power utilities conspired to site power stations in isolated, economically deprived places that could be bought off with largesse. Several of these towns are clamouring for the reactors to restart. But in places a little farther afield, opposition mounts. Hirohiko Izumida, governor of Niigata prefecture on the main island's north-west coast, says that around 70% of the prefecture's population are against starting the reactors at Kashiwazaki-Kariwa, the world's biggest nuclear plant. Mr Izumida says that governors do not have the power to block restarts once the NRA has given the go-ahead. Yet overriding popular local politicians would take bravado from the government and the utilities.

Besides, the LDP itself contains many more critics of nuclear power than it did before March 2011, countering the influence of nuclear backers such as the economy minister, Akira Amari. They think that starting the reactors could become a liability before the next general election, due in 2016. The LDP's anti-nuclear coalition partner, New Komeito, also constrains the government somewhat. Meanwhile, rising business optimism appears to undermine the case that economic recovery depends on nuclear power. Probably no more than 12-15 reactors will be switched back on, says Kazuhiro Ueta, a renewable-energy specialist who sits on the government's energy-advisory board. For the nuclear village, which once expected to supply at least half of Japan's power, that would be a grave disappointment.

Instead, Japan is preparing for other long-term energy supplies. Since 2011 the number of independent power producers tapping renewable sources, such as solar power, has tripled, thanks in part to a new "feed-in" tariff system for renewables. Including hydro-electricity, renewables now represent 10% of the energy mix, leading to hopes that they might one day replace the share that nuclear power once claimed.

Yet scepticism is warranted. The power grids are still owned by the big utilities, which can find excuses to deny access. And where in a crowded, mountainous country to put all the needed solar panels and wind turbines? Paul Scalise of Tokyo University says that a square metre (10.8 square feet) of land devoted to wind power generates just two watts of power. For solar power, the equivalent area generates 20W. Nuclear power generates about 1,000W a square metre.

For a long time to come, therefore, Japan will turn to oil, gas and coal to make up most of the nuclear shortfall. In May the government won American approval for imports of cheap shale gas from the United States. That could handily slash the cost of energy imports and alleviate concerns about energy security.

The cranking-up of fossil-fuel power stations, many working at well under capacity before March 2011, is one reason why the predictions of widespread black-outs never came about after the Fukushima scare.

But another reason was the room for conserving energy. Tokyo alone has slashed electricity consumption by a tenth since 2011, according to the Japan Renewable Energy Foundation. The demand for power-saving devices has leapt. Sales of light-emitting diodes (LEDs) have shot up from 3% of all Japanese bulbs sold in 2009 to over 30% today. By 2015, says the head of Philips Electronics Japan, Danny Risberg, incandescent and fluorescent lights will be nearly a thing of the past.

Long-overdue proposals to liberalise the electricity market may do much to diversify energy sources and lower electricity bills. The government's plan, easier to push through now that TEPCO, the biggest utility, has been brought low by its handling of the Fukushima fiasco, is to split generation and transmission, with the residential electricity market open to new competition. If the reform succeeds, says Hiroshi Takahashi of the Fujitsu Research Institute in Tokyo, the share of nuclear power in the energy mix would fall as new, non-nuclear providers won customers. It would, at long last, give the public some say over Japan's energy choices.

From the print edition: Asia

Growth in nuclear industry expected to continue (NucNet)

25.09.2013_No234 / News in Brief

Nuclear Growth To Continue Despite Fukushima, Says IAEA

Plans & Construction
http://www.nucnet.org/all-the-news/2013/09/25/nuclear-growth-to-continue-despite-fukushima-says-iaea

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For full details: www.iaea.org/OurWork/ST/NE/Pess/assets/rds1-33_web.pdf
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To contact the editor responsible for this story David Dalton at david.dalton@nucnet.org

Koizumu urges ending nuclear generation

September 29, 2013

Former Prime Minister Koizumi urges Abe to end nuclear power immediately

http://ajw.asahi.com/article/behind_news/politics/AJ201309290107

By HISANORI IMAMURA/ Staff Writer

Former Prime Minister Junichiro Koizumi said that Japan should immediately pull the plug on nuclear power before it is too late, and left the responsibility at the doorstep of current Prime Minister Shinzo Abe.

Koizumi told Your Party head Yoshimi Watanabe and other leaders at a dinner that Abe and other officials should demonstrate leadership in ending nuclear power generation.

"I will be dead decades from now and may not be able to see a Japan without nuclear power plants," the former prime minister was quoted as saying by one of the participants at the event in Tokyo on Sept. 27. "But making it happen is what a true statesman should do."

Koizumi, 71, who was in office from 2001 and 2006, expressed disappointment that Abe is not steering the nation toward a nuclear-free future. Abe succeeded Koizumi as prime minister in 2006 in his first stint in office, which lasted less than a year, before returning to power in December after his Liberal Democratic Party swept the Lower House election.

"Abe is gathering momentum as a leader," Koizumi is reported as saying. "Japan will be able to make progress in moving away from nuclear power only once he decides on it. That is unfortunate."

Koizumi spoke of details of his visit to Finland in August, where he toured the Onkalo repository, the final disposal site for highly radioactive spent nuclear fuel. The facility is expected to store the nuclear waste for 100,000 years until it is neutralized.

Koizumi stressed the importance of ending nuclear power generation in Japan quickly in light of the problem of the final disposal of the spent fuel, referring to the volume generated by Japan's 50 reactors, compared with Finland's four.

Koizumi and Watanabe talked for four hours at the dinner. The Your Party leader said he was greatly encouraged by the former prime minister's views.

Koizumi: "It is irresponsible to pursue nuclear power"

October 2, 2013

Ex-PM Koizumi raps gov't push for nuclear power as 'irresponsible'

http://mainichi.jp/english/english/newsselect/news/20131002p2g00m0dm037000c.html

NAGOYA (Kyodo) -- Former Japanese Prime Minister Junichiro Koizumi criticized the government's push to restart nuclear power generation and urged it to reconsider.

"It is irresponsible to pursue nuclear power when there is no permanent disposal site for radioactive waste," Koizumi said at a lecture in Nagoya, Aichi Prefecture.

The government under Prime Minister Shinzo Abe has retracted its predecessor's goal of phasing out nuclear power and opened the way for the restart of idled reactors.

The former prime minister, who appointed Abe as his chief Cabinet secretary, said that during his time as a lower house lawmaker, he believed expert opinion that nuclear energy is environmentally friendly and the cheapest source of power.

Following the March 2011 earthquake and tsunami, and subsequent nuclear crisis, he said, "I started having doubts about whether (nuclear power) is really safe and cheap."

"Japan can still stand even without nuclear power plants," Koizumi said, calling on the government and ruling Liberal Democratic Party to take the initiative in pursuing a policy that does not depend on nuclear plants.

Koizumi said that after visiting Germany and seeing the way the country is pursuing renewable energy, he changed his mind and wants Japan to make use of natural energy sources.

Currently, all of Japan's 50 commercial reactors are offline and have to be checked by the Nuclear Regulation Authority to determine whether they satisfy a set of new safety requirements before they can be restarted.

October 02, 2013(Mainichi Japan)

Ex-PM Koizumi raps government push for nuclear power as 'irresponsible'

Kyodo

http://www.japantimes.co.jp/news/2013/10/02/national/ex-pm-koizumi-raps-government-push-for-nuclear-power-as-irresponsible/#.UkvZ11M0_9k

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Koizumi's argument reasonable

October 3, 2013

VOX POPULI: Koizumi's anti-nuclear stance strikes a chord

http://ajw.asahi.com/article/views/vox/AJ201310030030

Vox Populi, Vox Dei is a daily column that runs on Page 1 of the vernacular Asahi Shimbun.

Comments by famous politicians who have retired from the front lines tend to be viewed as having been made with an ax to grind. If the politician is a former prime minister, it's pretty much certain that he will come under scrutiny for making any controversial remarks. But in this instance, I wish to listen carefully to what former Prime Minister Junichiro Koizumi said.

I am referring to his Sept. 27 comment calling for a nuclear-free Japan. He also made his anti-nuclear stance clear in a lecture he gave in Nagoya on Oct. 1. With regard to the argument that Japan may do away with nuclear power generation in the future but not now, Koizumi said, "The sooner the government comes up with a policy for the abolition of nuclear power plants, the sooner companies and citizens can prepare for it and make an effort and study."

Koizumi said when he was prime minister, he believed that nuclear power was a clean and inexpensive energy source but came to have doubts about it after the March 2011 Great East Japan Earthquake. It is true that in May of that year, he said he was "wrong" to have believed in the safety of nuclear power plants.

Apparently, a trip to Finland this August served as a catalyst to strengthen his conviction.

There, Koizumi visited the Onkalo facility, a final disposal site where high-level radioactive waste from nuclear power plants is buried in the ground. It is the world's first attempt to build a "toilet" for a "toilet-less housing complex," so to speak. However, even when nuclear waste is buried deep underground there, it takes as long as 100,000 years for radiation levels to drop close to zero.

Can the facility be maintained over such a long period? In the first place, how will humans be after tens of thousands of years from now? There is no guarantee that they would be using the same languages and writing systems as we do now. How can we inform them that the waste buried there is hazardous? It is almost like science fiction. Koizumi must have thought seriously about the issue.

In the lecture, he refuted pro-nuclear arguments supported by the business world. "Some people say it is irresponsible to call for abolition of nuclear power plants. But it is far more irresponsible to promote nuclear power generation when there are no prospects for building a disposal site." His argument is reasonable. It is time we came to our senses.

--The Asahi Shimbun, Oct. 3
* * *
Vox Populi, Vox Dei is a popular daily column that takes up a wide range of topics, including culture, arts and social trends and developments. Written by veteran Asahi Shimbun writers, the column provides useful perspectives on and insights into contemporary Japan and its culture.

Koizumi's argument (2)

October 5, 2013

Editorial: Koizumi's call to end nuclear power in Japan reaches core of issue

http://mainichi.jp/english/english/perspectives/news/20131005p2a00m0na002000c.html

Former Prime Minister Junichiro Koizumi's call urging the government to pursue a society without nuclear power -- which has drawn attention from the public in recent months -- cuts to the heart of the energy issue.
Koizumi's argument, which raises questions about what Japan is going to do with its spent nuclear fuel and underscores the importance of the government setting a specific goal of eliminating the nation's nuclear plants, is reasonable. All politicians should lend an ear to his line of reasoning -- all the more so because the Cabinet of Prime Minister Shinzo Abe is leaning toward resuming operations at that nation's idled nuclear reactors.
In a speech in Nagoya on Oct. 1, Koizumi, who has already retired from politics, pointed out that it is irresponsible to promote nuclear power without any clear idea about how the resulting radioactive waste will be disposed of. Touching on the seriousness of the ongoing Fukushima nuclear crisis, the former prime minister said, "Nothing is more costly than nuclear power." He furthermore urged the Liberal Democratic Party (LDP)-led government to pursue complete elimination of nuclear power stations.
Koizumi's call for elimination of nuclear power has drawn particular attention from the public since the Mainichi Shimbun introduced his remarks on the issue in its "Fuchiso" (Japan Political Pulse) column in late August. Koizumi, who raised doubts about the government's nuclear power policy following the outbreak of the crisis in March 2011, visited the Onkalo spent nuclear fuel repository under construction in Finland in mid-August. He said he was convinced it is impossible to control radioactive waste after seeing the facility where spent nuclear fuel will be stored underground for 100,000 years until the substance is believed to become harmless.
It remains to be seen whether Koizumi will take political action to seek to rid Japan of all nuclear reactors, but his argument should be taken seriously.
The government has so far failed to give any responsible answer to a question as to how radioactive waste should be dealt with. The government has stuck to the so-called nuclear fuel cycle project, in which plutonium is extracted from spent nuclear fuel and reused in nuclear reactors, but there are no prospects that a fast-breeder nuclear reactor, the core of the project, can be put into practical use anytime in the

foreseeable future. Under the circumstances, even if the government speeds up the construction of a nuclear fuel reprocessing plant in Rokkasho, Aomori Prefecture, it will only cause surplus plutonium to pile up. With this point fully in mind, we have pointed out that the policy of promoting nuclear power is irresponsible.

Koizumi's call for the elimination of nuclear plants has reminded the public of the importance of setting a clear goal for any key issue in national policy. The former prime minister has warned that unless the government sets a goal of completely eliminating nuclear power stations now, it will be difficult to do so in the future. It is no easy task to reverse Japan's nuclear power policy, because this form of power has been deeply incorporated in the country's economy and society. Unless a clear political direction for atomic power policy is presented, it will be difficult to draw up specific plans to develop energy sources to replace nuclear energy.

What is incomprehensible is that political forces that have constantly criticized the proposal to end Japan's reliance on nuclear plants have not stepped forward to refute the statements from Koizumi, who still has a huge influence on society. In particular, Prime Minister Abe, who respects Koizumi as his political mentor, should express his view on the issue.

If you can't build in Japan...

October 6, 2013

Toshiba set to buy British nuclear power firm for 10 billion yen

http://ajw.asahi.com/article/economy/business/AJ201310060021

By OSAMU UCHIYAMA/ Staff Writer

With the future of the domestic nuclear industry uncertain, Toshiba Corp. is looking to bolster its overseas business with the acquisition of a company planning a nuclear plant in Britain for upward of 10 billion yen ($100 million), sources said.

Toshiba is in the final stage of negotiations for purchasing more than 50 percent of NuGeneration Ltd. through subsidiary Westinghouse Electric Co., a U.S. nuclear reactor builder.

Toshiba, which holds a leading 30 percent share of the global market of nuclear reactor construction with Westinghouse, hopes to close the deal by year-end, the sources said.

NuGeneration, based in Britain, is owned equally by two major electric utilities, France’s GDF Suez SA and Spain’s Iberdrola SA.

The joint venture hopes to open a 3.6-gigawatt nuclear power facility, about the capacity of two to three large reactors, in central Britain by 2023.

It will be the first time that Toshiba has acquired a nuclear plant operator overseas. Operation of the British plant will be commissioned to other companies.

Toshiba plans to reinforce its nuclear power business in Europe, Asia and elsewhere because construction of new reactors will be difficult in Japan given the crisis at the Fukushima No. 1 nuclear power plant and mounting public opposition.

The company is bidding for two reactor construction projects in Finland and also aims to win contracts in the Middle East and India. Europe is a powerful domain of France's Areva SA, the world's second-largest reactor builder after Toshiba.

Toshiba plans to increase sales from its nuclear power business, including construction and maintenance of reactors, to 800 billion yen in fiscal 2017 from 500 billion yen, or slightly less than 10 percent of its group revenue, in fiscal 2012.

Domestic rival Hitachi Ltd. acquired a British nuclear plant operator for 85 billion yen last year.

Indecent?

October 7, 2013

Cultural critic Azuma wants to turn Fukushima nuclear plant into tourist spot

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201310070075

By YOHEI FUKUI/ ASAHI SHIMBUN WEEKLY AERA

Philosopher and writer Hiroki Azuma isn't joking when he pitches the possibility of turning the wrecked Fukushima No. 1 nuclear power plant into a sightseeing spot.

Azuma, a professor of philosophy at Waseda University and known as a cultural critic, wants to combine nuclear disaster and tourism in what, at first glance, seems to be an indecent pairing of words. But he is straightforward about his intention.

"To make sure the memories of the disaster don't fade away," Azuma said.

The key proponent of his plan centers around J-Village, a soccer facility in Fukushima Prefecture, which was a training center for the Japanese national soccer team. Currently, it is a base for relaying those working to control the accident at the Fukushima No. 1 plant.

According to Azuma, opening an immense visitor center for both amusement and education, the Fukushima Gate Village, on the site would allow people to tour the plant as the cleanup work continues. Azuma proposes that this be what the Fukushima No. 1 nuclear plant site becomes in 2036.

LEARNING FROM CHERNOBYL

Two and a half years after the Fukushima nuclear disaster following the March 11, 2011, Great East Japan Earthquake and tsunami, there are still 150,000 evacuees. Azuma proposed the plan to make the site into a "tourist destination" last fall.

A team of architects, artists and journalists--including the likes of Hiroshi Kainuma, the sociologist who wrote " 'Fukushima' theory--the birth of a nuclear village"--came together and are engaged in activities such as workshops in Minami-Soma, a city affected by the nuclear disaster, and seminars.

This past April, Azuma, Kainuma and other members "toured" the area around the Chernobyl nuclear power plant in Ukraine, where a meltdown occurred in 1986. The fruits of their investigation were compiled in the mook (a book designed like a magazine) "Chernobyl Dark Tourism Guide."

Azuma said he remembers what survivors in the Tohoku region of northeastern Japan said in interviews--that their greatest fear is that memories of the accident will fade--and the therapeutic effect and self-affirmation talking about their experience in the disaster gave them.

"We don't want to turn (the Fukushima nuclear power plant) into a tourist destination to build a big theme park on a disaster site," he said. "We want a complete disclosure of information."

Twenty-seven years after the accident, the Chernobyl plant and surrounding area are now beginning to actively embrace tourists. In fact, Chernobyl still retains some of its function as a power plant and transmits power. Visitors can get an up-close look at this work as well as the decommissioning of the No. 4 reactor where the accident occurred. Azuma argued that making it easy for anyone to see the entire situation will pass on memories and knowledge of the accident to the next generation.

This is why he believes the Japanese must avoid making a mere park or a boring public building simply filled with data and graphs at the site; instead, create a center that attracts people by making it into a tourist destination. That is the idea behind Azuma's proposal.

"The main hall of the National Chernobyl Museum in (the Ukrainian capital of) Kiev has artistic displays that make use of Russian Orthodox Church symbols," he said. "I believe this sort of scheme, which many people would look on dubiously in Japan, is exactly what we need."

VACANT LAND UNACCEPTABLE

Opponents to the idea question whether Azuma has the right to "butt in" on how to use the site of the crippled plant, because he is not a "concerned party." He offers a strong retort.

"I certainly don't butt in when it comes to other natural disasters, but the Fukushima No. 1 nuclear power plant belongs to Tokyo Electric Power Co., so I, and all the other residents of Tokyo, are without a doubt 'concerned parties,' " he said. "This accident doesn't just affect Fukushima; it affects all of humanity. Even if, hypothetically speaking, the people of Fukushima were to say they don't want to see it anymore and demand the site be turned into vacant land, it would still be unacceptable."

All the Ukrainians Azuma interviewed said they viewed Chernobyl as an accident affecting the entire world, and that it will remain a notable event in the history of mankind. If the Fukushima accident is not viewed from the same broad perspective, then memories of it will disappear, and the same thing will occur again.

Azuma said the significance of spreading information from Tokyo, far removed from Fukushima, is to share this point of view.

"Even if it goes against the spirit of the time, I still want to take an intellectual, cultural approach," he said.

Koizumi's son on energy

October 8, 2013

Koizumi's son says it's time to thoroughly discuss energy policy

http://ajw.asahi.com/article/behind_news/politics/AJ201310080054

By RYO AIBARA/ Staff Writer

NAGOYA--The lawmaker son of retired Prime Minister Junichiro Koizumi is clearly sympathetic to his father's much-publicized call for a radical change in energy policy, putting him in step with growing popular sentiment.

Shinjiro Koizumi said during a speech here Oct. 7 that the ruling Liberal Democratic Party needed to have wide-ranging discussions on future energy policy, such as how to promote the use of renewable energy sources.

His remarks carry weight for a number of reasons. At age 32, Koizumi--partly due to his name value--is widely regarded as a candidate for a future prime minister. He is not only his father's designated successor, but is also popular with the younger generation of LDP lawmakers, as well as the public at large.

Koizumi was recently appointed as parliamentary secretary in charge of reconstruction from the 2011 earthquake and tsunami disaster that led to reactor meltdowns at a nuclear power plant in Fukushima Prefecture.

"(Following the Great East Japan Earthquake and tsunami), looking toward the future, everyone thought it was time for Japan to change," Koizumi said. "It is a good opportunity for the LDP to alter itself. The party has to change."

Many people regard Koizumi as a future savior for the LDP. He was elected to the Lower House for the first time in 2009, and re-elected in December 2012. He served two years as director of the party's youth division, a position that is regarded as one path to success in the LDP.

"I want to make him the prime minister someday," LDP Secretary-General Shigeru Ishiba has said on occasion. Koizumi was named to his first government post on Sept. 30.

Asked about his father's recent call for Japan to immediately pull the plug on nuclear power, Koizumi replied: "I think there is a feeling of suspicion among Japanese citizens."

"There is continuing concern that it may be inappropriate (to maintain or further increase dependency on nuclear power) without debate," Koizumi added. "Because the economy is now apparently in the process of recovery, people are keeping silent."

He reminded the audience that promoting nuclear power is not his party's only option.

"The LDP does not only promote nuclear power generation," Koizumi said. "Its campaign platform for the Upper House election (in July) pledged it will make every effort to enhance the introduction of renewable energy sources. ... The LDP has a chance to discuss (its energy policy)."

By RYO AIBARA/ Staff Writer

Spain and Japon sign agreement on nuke safety...

08.10.2013_No247 / News in Brief

Spain And Japan Regulators Sign Nuclear Information Agreement http://www.nucnet.org/all-the-news/2013/10/08/spain-and-japan-regulators-sign-nuclear-information-agreement

Security & Safety
8 Oct (NucNet): The nuclear regulators of Spain and Japan have signed an agreement to exchange information about nuclear safety and radiation protection focusing on operational experience and lessons learned from nuclear accidents.
Spain's nuclear regulatory authority Consejo de Seguridad Nuclear (CSN) said in a statement that the agreement, signed in Tokyo with Japan's Nuclear Regulation Authority, would also see the two organisations sharing information about improving crisis communications, emergency response and the management of radioactive waste.

CSN said the two regulators would increase their collaboration, establishing channels for information exchange and cooperating in areas such as Nuclear Energy Agency and International Energy Agency working groups.

Cooperation would also be increased within the context of the International Nuclear Regulators

Association (INRA), which Spain and Japan helped establish in 1997.

The INRA is an association that comprises the most senior officials of the nuclear regulatory authorities from Canada, France, Germany, Japan, Spain, Sweden, the UK and the US. The US Nuclear Regulatory Commission says the main purpose of the association is to influence and enhance nuclear safety, from the regulatory prospective.
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To contact the editor responsible for this story David Dalton at david.dalton@nucnet.org

Bilateral agreement on nukes with India

October 11, 2013

Japan, India OK to speed up talks on nuclear cooperation pact

http://mainichi.jp/english/english/newsselect/news/20131011p2g00m0dm029000c.html

BANDAR SERI BEGAWAN (Kyodo) -- Japanese Prime Minister Shinzo Abe and his Indian counterpart Manmohan Singh agreed Thursday to speed up negotiations aimed at concluding a bilateral nuclear cooperation pact, a Japanese official said.
The agreement during their meeting on the sidelines of summits related to the Association of Southeast Asian Nations in Brunei was made bearing in mind Japan's export of nuclear technology to India.
Prior to any export of such technology from Japan to India, a civil nuclear cooperation pact must be forged between the two nations. The pact sets a legal framework for the peaceful use of atomic-power technology.
India is a de facto nuclear weapons state that has not signed the Nuclear Non-Proliferation Treaty.
When Abe and Singh met in May, they agreed to resume the bilateral negotiations on the nuclear cooperation deal that were halted in the wake of the March 2011 nuclear crisis at the Fukushima Daiichi power plant.
The two leaders also reaffirmed the promotion of discussions on exporting to India US-2 amphibious aircraft used by Japan's Maritime Self-Defense Force and implement joint maritime drills between the MSDF and Indian Navy, the official said.
They agreed as well to expand their economic ties, with Japan vowing to support India's development of a high-speed railway and other infrastructure needs.
Abe was also quoted by the official as asking Singh for India to help make the visit by Emperor Akihito and Empress Michiko to the country from late November to early December a memorable one, to which Singh said India will do the best it can.

Hopeful news for abolition of nuclear weapons

October 11, 2013

Japan to sign joint U.N. statement to abolish nuclear weapons

http://ajw.asahi.com/article/behind_news/politics/AJ201310110074

THE ASAHI SHIMBUN

In a reversal of its longstanding policy toward nuclear weapons, Japan, the only nation that has experienced the devastation of atomic bombings, will sign a joint statement by the United Nations calling for their abolition.

Japan had steadfastly abstained from voting since the United Nations began adopting resolutions in 1995 urging the start of negotiations toward concluding a treaty to ban nuclear weapons. It had maintained a position over the years that supporting such a call will conflict with the nation's defense policy, which relies on the U.S. nuclear umbrella.

The Japanese government announced on Oct. 11 its intention to sign the joint statement expected from the U.N. General Assembly First Committee next week.

The statement, supported by Switzerland, New Zealand and 14 other countries, calls for the elimination of nuclear weapons, saying they could create a catastrophe in terms of a humanitarian viewpoint, the sources said.

The policy reversal comes after Japanese government officials came under heavy fire for not signing a joint statement adopted in Geneva in April at the second session of the Preparatory Committee for the 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons.

More than 70 countries, including Switzerland, endorsed the document.

Japan initially sought to find a way to back the statement, but gave up its effort.

The sticking point was the wording, which stated: “it is in the interest of the very survival of humanity that nuclear weapons are never used again, under any circumstances.”

The Japanese government concluded that ruling out the use of nuclear weapons would run counter to its longtime national security policy.

But it has since reviewed its position after the mayors of Hiroshima and Nagasaki, which were devastated by atomic bombs near the end of World War II, as well as civic groups, blasted Japan’s refusal to sign.

Prime Minister Shinzo Abe ordered the Foreign Ministry to work with relevant nations over the forthcoming joint statement.

“I want to explore the possibility of signing (a joint statement) concerning a similar theme,” Chief Cabinet Secretary Yoshihide Suga quoted Abe as saying.

Although the document effectively stated that nuclear weapons should not be used under any circumstances, sources said the Japanese government decided to sign it as it concluded the overall wording reflected consideration for Tokyo’s position.

A joint statement underscoring the inhumane nature of nuclear weapons was suggested for the first time at the first session of the Preparatory Committee for the 2015 Review Conference of the Parties to the NPT last year.

Japan to sign U.N. statement against use of nuclear weapons

http://mainichi.jp/english/english/newsselect/news/20131011p2g00m0dm030000c.html

TOKYO (Kyodo) -- The Japanese government has decided to sign for the first time a joint statement to be issued at the United Nations calling on countries not to use nuclear weapons under any circumstances, Japanese government sources said Thursday.

Similar U.N. statements have been drafted three times before but Japan refused to endorse them on the grounds that they would contradict its policy of relying on the U.S. nuclear umbrella, they said.

Tokyo will join more than 80 other countries in upholding the statement to be released, possibly on Oct. 17, at the First Committee of the U.N. General Assembly, as it has confirmed with New Zealand, one of the drafters of the initiative, that the document will not be legally binding, the sources said.

Japanese Foreign Minister Fumio Kishida, a native of Hiroshima, is eager to promote nuclear disarmament and thought it would not be desirable for Japan to continue opposing U.N. initiatives calling on nations not to use nuclear weapons, they said.

People in Hiroshima and Nagasaki, which suffered U.S. atomic bombings in 1945, have criticized Japan's past refusal to sign U.N. documents on nuclear arsenals.

Hiroshima is scheduled to host a foreign ministers' meeting of the 10-member Non-Proliferation and Disarmament Initiative group in 2014.

Not to be used "under any circumstances"

October 12, 2013

Draft U.N. statement says nukes not to be used 'under any circumstances'

http://mainichi.jp/english/english/newsselect/news/20131012p2g00m0dm054000c.html

NEW YORK (Kyodo) -- A draft of a joint statement on nuclear disarmament that Japan has decided to join in crafting along with other countries for release at the United Nations says nuclear arsenals should never be used again "under any circumstances" in the interest of humanity's survival.

The draft, obtained by Kyodo News, also says the inhuman nature of atomic weapons "became evident from the moment of their first use," apparently alluding to Hiroshima, the first city devastated by a nuclear explosion in history.

Similar U.N. statements were issued three times in the past. But Japan did not endorse them on the grounds that a reference that nukes should not be used "under any circumstances" would contradict Japan's policy of relying on the U.S. "nuclear umbrella."

In a shift of position, Japanese Foreign Minister Fumio Kishida on Friday announced that Tokyo would endorse the joint statement.

A group of countries are currently fine-tuning the wording of the document expected to be unveiled Thursday or later, diplomats said.

The draft statement says nuclear weapons use would cause devastating consequences with "deep implications for human survival; for our environment; for socio-economic development; for our economies; and for the health of future generations."

Noting the uncontainable catastrophic effects of a nuclear weapon detonation, by design or accident, the statement says, "It is in the interest of the very survival of humanity that nuclear weapons are never used again, under any circumstances."

It has also been speculated that Japan did not endorse past statements because they did not conform to the country's policy of seeking the elimination of nuclear weapons in a phased manner.

The upcoming statement, however, mentions "all approaches and efforts towards nuclear disarmament," allowing a broader range of countries to support it.

The past documents also had cited "outlawing" nuclear weapons, an expression rejected by Japan but the word "outlaw" was eliminated in the last statement issued in Geneva in April.

The Geneva statement noted the application of international humanitarian law to the use of nuclear weapons. This was not included in the draft statement, weakening the advocacy of a ban on nuclear weapons through international law.

What is behind Japan's move on (abolition of) nuclear weapons?

October 12, 2013

EDITORIAL: Time for Japan to end reliance on U.S. nuclear deterrence

http://ajw.asahi.com/article/views/editorial/AJ201310120028

Japan for the first time has decided to sign a United Nations statement calling for the abolition of nuclear weapons.

Saying nuclear arms are inhumane and should never be used, the government announced on Oct. 11 its intention to sign the joint statement that will soon be proposed at the U.N. General Assembly First Committee. Foreign Minister Fumio Kishida said the government decided it “can support" the document.

The international movement to highlight the inhumane nature of nuclear weapons and ban them altogether has been gathering momentum since a meeting three years ago of the Review Conference of the Parties to the Treaty on the Nonproliferation of Nuclear Weapons.

Since last year, a joint international statement for promoting the cause has been issued three times. In April, 80 countries endorsed a statement adopted in Geneva at a session of the Review Conference.

But Tokyo has so far refused to sign these statements, saying their content is inconsistent with Japan's defense policy, which relies on the U.S. nuclear umbrella for security.

Japan became the first country to suffer nuclear devastation 68 years ago, when Hiroshima and Nagasaki were attacked with atomic bombs. What reason could there be for Japan not to support such a statement?

This summer, Nagasaki Mayor Tomihisa Taue, in the Nagasaki Peace Declaration 2013, bitterly criticized the government's stance, saying it “contradicts the resolution that Japan would never allow anyone else to become victims of a nuclear bombing."

Although it is a grossly belated move, we welcome the policy change by the administration of Prime Minister Shinzo Abe as a step forward. **But there are reasons to be skeptical.**

Explaining the policy reversal, Kishida said the text of the statement has been “revised appropriately."

The text is now being worked out by New Zealand, Switzerland and other countries. But details have not been revealed.
However, the Abe administration appears to believe the text will not put any pressure on Japan to change its defense strategy dependent on extended nuclear deterrence provided by the United States.

Japan's move to sign the statement will be less meaningful if it does so only because the document poses no threat to its traditional defense policy.

The policy shift should be a first step in Japan's long-term quest to carve out a secure future that is not dependent on the U.S. nuclear umbrella.

The nuclear deterrence theory, which calls for using the threat of nuclear weapons to maintain peace, is based on Cold War-era thinking.

Despite a quarter century having passed since the end of the Cold War, Japan is putting increasing importance on the U.S. nuclear deterrence.

China is expanding its military presence in the region, while North Korea is developing nuclear weapons and ballistic missiles. Japan's defense policy is based on the assumption that only the U.S. nuclear arsenal can guarantee the nation's security in the face of these threats.

In the United States, however, the perception that the nuclear deterrence theory is outdated is spreading among policymakers and experts. The administration of President Barack Obama is keen to reduce the

role of nuclear arms in the U.S. defense strategy. There is even the view that Japan's policy stance is an impediment to U.S. efforts to slash its stockpile of nuclear weapons.

Behind the growing trend toward stressing the inhumane nature of nuclear arms is the view that human beings, not nations, would be the true victims of nuclear attacks, and that they should be protected.

A nuclear attack kills countless citizens and leaves many survivors suffering from the horrible aftereffects of exposure to radiation. Japan knows the brutality of nuclear attacks more than any other country.

As the only nation that has ever experienced the devastation of atomic bombings, Japan has a duty to commit itself to international efforts to promote the trend toward banning nuclear arms for a nuclear-free world.

Growing Korean discontent over nuclear power

October 13, 2013

Study group: South Korea should lower reliance on nuclear

http://ajw.asahi.com/article/asia/korean_peninsula/AJ201310130060
REUTERS

SEOUL--South Korea should reduce its reliance on nuclear power in view of public discontent with corruption in the industry and Japan's difficulty tackling the aftermath of the Fukushima disaster, a group weighing up the problem said on Oct. 13.

The Energy Ministry published the findings of a study group of 60 representatives from industry, academic institutions and civic bodies that recommended reducing to between 22 percent and 29 percent the portion of electricity that can be generated by nuclear power.

That compares to 41 percent proposed in a government plan for 2030.

Asia's fourth-largest economy currently generates one-third of its electricity from nuclear power as part of long-term efforts to replace imported oil and gas.

Agreement on a range of 22-29 percent was reached "based upon consensus to minimize social conflict over the proportion of nuclear power generation," the study group said in a statement released by the energy ministry.

The government will hold public hearings over the report's conclusions and plans to draw up final revisions to energy policy in December, it said.

The group also recommended keeping the proportion of renewable energy at 11 percent as planned. It suggested imposing taxes on coal-fired power stations and lowering taxes on liquefied natural gas and kerosene.

Public discontent over nuclear power has been fanned by a scandal over the use of fake certificates which, since 2012, has prompted a series of reactor shutdowns in South Korea.

The nuclear industry has been criticized for breeding a culture of secrecy that led to corrupt practices among officials involved in safety certification.

Six of 23 reactors remain off line, including three halted in May to replace cables supplied using bogus certificates. Authorities on Oct. 10 said 100 people, including a top former state utility official, had been indicted on corruption charges.

The head of the group, Kim Chang-seob, said the figures provided were intended strictly as guidelines to take account of trends and growing discontent over the nuclear sector.

"Our suggestion is to set the direction in the policy for social consent, as there are huge social conflicts," Kim said.

Anxiety has also risen over repeated setbacks by the Tokyo Electric Power Co. in its efforts to halt radiation leaks and make safe the Fukushima No. 1 plant, which was crippled by an earthquake and tsunami in 2011.

TEPCO said on Oct. 10 that radiation levels in seawater just outside the plant had climbed to their highest level in two years.

Prime Minister Shinzo Abe has been criticized since he declared the problems at Fukushima "under control." Japan's Nuclear Regulation Agency earlier this month ordered TEPCO to draft in additional workers and report on its measures to tackle the clean-up.

Japan to remain committed to nuclear power

October 15, 2013

Nuclear power still vital part of Japan energy mix: officials

AFP-JIJI

http://www.japantimes.co.jp/news/2013/10/15/national/nuclear-power-still-vital-part-of-japan-energy-mix-officials/#.UlwjtFM0_9k

SEOUL – Nuclear power is set to remain a key part of Japan's energy profile despite the safety concerns raised by the Fukushima disaster, senior Japanese energy officials predicted Monday.

"The Japanese government still considers nuclear as an option for the energy mix. It must not be excluded from the overall energy mix," said Zengo Aizawa, vice president of Tokyo Electric Power Co. which operates the stricken Fukushima plant.

"The government has rethought the idea of abandoning nuclear energy," Aizawa told a session of the World Energy Congress being held in Daegu, South Korea.

Japan shut down all 50 commercial reactors in the wake of the 2011 earthquake and tsunami that triggered a nuclear crisis at the Fukushima plant.

Two reactors were restarted in July last year, but were taken offline again last month for inspections, leaving the country without any nuclear power.

Prime Minister Shinzo Abe has openly backed a return to the widespread use of atomic energy, but the Japanese public remains divided, with opponents citing continued safety fears.

Makoto Yagi, Chairman of the Federation of Electric Power Companies of Japan, told the gathering of energy officials in Daegu that Japan should remain committed to nuclear power in the medium and long term.

"It is important to resume nuclear power plants as soon as their safety can be guaranteed," Yagi said.

He stressed the importance of regaining public trust by explaining the post-Fukushima safety measures that were being put in place.

"It is a Japanese responsibility to help improve nuclear safety standards worldwide," based on the lessons learned from Fukushima, he added.

Nuclear power supplied about one-third of Japan's electricity before the 2011 tsunami.

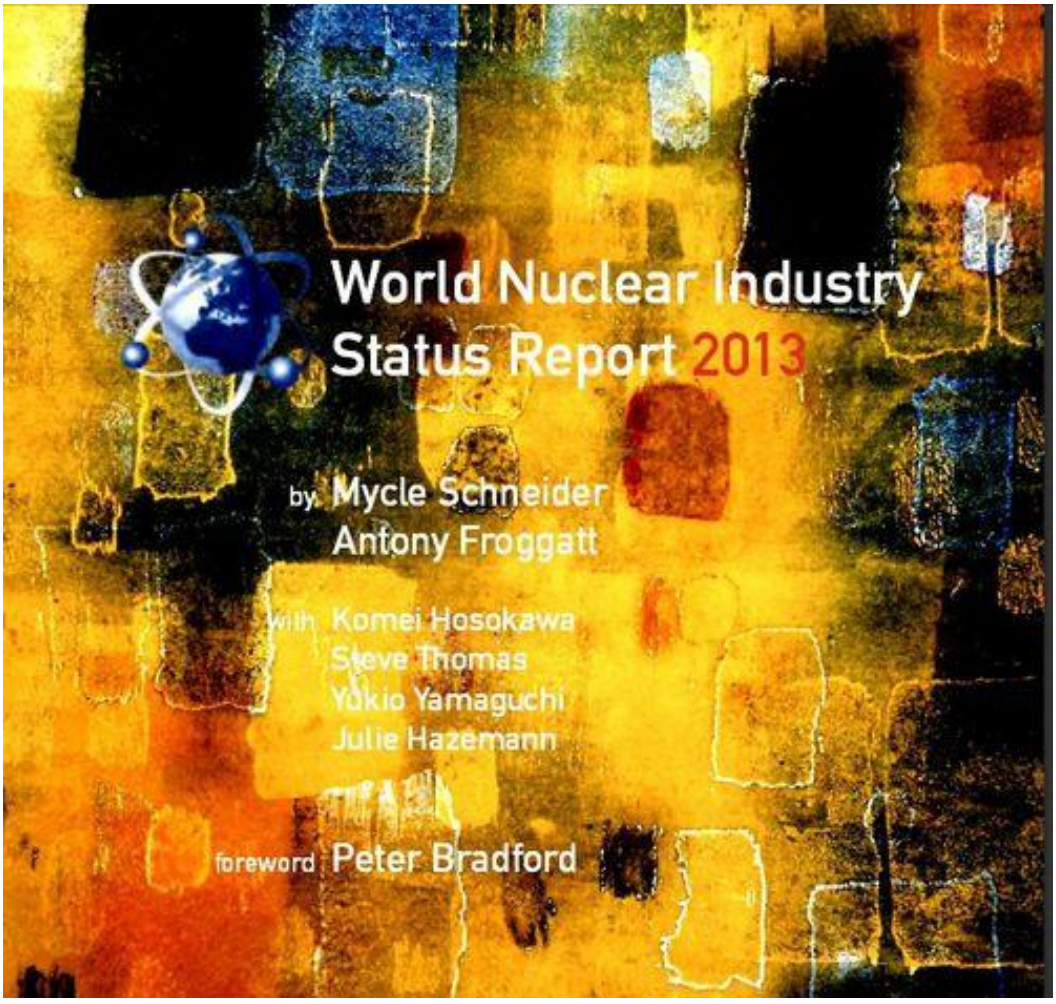
World Nuclear Industry Status Report 2013

October 18, 2013

http://www.beyondnuclear.org/home/2013/10/18/global-nuclear-retreat-continues-while-renewables-soar.html

Nuclear power continues its decline worldwide while investements in, and development of, renewables soar. The findings of the newly released 2013 World Nuclear Industry Status Report, prepared by Mycle Schneider, Antony Froggatt et al., show that only three reactors started up worldwide in 2012 while six were shut down. Meanwhile, China, India, Germany and Japan now generate more power from renewables than nuclear. Read the report.

http://www.worldnuclearreport.org/IMG/pdf/20130716msc-worldnuclearreport2013-lr-v4.pdf



Another pledge

October 18, 2013

Abe pledges to minimize nuclear power dependence

http://www3.nhk.or.jp/nhkworld/english/news/20131018_28.html

Japan's Prime Minister Shinzo Abe has pledged to reduce the country's reliance on nuclear energy as much as possible.

Abe was answering a question by the Japanese Communist Party in the upper house on Friday.

The party's secretariat head Tadayoshi Ichida said all of Japan's nuclear power plants are offline, but people are leading their usual lives and the economy has not collapsed.

Ichida suggested that Abe decide now to end nuclear power generation in Japan.

Abe replied that suspending the plants has increased dependence on oil and other fossil fuels.
He said people's lives and economic activity have been greatly affected because fuel imports have risen by 3 trillion yen, or more than 30 billion dollars, and electricity bills have gone up.

He also said the government will draw up a responsible energy policy that includes nuclear power generation.

Abe pledged to promote renewable energy and power-saving measures for the next 3 years or so.

He added that the government will screen the safety of nuclear power plants using the world's toughest standards, while minimizing reliance on nuclear power.

Japan ready to sign?

Oct. 18, 2013

Japan to sign latest U.N. statement on nuclear weapons abolition

http://mainichi.jp/english/english/newsselect/news/20131018p2a00m0na016000c.html

NEW YORK -- A renewed statement from the First Committee of the United Nations General Assembly calling for an end to the use of nuclear weapons, which Japan is expected to sign, will include phrases from a previous statement that Japan had objected to on the grounds that it could hinder U.S. nuclear deterrence, a final draft obtained by the Mainichi has shown.

The final draft states, "It is in the interest of the very survival of humanity that nuclear weapons are never used again, under any circumstances." It also mentions "all approaches and efforts towards nuclear disarmament" -- a phrase not included in an earlier statement that Japan had refrained from signing.

The wording of the statement accommodates many countries including Japan, which aims to gradually eliminate nuclear weapons while relying on U.S. nuclear deterrence. It is believed that Japan reversed its policy and decided to sign the statement as changes including alterations to the section mentioning efforts toward nuclear disarmament mean the document does not totally deny nuclear deterrence.

U.N. sources say over 80 countries have expressed their intention to sign the statement, which is due to be announced either on Oct. 18 or 21 by a New Zealand representative who drafted it.

The draft states that nuclear weapons "have deep implications for human survival; for our environment; for socio-economic development; for our economies; and for the health of future generations." It adds that the "consequences of nuclear weapons became evident from the moment of their first use" -- an apparent reference to the atomic bombs dropped on Hiroshima and Nagasaki during World War II.

The draft points out that for years, the humanitarian consequences of nuclear weapons "have not been at the core of nuclear disarmament and nuclear non-proliferation deliberations." But it says that now, the humanitarian focus is "well established on the global agenda." It says that since the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, the issue has been brought up at various international conferences with a trend toward nuclear disarmament.

The proposed statement also says that the only way to prevent nuclear weapons from being used again is through their "total elimination." It adds, "We owe it to future generations" to rid the world of the threat posed by nuclear weapons.

Similar statements have been released three times since a meeting of the Preparatory Committee of the Nuclear Non-Proliferation Treaty Review Conference in May last year, but Japan has not signed any of them. However, on Oct. 11, Foreign Minister Fumio Kishida announced that Japan would sign the latest declaration.

October 18, 2013(Mainichi Japan)

Asia not so depressed by Fukushima disaster

October 19, 2013

Nuclear husk: The destroyed No. 4 reactor building at Tokyo Electric Power Co.'s Fukushima No.1 nuclear power plant is seen in May 2012. | BLOOMBERG

Asia drives global nuclear growth despite debate raised by Fukushima

AFP-JIJI

http://www.japantimes.co.jp/news/2013/10/19/business/asia-drives-global-nuclear-growth-despite-debate-raised-by-fukushima/#.UmJrOVM0_9k

SEOUL – Safety concerns in the wake of the Fukushima nuclear disaster in Japan have done little to curb Asia's ambitious plans for expanding the role of atomic power in the regional energy mix.

Led by China and India, Asia will continue to drive growth in the global nuclear industry over the next two decades, according to experts attending the World Energy Congress (WEC) in Daegu, South Korea.

"There will be an increase of nuclear power globally, but Asia will be at the center of that, especially China, India and South Korea," Yukiya Amano, head of the International Atomic Energy Agency said on the sidelines of the triennial gathering that ended last Thursday.

Doubts over the safety of atomic energy following the Fukushima disaster caused the IAEA to marginally cut its long-term outlook for the nuclear industry.

In its last annual report, the U.N. atomic agency projected the industry could nearly double its capacity by 2030, mainly due to growth in Asia.

Amano noted that around 70 new nuclear power reactors are being built at the moment — 50 of them in Asia — in addition to the more than 430 already in operation worldwide.

At the annual gathering of the IAEA's 159 member states in Vienna last month, China made it clear that the ongoing crisis in Fukushima would not derail its own expansion policy.

China has 17 nuclear reactors in operation, another 30 under construction and plans to build an additional 59.
"Energy in China is very much diversified and nuclear power will become one of our main alternatives," said Liu Zhenya, the president and CEO of State Grid Corp. of China.

"That will not change, despite the nuclear crisis in Japan," Liu said on the summit's sidelines.

As China's energy requirements soar along with economic growth and rapid urbanization, experts say Beijing cannot afford to stop developing its nuclear sector, although they expect it to increase its share of renewables such as solar and wind power in the longer term.

"China needs to invest in all forms of energy more than any other country. It has no other choice in the short term," said Karl Rose, the WEC's senior director for policy and scenarios.

Asia's third-largest economy, India, which is still plagued by energy shortfalls, also has ambitious plans for its nuclear sector.

With 20 reactors already in operation, seven under construction and another 18 on the drawing board, India hopes to generate 63,000 megawatts from nuclear power by 2030 — part of a planned near 15-fold rise from current levels.

Nuclear energy has been a priority for India since 2008 when then-U.S. President George W. Bush signed into law a deal with New Delhi that ended a decades-old ban on civilian nuclear trade with the country.

The country's largest nuclear plant, in the southern state of Tamil Nadu, began operations in July, despite large public protests and opposition from anti-nuclear activists.

Critics said the plant was located in an area vulnerable to earthquakes, which could spur a disaster reminiscent of the one at Fukushima.

"There is a lot of public unease after Fukushima about the dangers of nuclear power stations, but countries with no other alternatives have to use nuclear power," Rose said.

South Korea's nuclear industry is struggling to regain public confidence after a torrid year that saw a major scandal over forged safety certificates at a number of plants add to post-Fukushima concerns.

Until now, Seoul has insisted it will push ahead with plans to add another 16 reactors to the 23 existing units by 2030.
Earlier this month, however, a government advisory group recommended scaling back the nuclear expansion plans to "minimize social conflict."

Instead of aiming for a 41 percent share for nuclear power in the national energy profile by 2035, the panel suggested a figure of under 30 percent.

Japanese officials in Daegu argued that nuclear power should also remain a key part of their nation's energy mix.
Japan shut down all 50 commercial reactors in the wake of the crisis at the Fukushima plant.

Two reactors were restarted in July last year, but were taken offline again last month for inspections, leaving the country without any nuclear power.

Prime Minister Shinzo Abe has openly backed a return to the widespread use of atomic energy, but the public remains divided, with opponents citing continued safety fears.

Rose said keeping the reactors permanently switched off would be disastrous for such a highly energy-intensive economy as Japan's.

"Whatever transition you have to make, it has to be in a measured phase," he said.

No immediate end to nukes

October 20, 2013

Abe to retain nuclear power in nation's basic energy policy

JIJI

http://www.japantimes.co.jp/news/2013/10/20/national/abe-to-retain-nuclear-power-in-nations-basic-energy-policy/#.UmQBrFM0_9k

The Liberal Democratic Party-led government will clarify its medium- to long-term policy of maintaining the share of nuclear power at a certain level in the nation's energy mix on condition that its safety is secured, according to sources.

By the end of the year, the government plans to revise the current basic energy policy, which was drawn up in 2010 when the Democratic Party of Japan was in power, to reflect lessons learned from the meltdown calamity at the Fukushima No. 1 nuclear plant, which was wrecked by the March 2011 earthquake and tsunami.

A subcommittee of the industry ministry's advisory committee for natural resources and energy will start full-fledged work on the revision next month, the sources said.

At a meeting Wednesday, members of the subcommittee stated their opinions about nuclear power.

Kyoto University professor Hajimu Yamana said that nuclear power is important from the viewpoint of energy security. Keigo Akimoto of the Research Institute of Innovative Technology for the Earth argued nuclear power is an affordable source of electricity and useful for combating global warming.

Before the LDP returned to power last December and its leader, Shinzo Abe, became prime minister, many members of the committee under the predecessor government, led by the DPJ, had called for the country's dependence on nuclear power to be phased out.

After Abe and the LDP took over, subcommittee members have been reshuffled and there have been no demands from new members for an immediate end to nuclear power.

The existing basic energy policy sees nuclear power as a key source of electricity and has a goal of increasing the proportion of energies that do not emit carbon dioxide, including atomic and hydraulic power, to some 70 percent of the country's energy mix by 2030.

In the forthcoming revision, the government has no plans to include a numerical target for a desirable level of reliance on nuclear power because it is not known how many reactors can be brought back online under new safety standards introduced in July, the sources said.

While the government is seeking to restart reactors once their safety has been confirmed, Abe has said the government will reduce dependence on nuclear power as much as possible.

At the subcommittee meeting, Kikuko Tatsumi of the Nippon Association of Consumer Specialists said the government should make it clear how much and by what means it aims to reduce dependence on nuclear power.

Japan backs UN non-nuclear arms statement

October 22, 2013

Japan finally backs U.N. statement against use of nuclear weapons

http://ajw.asahi.com/article/behind_news/politics/AJ201310220037

THE ASAHI SHIMBUN

For the first time, Japan has thrown its support behind a United Nations statement that calls nuclear warfare inhumane.
The joint statement was presented Oct. 21 to the U.N. General Assembly First Committee during a discussion on disarmament and national security.

On a number of occasions since last year, Japan has stopped short of backing similar statements that have been presented at international conferences.

This was mainly due to inconsistencies that would arise with Japan's national security policy, given that it relies on the nuclear umbrella provided by the United States.

However, prior consultations between Japan and the nations drawing up the latest statement led to revisions that made allowances for Japan's position.

The joint statement was compiled through the initiative of 16 nations, including neutral New Zealand and Switzerland. A total of 125 nations, including Japan, have expressed their support.

When a similar statement was released in April, Japan raised objections to the phrase, "It is in the interest of the very survival of humanity that nuclear weapons are never used again, under any circumstances."

Although that phrase remains in the latest joint statement, additional wording was included that supports "all approaches and efforts toward nuclear disarmament."

According to several sources, the revised wording is believed to have been included to take into consideration the "realistic approach" taken by Japan. This refers to Japan's efforts for gradual disarmament by the nuclear powers, including the United States, while also maintaining a nuclear deterrent. That is in addition to the "humanitarian approach" taken by the nations who initiated the effort with an eye toward eventually making nuclear weapons illegal by focusing on the humanitarian consequences.

A joint statement expressing humanitarian concerns about nuclear weapons was first proposed in May 2012 at the first session of the Preparatory Committee for the 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. A similar statement was presented to the U.N. General Assembly First Committee in October 2012. On both occasions, Japan refused to sign.

When it also failed to sign the joint statement prepared at the second session of the preparatory committee in April, the Japanese government was criticized, especially by survivors of the 1945 atomic bombings of Hiroshima and Nagasaki.
(This article was written by Yoshiaki Kasuga in New York and Hajimu Takeda in Osaka.)

JOINT STATEMENT ON THE HUMANITARIAN CONSEQUENCES OF NUCLEAR WEAPONS
(Delivered by New Zealand Ambassador Dell Higgie)

Mr. Chairman

I am taking the floor on behalf of the following Member States: Afghanistan, Algeria, Angola, Antigua and Barbuda, Argentina, Austria, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Burkina Faso, Cambodia, Cameroon, Cape Verde, Central African Republic, Chile, Colombia, Congo, Costa Rica, Côte d'Ivoire, Cuba, Cyprus, DR Congo, Denmark, Djibouti, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Fiji, Gabon, Georgia, Ghana, Grenada, Guatemala, Guinea, Guinea Bissau, Haiti, Honduras, Iceland, Indonesia, Iraq, Ireland, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kiribati, Lao PDR, Lebanon, Lesotho, Liberia, Libya, Liechtenstein, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Marshall Islands, Macedonia, Mexico, Mongolia, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nauru, Nepal, Nicaragua, Niger, Nigeria, Norway, Palau, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Qatar, Rwanda, Samoa, San Marino, Senegal, Serbia, Seychelles, Sierra Leone, Singapore, Solomon Islands, South Africa, South Sudan, Suriname, Swaziland, Switzerland, Tanzania, Thailand, Timor-Leste, Togo, Tonga, Trinidad and Tobago, Tunisia, Tuvalu, Uganda, Ukraine, United Arab Emirates, Uruguay, Vanuatu, Viet Nam, Yemen, Zambia, my own country New Zealand, and the Observer State the Holy See.

Our countries are deeply concerned about the catastrophic humanitarian consequences of nuclear weapons. Past experience from the use and testing of nuclear weapons has amply demonstrated the unacceptable humanitarian consequences caused by the immense, uncontrollable destructive capability and indiscriminate nature of these weapons. The fact-based discussion that took place at the Conference on the Humanitarian Impact of Nuclear Weapons convened by Norway last March allowed us to deepen our collective understanding of those consequences. A key message from experts and international organizations was that no State or international body could address the immediate humanitarian emergency caused by a nuclear weapon detonation or provide adequate assistance to victims.

The broad participation at the Conference, with attendance by 128 States, the ICRC, a number of U.N. humanitarian organizations and civil society, reflected the recognition that the catastrophic humanitarian consequences of nuclear weapons are a fundamental and global concern. We warmly welcome Mexico's announcement of a follow-up
Conference, scheduled for Feb. 13-14, 2014. We firmly believe that it is in the interests of all States to participate in that Conference, which aims to further broaden and deepen understanding of this matter, particularly with regard to the longer-term consequences of a nuclear-weapon detonation. We welcome civil society's ongoing engagement.

This work is essential, because the catastrophic consequences of nuclear weapons affect not only governments, but each and every citizen of our interconnected world. They have deep implications for human survival; for our environment; for socio-economic development; for our economies; and for the health of future generations. For these reasons, we firmly believe that awareness of the catastrophic consequences of nuclear weapons must underpin all approaches and efforts toward nuclear disarmament.

This is not, of course, a new idea. The appalling humanitarian consequences of nuclear weapons became evident from the moment of their first use, and from that moment have motivated humanity's aspirations for a world free from this threat, which have also inspired this statement.

The humanitarian consequences of nuclear weapons have been reflected in numerous U.N. resolutions, including the first resolution passed by this Assembly in 1946, and in multilateral instruments, including the Nuclear Non-Proliferation Treaty. The world's most eminent nuclear physicists observed as early as 1955 that nuclear weapons threaten the continued existence of mankind and that a war with these weapons could quite possibly put an end to the human race.

The First Special Session of the General Assembly devoted to Disarmament (SSOD-1) stressed in 1978 that "nuclear weapons pose the greatest danger to mankind and to the survival of civilization." These expressions of profound concern remain as compelling as ever. In spite of this, the humanitarian consequences of nuclear weapons have not been at the core of nuclear disarmament and nuclear nonproliferation deliberations for many years.

We are, therefore, encouraged that the humanitarian focus is now well established on the global agenda. The 2010 Review Conference of the NPT expressed "deep concern at the catastrophic humanitarian consequences of any use of nuclear weapons." That deep concern informed the Nov. 26, 2011, resolution of the Council of Delegates of the Red Cross and Red Crescent Movement, and the decision last year of this General Assembly to establish an open-ended working group to develop proposals to take forward multilateral nuclear disarmament negotiations. It underlies the Community of Latin American and Caribbean States' call to the international community, in August 2013, to emphasize the humanitarian consequences of nuclear weapons during any discussion of nuclear issues.

Last month, at the High-Level Meeting on Nuclear Disarmament, numerous leaders from around the world again evoked that deep concern as they called for progress to be made on nuclear disarmament. Today, this statement demonstrates the growing political support for the humanitarian focus.

It is in the interest of the very survival of humanity that nuclear weapons are never used again, under any circumstances. The catastrophic effects of a nuclear weapon detonation, whether by accident, miscalculation or design, cannot be adequately addressed. All efforts must be exerted to eliminate the threat of these weapons of mass destruction.

The only way to guarantee that nuclear weapons will never be used again is through their total elimination. All States share the responsibility to prevent the use of nuclear weapons, to prevent their vertical and horizontal proliferation and to achieve nuclear disarmament, including through fulfilling the objectives of the NPT and achieving its universality.

We welcome the renewed resolve of the international community, together with the ICRC and international humanitarian organizations, to address the catastrophic humanitarian consequences of

nuclear weapons. By raising awareness about this issue, civil society has a crucial role to play side-by-side with governments as we fulfil our responsibilities. We owe it to future generations to work together to do just that, and in doing so, to rid our world of the threat posed by nuclear weapons.

Japan joins UN non-nuclear arms statement
http://www3.nhk.or.jp/nhkworld/english/news/20131022_12.html

Japan has for the first time signed up to a UN statement that says nuclear weapons should not be used under any circumstances.

The statement was adopted on Monday at the UN General Assembly's First Committee on disarmament. The document, proposed by New Zealand, was released by 125 countries.

The statement says nuclear weapons have immense, uncontrollable destructive capabilities and are indiscriminate in nature.

It says past use and testing of these weapons have clearly shown their unacceptable humanitarian consequences.

The statement says that for the sake of humanity's survival nuclear weapons must never be used again, under any circumstances.

Similar statements have been released 3 times in the past, including one in April at a conference on the Nuclear Non-Proliferation Treaty.

Until now Japan has not signed such documents. The government says the phrase rejecting the use of nuclear arms "under any circumstances" is incompatible with the country's reliance on the US nuclear umbrella.

That attitude has come under fire, as Japan is the only country to have experienced atomic bombings.

But the government made an about-face, saying the overall aim of the statement now conforms to Japan's security policy and its disarmament efforts.

In the run-up to the release of the statement, Japanese officials lobbied New Zealand to revise some of its wording to make it more acceptable to Japan.

The document now expresses support for "all approaches and efforts" toward nuclear disarmament.

This strikes a balance between countries that want a treaty banning the use of atomic weapons, and those favoring a more gradual approach.

The latter camp includes nuclear powers such as the United States and countries like Japan and Australia that rely on nuclear deterrence.
Oct. 22, 2013

Japan for first time backs U.N. nuke disarmament statement

KYODO
http://www.japantimes.co.jp/news/2013/10/22/national/japan-for-first-time-backs-u-n-nuke-disarmament-statement/#.UmZrD1M0_9k

NEW YORK – Japan on Monday endorsed a U.N. statement on nuclear disarmament for the first time, joining more than 120 other countries in issuing a statement expressing deep concern about the "catastrophic consequences" of atomic weapons and opposing their use.
After declining to back similar statements three times in the past, the government decided to endorse a New Zealand-led initiative that drew a record 125 supporting countries, roughly two-thirds of the 193 member states of the United Nations.
Previously, Japan deemed similar statements as incompatible with its security policy due to its reliance on the nuclear deterrence provided by the United States.
New Zealand Ambassador Dell Higgie said "some changes" had been made to the text "at Japan's request, which has facilitated their involvement." Unlike last year's, this year's text did not mention the "outlawing" of nuclear arsenals. Higgie downplayed Tokyo's previous opposition to the statements.

Gov't discussing radical overhaul of nuke sector

October 23, 2013

Nuclear industry amalgamation mulled

LDP examining idea to bring all reactors under one company
Bloomberg
http://www.japantimes.co.jp/news/2013/10/23/business/ldp-mulls-amalgamating-all-nuclear-plants-under-one-firm/#.Umi8llM0_9k

The government is discussing a radical overhaul of the nuclear power sector that would combine the nation's 50 operating reactors into a single company to rebuild an industry that's been effectively halted by the Fukushima disaster that started in March 2011.

The company would be owned by the nine regional utilities, along with wholesalers Japan Atomic Power Co. and Electric Power Development Co., **while the government and reactor makers would give**

financial and technical support, Taku Yamamoto, who chairs the Liberal Democratic Party's energy committee, said in an interview.

Part of the profit from sales of the new company's electricity would be funneled toward the cleanup of the Fukushima No. 1 power plant and victim compensation, which combined may cost more than ¥11 trillion. The plan would keep Tokyo Electric Power Co. alive to shoulder Fukushima costs.

"The plan is based on Tepco's profits covering Fukushima costs without taxpayers' money and to increase the government's role in the nuclear industry," Yamamoto said. "Who's going to like a bankruptcy of Tepco? The company has to go on working hard for the Fukushima disaster until it dies."

Setting up a comprehensive nuclear-management company should help Japan expand its exports of reactors and operation skills as domestic electricity demand slows, Yamamoto said.

Tepco spokesman Tsuyoshi Numajiri declined comment on lawmakers' discussions about spinning off nuclear operations at utilities, saying such plans are subject to change.

Discussions of such a dramatic overhaul of Japan's nuclear industry — the third-biggest in the world — signal growing momentum in the government to restructure an electricity supply model that helped rebuild the economy after World War II, only to be exposed by safety lapses that culminated in the Fukushima disaster.

All 50 reactors have been shut down since Kansai Electric Power Co. turned off units 3 and 4 at its Oi plant in Fukui Prefecture in September for regular safety checks.

None of the idled reactors may be restarted by the end of March 31, as preparations by power companies for the Nuclear Regulation Authority's safety review are behind schedule, the Sankei Shimbun reported Monday.

LDP lawmakers have discussed other options to restructure Tepco. Tadamori Oshima, head of the party's 2011 quake reconstruction task force, proposed to Prime Minister Shinzo Abe that Tepco form a separate company to deal with decommissioning Fukushima No. 1 and the government provide financial aid, Kyodo News reported Sept. 21.

The Abe administration is seeking the Diet's endorsementthis month for a bill designed to end the 60-year-old monopolies of the regional utilities, led by Tepco.

The other entities — which like Tepco dominate electricity generation and transmission in their respective regions — are Hokkaido Electric Power Co., Tohoku Electric Power Co., Chubu Electric Power Co., Kansai Electric, Hokuriku Electric Power Co., Chugoku Electric Power Co., Shikoku Electric Power Co. and Kyushu Electric Power Co.

The draft bill would unbundle generation and transmission operations and allow households to choose power suppliers for the first time. In theory, 60 percent of the electricity market has been deregulated, though in practice the dominance of the regional utilities stands in the way.

The regional utilities produced 90 percent of the nation's electricity output in the year that ended March 31, Ministry of Economy, Trade and Industry data show.

"The power industry reform bill would help stop utilities' dominance in Japan and encourage more newcomers from home and abroad to enter the mature power market," Yamamoto said.

"The passage of the legislation is a prerequisite for the unification of nuclear plant management to move forward," said Yamamoto, who has studied Japan's nuclear power industry for three decades and chairs the LDP's committee to discuss strategic natural resources and energy policy.

Tepco should sell all its power-generating assets, including the gigantic Kashiwazaki-Kariwa nuclear plant in Niigata Prefecture, and reshape itself as an electricity transmission and distribution company, according to Takeo Kikkawa, a commerce professor at Hitotsubashi University.

"A breakup of Tepco would create a wave of asset sales in the greater Tokyo power market as Japanese oil refiners and gas companies are expanding power-generation business to diversify their business portfolios," said Kikkawa. "It'd be a time of big mergers and acquisitions in the power industry in years ahead."

Replace aging reactors?

October 24, 2013

Gov't mulls replacing aging nuclear reactors with new ones

http://mainichi.jp/english/english/newsselect/news/20131024p2a00m0na008000c.html

The government has begun mulling replacing aging reactors at nuclear power plants with news ones in a move to continue Japan's dependence on nuclear power.

The government and the ruling Liberal Democratic Party (LDP) started considering the replacement plan on Oct. 23 as part of the country's medium- and long-term nuclear energy policy. The government is eyeing to include the project in its basic energy plan to be compiled by the end of the year.

As the administration led by Prime Minister Shinzo Abe is poised to reactivate idled reactors that have cleared regulatory standards, it aims to clarify its policy to maintain a certain amount of nuclear power generation in the future.

However, as the Fukushima No. 1 Nuclear Power Plant disaster is hardly under control following the recent spate of radiation-contaminated water leaks and other problems, the move to push forward Japan's dependence on nuclear power is expected to draw fire.

There are also proposals to have the basic energy plan refer to the best energy mix to define nuclear power as the country's key power source. The government is also considering including in the basic plan additional construction of reactors on the premises of existing nuclear plants, while some have expressed reservations about the move on the grounds that it has low feasibility.

The government is set to avoid including in the basic plan the new construction of nuclear plants as "there is no prospect of obtaining residents' understanding in the aftermath of the Fukushima nuclear disaster," according to a senior LDP official.

Prime Minister Abe has stated that while the ratio of nuclear power generation will be lowered, the reactivation of idled reactors will "be decided based on the world's toughest safety standards."

That being said, Japan is expected to have no reactors online in 2049 if it does not replace or additionally construct reactors under the 40-year service life rule, with many reactors already being offline for regular inspections or other reasons.

In an attempt to dodge public criticism, some in the government and the LDP insist underlining a plan to replace reactors with new ones that are safer and more capable by utilizing existing nuclear plants rather

than newly building such facilities. In consideration of the public's distrust in nuclear energy, however, the ratio of nuclear power generation in the future will not be specified in the basic plan.

Riding on the wave of the Abe administration's growth strategy, many in the government, the LDP and economic circles advocate that certain nuclear plants are necessary for Japan to keep its economy afloat.

A legislators' group for promoting a stable supply of electricity, comprising pro-nuclear energy members of the LDP, is set to submit its proposals for the government's basic energy plan in early December. "We must consider replacing or additionally building reactors," said a senior official of the group in a move to spur the Agency for Natural Resources and Energy, which is tasked with mapping out the basic plan.

In order to maintain nuclear power stations, however, there remain outstanding issues such as the absence of a final disposal site for radioactive waste. Prime Minister Abe is poised to make a final decision on the country's energy policy by taking into account the prospects for reactor restarts and trends in public opinion.

"First step toward nuclear abolition"

October 25, 2013

VOX POPULI: U.N. statement marks 1st step toward nuclear abolition

http://ajw.asahi.com/article/views/vox/AJ201310250021

Vox Populi, Vox Dei is a daily column that runs on Page 1 of the vernacular Asahi Shimbun.

Olof Palme, prime minister of Sweden from 1969 to 1976 and then from 1982 until his assassination in 1986, visited the Hiroshima Peace Memorial Museum in 1981. While in the museum, Palme grew increasingly quiet. He later insisted that all governments of the world should require people in positions of responsibility to visit Hiroshima.
Were this anti-nuclear pacifist statesman alive today, he would certainly be gratified that Japan has finally signed a United Nations statement condemning the inhumanity of nuclear weapons.

Even though Japan experienced two atomic bombings in 1945, it had refused to endorse similar statements, claiming they ran counter to Japan's policy of reliance for its national security on the "nuclear umbrella" provided by the United States.

Signed by 125 countries and presented on Oct. 21 to the U.N. General Assembly First Committee, the Joint Statement on the Humanitarian Consequences of Nuclear Weapons says, "It is in the interest of the very survival of humanity that nuclear weapons are never used again, under any circumstances."

Japan should have signed it sooner. I hope this statement marks the first step toward total nuclear disarmament.

But nuclear weapons still figure prominently in the international community. The U.N. Security Council is dominated by nuclear powers, and nations that have recently joined their ranks are gaining influence, while North Korea's dictatorial regime continues to pose a nuclear threat. However, the world will never change so long as we let this reality remain our excuse for abandoning our ideals.

According to a book written by an Asahi Shimbun reporter, it was well before nuclear weapons became a reality that British writer H.G. Wells (1866-1946) suggested one way to eliminate wars would be to develop weapons to the bitter end. It is as if Wells foresaw the chilling paradox of the theory of nuclear deterrence.

I certainly do not want our world to keep relying on this terrible paradox. "The only way to guarantee that nuclear weapons will never be used again is through their total elimination," says the U.N. statement. This is the truth that will spare the world a third nuclear tragedy, and thereby do right by the victims of Hiroshima and Nagasaki.

--The Asahi Shimbun, Oct. 25

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Vox Populi, Vox Dei is a popular daily column that takes up a wide range of topics, including culture, arts and social trends and developments. Written by veteran Asahi Shimbun writers, the column provides useful perspectives on and insights into contemporary Japan and its culture.

Vox Populi, Vox Dei is a daily column that runs on Page 1 of the vernacular Asahi Shimbun.

Japan should play leading role in nuclear disarmament

October 23, 2013

Editorial: Japan can do more to lead global move toward nuclear disarmament

http://mainichi.jp/english/english/perspectives/news/20131023p2a00m0na007000c.html

Japan joined 124 other countries in announcing a joint statement opposing the use of nuclear weapons at the U.N. General Assembly's First Committee. This is the first time that Japan has endorsed such a statement, marking an important step forward.

The next step that Japan should take is to play a leading role in efforts toward nuclear disarmament through various venues, such as the foreign ministerial conference of the Non-Proliferation and Disarmament Initiative (NPDI) to be held in Hiroshima in April 2014 with the participation of 12 non-nuclear powers.

The statement drafted by New Zealand says, "It is in the interest of the very survival of humanity that nuclear weapons are never used again, under any circumstances."

Similar statements were released in May and October last year and April this year, but Japan refused to support any of them. This is because Japan cannot keep consistency between such a statement and its security policy of relying on the U.S. nuclear umbrella, although it remains the only atomic-bombed country in the world.

As many as 80 countries backed the April statement largely because a phrase, "outlawing nuclear weapons," was deleted from its draft. Japan came under fire internationally and domestically for refusing to sign the statement. In the Peace Declaration on the Aug. 9, 2013 atomic bombing anniversary, Nagasaki Mayor Tomihisa Taue bitterly criticized the national government over its response and urged it to "consider once again that Japan is the only country to have suffered a nuclear bombing."

Tokyo chose to support the latest statement because its request that the document express support for all approaches and efforts toward nuclear arms reductions was accepted. The government explains that the statement is consistent with Japan's policy of promoting nuclear arms reductions on a step-by-step basis while depending on the nuclear deterrence provided by the United States.

However, the Japanese government's actions leading up to the decision to support the statement were lukewarm.

Moves by like-minded countries to ban the use of nuclear arms because of the inhuman nature of such weapons are gaining momentum on a global scale. The U.S. government of President Barack Obama is also seeking to reduce the roles of nuclear weapons.

Japan has made efforts toward nuclear disarmament by submitting to the United Nations every year a draft resolution calling for efforts to reduce the number of nuclear weapons on a step-by-step basis, but is wary of the moves by like-minded countries that could lead to the creation of a convention banning nuclear arms. Critics have pointed out that Japan is trying to dampen these moves because it heavily relies on the nuclear deterrence provided by the United States.

The security environment surrounding Japan is severe as a result of North Korea's nuclear program and China's military buildup. This time, Japan also joined 17 other countries including Australia and member countries of the North Atlantic Treaty Organization (NATO) in backing a similar statement. This statement underscores the need for discussions on security guarantees. The move highlights the delicate positions of Japan and NATO members.

However, there are many things that Japan can do even though it relies on the U.S. nuclear umbrella. To fulfill Japan's responsibility as a supporter of these statements, the executive and legislative branches of

the government should seriously discuss specifically what it can do to lead the global move toward nuclear disarmament, while listening to opinions from experts.

Japan should work toward nuclear disarmament

October 28, 2013

Pushing for nuclear disarmament

http://www.japantimes.co.jp/opinion/2013/10/28/editorials/pushing-for-nuclear-disarmament/#.Um6njlOwT9k

Japan on Oct. 21 joined 124 other countries in signing a United Nations statement that underlines the inhuman nature of nuclear weapons and calls for the nonuse of such weapons. This is the first time that Japan has supported such a joint statement despite its being the only nation to have suffered from nuclear attacks. Now that Japan has signed the statement, it should play a constructive role in global efforts to realize the abolition of nuclear weapons.

If Japan had not signed this time, the international community could have doubted its seriousness on the matter. Japan had stopped short of signing similar joint statements issued in May and October 2012 and last April because it held that the phrase against nuclear weapons being used "under any circumstances" was incompatible with its policy of relying on the U.S. nuclear umbrella.

The Japanese government faced strong criticism from survivors of the August 1945 U.S. atomic bombings of Hiroshima and Nagasaki and by the mayors of the two cities for its failure to support the three earlier statements.

The countries that possess or are suspected to possess nuclear weapons did not sign the past and latest statements. But this time, about two-thirds of the 193 U.N. member countries signed the statement, demonstrating that an opinion pushing for the nonuse of nuclear weapons and eventual abolition of such weapons is becoming strong in the international community.

The latest joint statement was presented to the U.N. General Assembly First Committee to discuss disarmament and national security. It partly said, "It is in the interest of the very survival of humanity that nuclear weapons are never used again, under any circumstances." It also said, "All efforts must be exerted to eliminate the threat of these weapons of mass destruction."

The Japanese government explained that the latter sentence agrees with Japan's approach of taking realistic and gradual steps toward nuclear disarmament.

Stressing the inhumane nature of nuclear weapons, the statement went on to say, "Past experience from the use and testing of nuclear weapons has amply demonstrated the unacceptable humanitarian consequences caused by the immense, uncontrollable destructive capability and indiscriminate nature of these weapons" and "The catastrophic effects of a nuclear weapon detonation, whether by accident, miscalculation or design, cannot be adequately addressed."

Japan should pay attention to the fact that while it enjoys the protection of the U.S. nuclear umbrella, U.S. President Barack Obama is working toward the eventual abolition of nuclear weapons and that Norway and Denmark, also under the U.S. nuclear umbrella as NATO countries, signed the statement.

Although Japan is protected by the U.S. nuclear umbrella, it should help deepen discussion on the abolition of nuclear weapons both at home and abroad, and consider what concrete actions will help the international community realize this goal.

Japan's seriousness on the matter will be tested at a foreign ministers' meeting of the Non-Proliferation and Disarmament Initiative — which will also be attended by Australia and 10 other non-nuclear weapons countries — in Hiroshima next spring .

Opposition parties & nukes

October 28, 2013

Two tasks for the opposition

http://www.japantimes.co.jp/opinion/2013/10/28/editorials/two-tasks-for-the-opposition/#.Um6oDlOwT9k

The Abe administration's plan to change the interpretation of the war-renouncing Article 9 of the Constitution so that Japan can exercise the right to collective self-defense and its push for a bill to allow the government to designate almost all information concerning defense and security as "special secrets" — thus jeopardizing freedom of the press and the people's right to know — are dangerous moves that must be thoroughly discussed by the Diet in the current extraordinary session that started Oct. 15.

The Diet also must fully scrutinize the Abe administration's moves to restart some of Japan's 50 nuclear reactors that are now offline. The opposition parties should highlight the irrationality of the government and power industry's efforts to restart the dormant nuclear plants at a time when the crisis at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant continues — and growing worse in some respects — and in view of the fact that Japan is an extremely quake-prone country and that another large-scale nuclear accident would cause irreparable damage.

Mr. Banri Kaieda, leader of the Democratic Party of Japan, posed questions concerning the leaks of radioactive water from the Fukushima plant to Prime Minister Shinzo Abe. Mr. Abe said that the government will push forward efforts to solve the issue.

Mr. Abe also said that the situation at the nuclear power plant is "under control as a whole" as the "effect" of radioactive substances from the plant is contained inside the harbor adjacent to the plant.

But the facts — worsening leaks and rising radiation levels — do not support his claim. It is also unclear what kind of structure a government organization set up to cope with the contaminated leaks will take and who will be responsible for specific work inside the organization. Although the government plans to build a wall of frozen soil to block the intrusion of ground water into the nuclear plant site, thorough discussions have not been carried out to determine whether this is the best method to stop the leaks. And few people feel that Mr. Abe's replies are convincing.

More importantly the DPJ should challenge the Abe administration on the wisdom of its move to restart the nuclear reactors. When it was in power, the DPJ government's position was that all available means should be mobilized so that Japan could cease nuclear power generation in the 2030s.

The DPJ and other opposition parties must point out the serious problems related to nuclear power generation and present policy proposals to drastically increase the weight of renewable energy sources in Japan's power-generation portfolio.

In addition to the constant threat posed by natural disasters to the nation's nuclear reactors, if the reactors are restarted, the nuclear waste storage facilities at each plant will become full in several years. And because technology to safely store high-level radioactive waste on a permanent basis has yet to be established, nuclear waste has the potential to cause grave environmental problems for tens of thousands of years. It is ethically untenable to saddle future generations with such a dangerous burden.

The DPJ and other opposition parties must strongly oppose the government and power industry's plan to restart nuclear power plants. They should instead push alternative policies that can end Japan's dangerous reliance on this dangerous source of energy.

Exporting nukes "a central pillar of Abe's growth strategy"

October 28, 2013

Abe heads for Turkey to sell nuke technology

Kyodo
http://www.japantimes.co.jp/news/2013/10/28/national/abe-heads-for-turkey-to-sell-nuke-technology/#.Um9gTFOwT9k

Prime Minister Shinzo Abe left Monday for a three-day trip to Turkey, where he is expected to affirm closer bilateral economic cooperation, including on exports of Japanese nuclear reactors, with Turkish Prime Minister Recep Tayyip Erdogan.

The trip, following one in May when the two governments signed an accord for the peaceful use of atomic power, is also aimed at bolstering security cooperation and exploring the possibility of launching negotiations on a bilateral free trade agreement, according to Japanese officials.

It is rare for a prime minister to visit the same country twice in such a short period. It is also unusual for a prime minister to make an overseas trip during the week while the Diet is in session.

Turkey is "an extremely important country in strategic meaning," Abe told reporters at Haneda airport in Tokyo. "I would like to solidify the relationship of mutual trust between the leaders."

Abe stressed the importance of "securing and promoting national interest through summit diplomacy" as he sought the opposition camp's acceptance of his absence during Diet deliberations on major bills.

In a meeting Tuesday in Istanbul, Abe and Erdogan are expected to call for speeding up talks for installing reactors in Turkey in line with the bilateral nuclear accord.

Exporting nuclear reactors is a central pillar of Abe's growth strategy.

Formal agreement with Turkey on nuclear reactors

October 30, 2013

Abe oversees Japan's 1st nuclear plant export after 2011 disaster

http://ajw.asahi.com/article/behind_news/politics/AJ201310300043

By KOTARO ONO/ Staff Writer

ISTANBUL--A corporate alliance led by Mitsubishi Heavy Industries Ltd. reached a formal agreement with the government of Turkey on Oct. 29 to construct nuclear power reactors on the Black Sea coastline.

It is the first time Japanese firms have won a formal order to build nuclear reactors since the 2011 earthquake and tsunami disaster triggered meltdowns at the Fukushima No. 1 nuclear power plant.

The project involves building four reactors in the city of Sinop, northern Turkey, at an expected cost of more than $22 billion (2.1 trillion yen).

Officials from both nations signed the agreement to coincide with Prime Minister Shinzo Abe's visit to Turkey. Abe and Recep Tayyip Erdogan, his Turkish counterpart, announced the deal during a joint news conference here, following summit talks.

Abe and Erdogan signed a joint statement that calls for closer bilateral ties in science and technology, including nuclear power generation.

"Japan has a responsibility to share the lessons of the Fukushima nuclear disaster with the rest of the world and to promote nuclear safety," Abe said at the news conference. "We will help ensure the safety of nuclear power in Turkey and other countries that decide to introduce nuclear technology by assisting in their institution-building and human resources development."

Abe has been eager to act as Japan's top salesman to export nuclear and other infrastructure technology. When he last visited Turkey in May, he confirmed with Erdogan that both countries will conclude a nuclear energy agreement, a precondition for Japan's export of nuclear technology.

The Abe administration hopes to have a Japan-Turkey nuclear energy agreement ratified during the current Diet session and to enter export procedures in earnest once the agreement has taken effect.

But it could face a backlash from public opinion because the problem of radioactive water accumulating at the stricken Fukushima plant came to public attention after the informal agreement in May.

Spent fuel good enough for weapons, said US in 1977

October 30, 2013

Cause of concern: Japan Atomic Energy's Tokai Reprocessing Plant in Tokai, Ibaraki Prefecture, is seen in 1997. Declassified Japanese diplomatic records show the United States believed in 1977 that nuclear weapons could be produced from spent nuclear fuel at Japan's light water reactors and conveyed its view to Tokyo. | KYODO

National / History

Spent fuel good enough for bomb, U.S. told Japan in 1977

Kyodo

The United States believed in 1977 that nuclear weapons could be produced from plutonium extracted from spent nuclear fuel at Japan's light water reactors and conveyed its view to Tokyo, according to Japanese diplomatic records declassified Wednesday.

A U.S. arms control official told a Japanese diplomat based in Austria that the common belief that reactor-grade plutonium is unfit for weapons production is wrong, according to a cable sent by then-Ambassador to the U.S. Fumihiko Togo to the Foreign Ministry in Tokyo on Feb. 23, 1977.

At the time, the administration of U.S. President Jimmy Carter was pursuing nonproliferation following a nuclear test carried out by India in 1974.

Nuclear experts in Japan, including Ryukichi Imai, a former adviser to the governmental Japan Atomic Energy Commission, long believed that plutonium extracted from reprocessed fuel was not suitable for atomic bomb production.

Washington was opposed to Tokyo's plan to open the country's first nuclear reprocessing plant in Ibaraki Prefecture.

The U.S. arms control official also told the diplomat from the Japanese Embassy in Austria that compared with high-purity weapons-grade plutonium, reactor-grade plutonium is not optimum for arms production because of its relatively low explosive power.

The official did not want the information made public but reiterated that nuclear weapons could be made from plutonium extracted from spent fuel.

The diplomatic record also revealed that the U.S. pressured South Korea into abandoning its plan to purchase a nuclear reprocessing facility in the mid-1970s.

Resource-poor Japan promoted a policy from the late 1950s of recycling nuclear fuel by extracting plutonium from spent fuel. The Carter administration later endorsed a plan by Tokyo to open the reprocessing plant in Ibaraki that limited the amount of reprocessed fuel.

The Nuclear Non-Proliferation Treaty does not clearly ban nonnuclear states from acquiring nuclear fuel reprocessing technology that can produce weapons-grade plutonium. At present, Japan keeps 44 tons of plutonium.

See also : October 30, 2013

U.S. believed Japan's reactors capable of producing nuclear weapons

http://mainichi.jp/english/english/newsselect/news/20131030p2g00m0dm072000c.html

What hope for nuclear-free world?

October 31, 2013

Nagasaki mayor sends protest letter to Obama over plutonium test

http://mainichi.jp/english/english/newsselect/news/20131031p2g00m0dm040000c.html

NAGASAKI (Kyodo) -- The mayor of Nagasaki sent a letter of protest to U.S. President Barack Obama on Wednesday after the United States revealed it had conducted an experiment using a small amount of plutonium to examine the capabilities of its nuclear weapons between July and September.

Mayor Tomihisa Taue and Hiroyuki Itasaka, chairman of the Nagasaki city assembly, said in the letter they cannot help but harbor doubts about the nuclear-free world proposed by Obama in Prague in 2009.

They also said the plutonium test trampled on the efforts of atomic bomb survivors and citizens of Nagasaki to eliminate nuclear weapons. The southwestern Japan city suffered a U.S. atomic bombing on Aug. 9, 1945.

The U.S. National Nuclear Security Administration has said on its website that a plutonium test involving a device called a "Z machine" was conducted in the July-September period, following one in the April-June quarter.

The Z machine generates strong X-rays to create a fusion reaction to assess the performance of nuclear weapons.

Give nuclear power it rightful place in the energy policy

October 31, 2013

Business leader calls for use of nuclear power

http://www3.nhk.or.jp/nhkworld/english/news/20131031_29.html
The head of a major business organization has urged the Japanese government to give nuclear power a position of importance in its new energy policy.

Japan Chamber of Commerce and Industry chairman Tadashi Okamura met on Thursday with trade and industry minister Toshimitsu Motegi.

The government plans to draw up a new basic energy plan by the end of this year.

Okamura argued nuclear power should be included in the variety of energy options in order to create a feasible policy.

He said nuclear power is essential to the stable power supply necessary for smooth economic activity.

And Okamura urged the minister to revise the policy set by the former Democrats-led government of abolishing nuclear power by the 2030s.

Motegi responded on the basis of mid- to long-term policy, saying the planned roles for each energy source will be clarified within the next 3 years.

And he said the government will work to build a full, responsible policy within 10 years

Japan' nuclear industry not really back on its feet

Source : Financial Times,

Fukushima hurts nuclear revival hopes

By Jonathan Soble - October 30, 2013 8:00 pm

Japan's successful bid to host the 2020 Olympics has reminded the world of the country's many attractive qualities, from delicious food to safe streets and punctual trains. But it has also refocused attention on a sore spot: the continuing efforts to deal with the aftermath of the Fukushima nuclear disaster.

Two and a half years after the triple meltdown, new failures at the stricken plant seem to be reported each week. Most have to do with contaminated water. Hundreds of tons of water cycle through each day, either as coolant pumped into still-hot reactors, or as groundwater seeping in and out of cracked plant basements.

Containing it all has proved to be beyond the capacity of Tokyo Electric Power (Tepco), the much-criticised owner. Some water has leaked out, exposing workers to radiation and contaminating the sea around the coastal site.

Experts say there is little risk to Olympic-hosting Tokyo, 240km south, but the situation looks a shambles: in a Nikkei newspaper poll, 80 per cent of respondents said they distrusted an assurance given to the International Olympic Committee by Shinzo Abe, the prime minister, that the clean-up was "under control".

All this has complicated Mr Abe's efforts to get Japan's nuclear industry back on its feet. In the months after the accident in March 2011, nearly all of Japan's 50 surviving reactors were closed indefinitely, amid public anxiety over safety and political wrangling between local governments and Tokyo.

The result pleased many Japanese – slightly more than half say they want the country to go nuclear-free – but left utilities struggling to replace an energy source that had provided 30 per cent of Japan's electricity.

Power bills have risen by 8-17 per cent, greenhouse gas emissions have jumped, and the cost of importing gas and other fuels has pushed a country that ran fearsome trade surpluses into a persistent deficit.

Mr Abe has been pushing gently but firmly for change – or, in the view of the anti-nuclear movement, a return to a scaled-down version of the pre-Fukushima status quo. Since coming to power in December, he has effectively abandoned a pledge by the previous, left-leaning government to end nuclear power by 2040. Instead, he has supported applications by utilities to restart a dozen idled reactors.

A new and more vocal nuclear regulator has both helped and hindered Mr Abe's cause. The Nuclear Regulation Authority has been more critical of safety flaws than its predecessors: at least one plant has been deemed unfit to reopen because it is sitting on an active faultline.

Mr Abe is counting on the NRA's perceived strictness to assuage public fears and inhibit opposition to restarting the plants. Utilities submitted the first applications for recertification in July; the NRA is expected to take until next spring to inspect the facilities, which have undergone safety upgrades, and make its first rulings.

Most expect permission to be granted. Still, even if all the reactors are allowed to reopen, Japan would have just a third the number of working reactors that it had before Fukushima.

More could be put back in service, but experts say at most half are new enough or far enough from Fukushima to be viable. That will keep pressure on the government to cultivate alternative energy sources, from renewables to US shale gas.

"Japan is thinking hard about its energy mix," says George Borovas, head of nuclear projects at Pills-bury, an international law firm. Japan's nuclear-equipment builders – Hitachi, Toshiba and Mitsubishi Heavy Industries – have become more assertive in pursuing deals abroad, he adds. Hitachi's acquisition of the Horizon nuclear project in the UK last year, for instance, put the company in charge of an entire atomic-energy enterprise – a departure from its usual, more limited role as a builder of reactors.

Meanwhile, there is still Fukushima to contend with. Ahead of the Olympic host-city decision in September, Mr Abe's government began asserting more control over the clean-up. In August, it said it would fund a project to freeze soil around the plant, to prevent groundwater seeping in and mixing with irradiated coolant.

"This is a critical issue of strong interest to the Japanese people," Mr Abe said at the time. "Instead of leaving everything to Tepco, we need to create a firm national strategy."

Some are now urging a re-examination of Tepco's future, reviving a debate dormant since the months after the meltdowns.

Clean-up and compensation costs had threatened the utility with bankruptcy until the previous government stepped in with Y1tn ($10bn) in capital and a promise to underwrite payments to tens of thousands of evacuated Fukushima residents.

Tepco is in effect owned now by the state, but through a complicated structure that allows the company to operate independently. Critics say that has left ultimate responsibility for the Fukushima site unclear, and may have contributed to the string of problems at the site.

Yasuhisa Shiozaki, a senior LDP politician and former chief cabinet secretary, says the government might end up taking clearer control – either of Tepco itself, the Fukushima site or of all Japanese reactors that are to be abandoned rather than restarted.

"I think it's inevitable," he said in September.

Energy policy should also reflect public opinion

November 4, 2013

Editorial: Gov't must reflect public opinion in new energy policy

http://mainichi.jp/english/english/perspectives/news/20131104p2a00m0na004000c.html

The Atomic Energy Commission (AEC) has set the basic direction for the government's nuclear energy policy for more than half a century. Previously, the commission worked out long-term plans, but it now draws up a framework for nuclear energy policy roughly every five years to review the policy's direction.

However, a government panel of experts that has reviewed the AEC's role since the outbreak of the crisis at the Fukushima No. 1 Nuclear Power Plant, recently agreed in principle to abolish the policy framework. The direction for nuclear energy policy will instead be included in a basic plan on energy that the Economy, Trade and Industry Ministry is considering drawing up

.

The decision is rational in the sense that nuclear energy policy should be incorporated within the government's overall energy policy. Still, there is a serious problem with the decision: Nuclear energy policy would be determined under the leadership of the Ministry of Economy, Trade and Industry, which has promoted nuclear power. Lessons learned from the Fukushima nuclear disaster could be rendered ineffective if policy-making were left to the discretion of the organization that promotes nuclear energy.

Following the outbreak of the nuclear crisis, the Democratic Party of Japan (DPJ)-led government set up a panel of Cabinet ministers involved in energy and environmental policies and set a goal of ridding Japan of all nuclear power stations by the end of the 2030s. It also decided not to allow the installation of any new nuclear reactors and to decommission any reactor that had been in operation for 40 years. An advisory council -- one-third of whose members are in favor of relying less on atomic power -- then began compiling a basic plan on energy. Although the DPJ-led government's move might have been insufficient, it could be appreciated as an effort to reform the way in which energy policy is worked out.

The situation changed under the government of Prime Minister Shinzo Abe, which abolished the panel of Cabinet ministers on energy and environmental policies, dropped the zero-nuclear policy and now intends to commission an advisory council to the Economy, Trade and Industry Ministry to draw up a basic plan for nuclear energy policy by the end of this year. The council is dominated by pro-nuclear power members, which could have a bearing on how Japan's atomic power policy in the wake of the nuclear accident will change.

While maintaining the basic policy of decreasing Japan's dependence on nuclear power, the Abe government has not clearly shown specific measures to achieve this goal, nor has it held in-depth discussions on the nuclear fuel cycle project, in which spent nuclear fuel is reprocessed and reused in nuclear reactors. Moreover, calls persist within the government to urge that nuclear power plants be retained and that aging ones be rebuilt. One cannot help but be astonished by such discussions -- held as if the Fukushima nuclear disaster never occurred.

Furthermore, and more seriously, it remains unclear how public opinion is being reflected in the discussions on Japan's atomic power policy. One of the problems highlighted by the nuclear crisis was that all decisions relating to nuclear policy had been determined by the exclusionary "nuclear power village," the title used to refer to the electric power industry, pro-atomic power bureaucrats and scholars who colluded to promote nuclear power. The government could repeat the same mistake unless it changes the policy-making process handled by the ministry advisory panel without clarifying the criteria for selecting its members.

The Economy, Trade and Industry Ministry is unlikely to specify the ratio of nuclear power to total power consumed in Japan. The basic plan on energy that the ministry will draw up could therefore send the public a message that Japan will maintain the status quo, hindering energy policy reform and leaving Japan to continue relying on atomic power.

The public has never given the Abe administration carte blanche over nuclear power policy. The government should review the nation's energy policy in a transparent way, so that policy fully reflects public opinion.

So they say

November 5, 2013

Experts Say Nuclear Power Needed to Slow Warming

PITTSBURGH November 3, 2013 (AP)
By KEVIN BEGOS Associated Press

http://abcnews.go.com/Technology/wireStory/experts-nuclear-power-needed-slow-warming-20767882

Some of the world's top climate scientists say wind and solar energy won't be enough to head off extreme global warming, and they're asking environmentalists to support the development of safer nuclear power as one way to cut fossil fuel pollution.

Four scientists who have played a key role in alerting the public to the dangers of climate change sent letters Sunday to leading environmental groups and politicians around the world. The letter, an advance copy of which was given to The Associated Press, urges a crucial discussion on the role of nuclear power in fighting climate change.

Environmentalists agree that global warming is a threat to ecosystems and humans, but many oppose nuclear power and believe that new forms of renewable energy will be able to power the world within the next few decades.

That isn't realistic, the letter said.

"Those energy sources cannot scale up fast enough" to deliver the amount of cheap and reliable power the world needs, and "with the planet warming and carbon dioxide emissions rising faster than ever, we cannot afford to turn away from any technology" that has the potential to reduce greenhouse gases.

The letter signers are James Hansen, a former top NASA scientist; Ken Caldeira, of the Carnegie Institution; Kerry Emanuel, of the Massachusetts Institute of Technology; and Tom Wigley, of the University of Adelaide in Australia.

Hansen began publishing research on the threat of global warming more than 30 years ago, and his testimony before Congress in 1988 helped launch a mainstream discussion. Last February he was arrested in front of the White House at a climate protest that included the head of the Sierra Club and other activists. Caldeira was a contributor to reports from the Intergovernmental Panel on Climate Change,

Emanuel is known for his research on possible links between climate change and hurricanes, and Wigley has also been doing climate research for more than 30 years.

Emanuel said the signers aren't opposed to renewable energy sources but want environmentalists to understand that "realistically, they cannot on their own solve the world's energy problems."

The vast majority of climate scientists say they're now virtually certain that pollution from fossil fuels has increased global temperatures over the last 60 years. They say emissions need to be sharply reduced to prevent more extreme damage in the future.

In 2011 worldwide carbon dioxide emissions jumped 3 percent, because of a large increase by China, the No. 1 carbon polluting country. The U.S. is No. 2 in carbon emissions.

Hansen, who's now at Columbia University, said it's not enough for environmentalists to simply oppose fossil fuels and promote renewable energy.

"They're cheating themselves if they keep believing this fiction that all we need" is renewable energy such as wind and solar, Hansen told the AP.

The joint letter says, "The time has come for those who take the threat of global warming seriously to embrace the development and deployment of safer nuclear power systems" as part of efforts to build a new global energy supply. Stephen Ansolabehere, a Harvard professor who studies energy issues, said nuclear power is "very divisive" within the environmental movement. But he added that the letter could help educate the public about the difficult choices that climate change presents

Japan-led resolution approved by UN

November 5, 2013

U.N. committee passes Japan-led nuke elimination resolution

http://mainichi.jp/english/english/newsselect/news/20131105p2g00m0dm058000c.html

NEW YORK (Kyodo) -- A Japan-led resolution calling for the elimination of nuclear weapons was approved Monday by the U.N. General Assembly's First Committee on disarmament with endorsements by 164 countries, marking the 20th year in a row that such a resolution has been passed.

The resolution, which is expected to be approved by the General Assembly at a meeting in early December, drew a record 102 co-sponsors.

North Korea was the only country to vote against it. The resolution condemned "in the strongest terms the nuclear test conducted" by North Korea in February this year and called on Pyongyang to "abandon all nuclear weapons and existing nuclear programs."

Fourteen other countries including China, Russia, India, Pakistan and Israel abstained.

Among other nuclear powers, the United States co-sponsored and voted for it, while Britain and France backed it without joining as sponsors.

In Tokyo, Foreign Minister Fumio Kishida welcomed the resolution's approval at the U.N. committee, saying that it would contribute to further building momentum toward a world free of nuclear weapons.

"Japan intends to lead the efforts of the international community toward the goal of a world without nuclear weapons through our continuing proactive efforts like this," Kishida told reporters.

The resolution calls for achieving "a world without nuclear weapons" and reaffirms "the crucial importance of the Treaty on the Non-Proliferation of Nuclear Weapons."

This year's resolution expresses "deep concern at the catastrophic humanitarian consequences of any use of nuclear weapons," in a similar fashion as a U.N. statement Japan joined for the first time and unveiled at the First Committee last month.

Last month's statement serves as an expression of will at the committee meeting by the participating countries.
In contrast, the resolution represents a formal decision of the committee of the General Assembly comprising 193 members.

Before the resolution was put to a vote at the committee, North Korea said it categorically rejected the resolution, adding that "Japan has no qualification and reputation" to table this draft because "plutonium is piled up," which can be used to create nuclear weapons.

Toshio Sano, the Geneva-based Japanese ambassador for disarmament who leads discussions at the First Committee, told reporters in New York that "our country's view to push forward nuclear disarmament through solid and joint efforts involving nuclear powers received overwhelming support."

Gov't must not evade responsibility- What structure for TEPCO?

November 9, 2013

Editorial: Failure of nuclear power policy shows Japan must get rid of all nuke plants

http://mainichi.jp/english/english/perspectives/news/20131109p2a00m0na004000c.html

The government's unreasonable policy of forcing a private electric power company to pay the full costs of dealing with a nuclear plant accident while promoting atomic power has come to a deadlock. The government should review its nuclear power policy and draw up a blueprint for a society that will not depend on such an energy source.

The ruling coalition comprised of the Liberal Democratic Party (LDP) and New Komeito is set to propose to Prime Minister Shinzo Abe that the government speed up efforts to bring the crisis at the tsunami-hit Fukushima No. 1 Nuclear Power Plant under control and restore areas affected by the disaster.

Specifically, the coalition will call for the use of taxpayers' money to build a temporary storage facility for soil contaminated with radioactive substances, to decontaminate areas affected by the disaster and to treat radioactively contaminated water accumulating at the Fukushima No. 1 Nuclear Power Plant. The total amount of money that the government is expected to pay is likely to amount to several trillion yen. The executive branch of the government will consider complying with the recommendation by the coalition. The move represents a departure from the government's policy of requiring Tokyo Electric Power Co. (TEPCO), the operator of the plant, to foot all the costs of dealing with the nuclear disaster.

The ruling coalition's proposal reflects its serious sense of crisis over the current situation in which work to restore areas hit by the nuclear crisis has been delayed.

The prime minister has said ensuring Fukushima's recovery from the disaster is the top priority for his government. Nevertheless, the government had been reluctant to play an active role in dealing with the nuclear disaster because it was unsure of how much such efforts would cost taxpayers. As a result, work to treat contaminated water has been delayed and little progress has been made on the restoration of nuclear disaster-hit areas.

It is obvious that work to deal with the meltdowns should not be left entirely to TEPCO. The government that has promoted nuclear power and actively helped power companies secure land and construction costs for nuclear plants must not evade its responsibility. The use of taxpayers' money is inevitable.

Since the government is set to use taxpayers' money, it must not repeat the mistakes of the past. In other words, the government needs to admit that its nuclear power policy was wrong and fundamentally review it. Electric power companies are required to shoulder unlimited liabilities for accidents at nuclear plants

they operate under the Act on Compensation for Nuclear Damage. However, even TEPCO, the largest company in the industry, cannot fully shoulder the costs of dealing with the disaster.

Still, the problem will never be solved even if an upper limit is to be set on utilities' liabilities for nuclear accidents because such a measure would require the government to bear the costs beyond the upper limit. In other words, **it is inevitable for taxpayers to shoulder a huge amount of financial burden once a serious accident occurs at an atomic power station**.

Electric power firms are forced to operate thermal power plants powered by natural gas and oil at full capacity to make up for the loss of nuclear power, costing the utilities more than 3 trillion yen in extra fuel expenses a year. Those in favor of nuclear power say nuclear fuel is far less expensive than fossil fuels as one of the reasons why they are promoting atomic energy. The cost-effectiveness of power generation cannot be ignored in Japan, which is beginning to show signs of overcoming its longstanding deflation as a result of "Abenomics," economic policies promoted by Prime Minister Abe.

However, the promotion of nuclear power was based on the myth of the infallible safety of nuclear plants. Since that safety myth has collapsed, nuclear plants have lost their edge even in terms of cost-effectiveness.

Such being the case, the government should eliminate nuclear power stations as quickly as possible while developing and introducing substitute energy sources, such as renewable energy, and promoting energy-saving measures. The government needs to draw up a clear road map toward that end.

The proposal that the LDP-New Komeito coalition will make shortly calls for the use of public funds to build infrastructure to support Fukushima's disaster recovery. This suggests that the coalition intends to fend off criticism from the public that taxpayers would be forced to shoulder the costs of bailing out TEPCO. However, the responsibility of TEPCO, which caused such a serious accident as a result of making light of safety measures, is extremely grave. If public funds were used solely to bail out TEPCO, the measure would never win the public's understanding.

Critics insist that TEPCO be liquidated as a precondition for an injection of public funds. Of course, ordinary businesses would be liquidated in such a case because it would be unreasonable to use taxpayers' money before their creditors -- including shareholders and financial institutions that buy the firms' bonds or extend loans to them -- assume their own responsibility for their failures.

However, electric power companies operate under special circumstances. They need to issue corporate bonds to raise massive amounts of funds to make investments in facilities including nuclear plants.

Therefore, priority is placed on utilities' redemption of their bonds under legislation in case they go under. No one can foresee how far TEPCO's debts will snowball.

In explaining at a recent Diet session why the government will not liquidate TEPCO, Economy, Trade and Industry Minister Toshimitsu Motegi expressed concern that priority could be placed on the protection of investors who hold TEPCO bonds over compensation payments to disaster victims, which could delay the decommissioning of the Fukushima reactors and countermeasures against contaminated water. The ruling coalition's proposal is based on the assumption that TEPCO will not be liquidated.

Still, calls persist within the ruling coalition urging the utility be liquidated. If the government could not persuade opponents within the coalition, use of taxpayers' money to deal with the disaster would never win support from the public. If the government intends to avoid liquidating TEPCO, it must provide a thorough explanation to convince taxpayers.

Furthermore, the government should demand TEPCO drastically reform its management in an effort to win the public's understanding for the use of public funds. TEPCO claims that it has streamlined its operations more thoroughly than required by its corporate rehabilitation plan endorsed by the government. Still, the government's Board of Audit has pointed out that the utility has wasted some money in procuring materials and equipment. Moreover, TEPCO should consider disposing some of its assets. The utility needs to be fully aware that it has come under pressure to thoroughly streamline its operations.

The ruling coalition's proposal also suggests that TEPCO can either split its division specializing in decommissioning nuclear reactors or transform itself into an independent administrative agency.

In reforming itself, however, TEPCO must aim to maintain the morale of workers struggling to bring the nuclear crisis under control and make steady progress in the work, as well as step up the streamlining of its operations to the extent that it will not sacrifice the safety of its nuclear plants in an effort to lessen the financial burden on taxpayers. Moreover, TEPCO must secure a stable supply of electric power.

To that end, it is necessary to consider the most appropriate management structure of the company.

Japan-India nuclear pact

Japan, India agree to promote nuclear pact talks

http://www3.nhk.or.jp/nhkworld/english/news/20131112_30.html

The Japanese and Indian foreign ministers have agreed to promote negotiations on concluding a civil nuclear pact at an early date.

Japan's Fumio Kishida and India's Salman Khurshid met in New Delhi on Tuesday. Kishida is there to attend foreign ministerial talks of the Asia-Europe Meeting.

He said Japan hopes to more closely cooperate with India to expand their bilateral strategic partnership. Khurshid replied that the 2 countries should hold summit and ministerial meetings to build deeper relations.

Kishida and Khurshid agreed to accelerate negotiations on a pact that would allow Japan to export nuclear power technology to India. The country plans to build nuclear power stations.

The foreign ministers also discussed security cooperation. They agreed to hold joint exercises of Japan's Maritime Self Defense Force and India's Navy at an early date.

They also confirmed that working group meetings should be held as soon as possible to discuss ways for Japan to export US-2 amphibious rescue aircraft to India.

Answer Koizumi's questions first

November 12, 2013

Ex-PM Koizumi urges Abe to break away from nuclear power

http://mainichi.jp/english/english/newsselect/news/20131112p2g00m0dm078000c.html

TOKYO (Kyodo) -- Former Prime Minister Junichiro Koizumi on Tuesday urged incumbent Japanese leader Shinzo Abe to break away from nuclear power generation, saying other politicians will follow once such a decision is made.

"It is a matter of judgment, or foresight. But I want (the prime minister) to shift to that direction," Koizumi said during a speech delivered at the Japan National Press Club in Tokyo.

The retired lawmaker from the ruling Liberal Democratic Party also said during a question-and-answer session that followed the speech, "The power a prime minister holds is enormous. If a prime minister says zero (nuclear), there wouldn't be much opposition."

Koizumi, meanwhile, suggested Abe can visit the Yasukuni Shrine in Tokyo, which honors convicted Japanese Class-A war criminals along with war dead, if he wishes to do so, even if it may trigger criticism from China.

November 11, 2013

Koizumi's nuclear power questions

http://www.japantimes.co.jp/opinion/2013/11/11/editorials/koizumis-nuclear-power-questions/#.UoEy-yewT9k

While political repercussions continue over former Prime Minister Junichiro Koizumi's surprise calls for ending nuclear power generation in Japan, what the once popular leader points out are all sensible and legitimate questions about Japan's energy policy that remain unanswered by members of the Abe administration. Any energy policy that fails to squarely answer the questions posed by Koizumi will not have any credibility.

Koizumi, who kept largely out of the media spotlight after retiring as lawmaker in 2009, has been speaking out in recent months that Japan should end its reliance on nuclear power. He says the Fukushima nuclear disaster changed his perception of nuclear power as a low-cost and safe source of energy and now says, "There is nothing more costly than nuclear power." He urges the government to divert the massive energy and money needed to maintain nuclear power in Japan into more investments in the development and promotion of renewable energy sources.

Many of his former Liberal Democratic Party colleagues initially tried to dismiss Koizumi as a retired politician who has nothing to do with the party today. Prime Minister Shinzo Abe, who served in key Cabinet and LDP positions during Koizumi's 2001-2006 rule, said it is "irresponsible" to commit to ending nuclear energy at this point. Meanwhile, hopes have emerged within the opposition camp that an alliance with Koizumi — who drew strong popular support while in office — on the zero nuclear agenda could provide them with ammunition against the LDP's dominance in the Diet.

The political ripple effects — and some criticism over his flip-flop after promoting nuclear power while in office — aside, what seems missing in the controversy are discussions on the very real and pressing issues highlighted by Koizumi. He points to poor prospects for finding a permanent storage site for highly radioactive waste after spent fuel is reprocessed. This problem — for which Japan's nuclear power industry has long been likened to a "condominium without a toilet" — has been set aside since well before the Fukushima crisis.

Abe has told the Diet that a technology has been established to store such waste in geological layers deep underground. Koizumi says the problem is that despite the existence of this technology, the government has been unable for more than a decade to find a candidate site anywhere in Japan. And this technology, Koizumi says, might be problematic in this quake-prone country — a point that Abe conveniently neglects to mention. Given the safety concerns over nuclear power following the triple meltdowns at the Fukushima plant, it is even more doubtful that a candidate site will ever be found, Koizumi says. Thus radioactive waste will continue to pile up as long as nuclear power plants are operated.

Japan's nuclear fuel cycle program is at a standstill. Completion of a fuel reprocessing plant in Rokkasho, Aomori Prefecture, has been delayed for years, and the Monju fast-breeder reactor in Tsuruga, Fukui Prefecture, has been idled for much of the time since a sodium leak and fire in 1995. Meanwhile, storage space for spent nuclear fuel from reactors around the country, and in the Rokkasho complex, is nearly 70 percent full.

As Koizumi points out, the myth that nuclear power is cheaper than other sources of energy is thrown in doubt when the expenses for siting nuclear plants, their future decommissioning and waste disposal are included. And on top of this there is the massive cost of dealing with the aftermath of the Fukushima No. 1 meltdowns, including compensation, which far exceeds the financial capacity of its operator, Tokyo Electric Power Co. This is necessitating the injection of a huge amount of taxpayer money.

Abe's rebuttal is that increased fossil fuel imports for thermal power generation to make up for the nuclear plant shutdowns is costing the nation trillions of yen a year. But his rhetoric does not answer the question whether nuclear power is really the affordable source of energy — as it has long been touted to be by the government — especially after the costs of compensation and decontamination in the wake of the Fukushima nuclear crisis are taken into account.

Abe has vowed to scrap the nuclear phaseout policy of the Democratic Party of Japan-led administration that his LDP ousted from power last year. But the prime minister has yet to present a new vision for the nation's energy policy — except to say that he would reduce as much as possible Japan's reliance on nuclear power while maximizing energy-saving efforts and development of alternative energy.

While the future of Japan's energy policy remains elusive and the Fukushima nuclear crisis is continuing, Abe has been pushing for the sale of Japanese nuclear power plant technology overseas as part of his bid to boost infrastructure exports. When Mitsubishi Heavy Industries and France's Areva clinched a joint-venture deal in October to build a nuclear power plant with four advanced reactors in Turkey, Abe said Japan "is responsible for helping improve the safety of atomic power in the world by sharing the experience and lessons" from the disaster at the Fukushima plant — whose situation he has described as "under control."

At home the Abe administration and the LDP are pushing for the restart of some idled nuclear reactors once they have cleared a new set of safety criteria, even though radiation-contaminated water continues to leak from the Fukushima compound nearly 2½ years after the meltdowns.

Abe should lay out a new energy vision that will fully address the doubts about nuclear power raised by Koizumi. His legitimate concerns are likely shared by a large part of the public — a majority of whom, according to media surveys, oppose restart of the idled nuclear reactors. As Koizumi says, only Japan's political leaders can set the direction for the nation's energy policy. The Abe administration has an obligation to choose a path that ensures Japan will not have to contend with another nuclear power plant disaster in the future.

Koizumi/Abe: same goal?

Suga: Govt., Koizumi seek nuclear reduction goal
http://www3.nhk.or.jp/nhkworld/english/news/20131112_23.html

Japan's Chief Cabinet Secretary Yoshihide Suga says the government and former prime minister Junichiro Koizumi share the same goal of reducing reliance on nuclear power generation as much as possible.

The former prime minister has repeatedly proposed that Japan end its reliance on nuclear power and switch to sources of renewable energy.

Suga told reporters on Tuesday that the government is responsible to ensure a steady and cheap supply of affordable energy.

He said the current policy is to reduce the country's reliance on nuclear power generation as much as possible.

It's up to Abe

November 11, 2013
Koizumi: It's up to Abe to make the move toward a nuclear-free society

http://ajw.asahi.com/article/behind_news/politics/AJ201311120095

By IZUMI SAKURAI/ Staff Writer

Former Prime Minister Junichiro Koizumi on Nov. 12 used his first public session with reporters since retiring from politics to continue pressing Prime Minister Shinzo Abe to abandon nuclear energy.

"There are no prospects for securing disposal sites for nuclear wastes produced through nuclear power generation," Koizumi said in a lecture at the Japan National Press Club in Tokyo. "The nuclear reactors should not be restarted. They should be abolished as early as possible."

He also urged an immediate halt to the government's nuclear fuel recycling project that reprocesses spent nuclear fuel.

After stepping down as prime minister in 2006, Koizumi remained largely out of the spotlight. But his recent anti-nuclear proclamations have generated a buzz in the political world and the media.

More than 300 people, including foreign correspondents from South Korea and embassy staff members, crowded the venue to hear Koizumi speak.

Koizumi did not reveal any specific plan for his anti-nuclear ideas. But he did bring politics, specifically Abe, into his arguments.

"Opposition parties are basically opposed to the promotion of nuclear power generation. If we explore the real intentions of (ruling) Liberal Democratic Party lawmakers, about half of them are against nuclear power generation while the other half are pro-nuclear," Koizumi said.

The LDP, which controls both chambers of the Diet, has been pushing for the restarts of nuclear reactors that have remained idle following the March 2011 accident at the Fukushima No. 1 nuclear plant.

"If Prime Minister Abe shows the determination (to create a nuclear-free society), many pro-nuclear LDP lawmakers will follow his determination. There will be no better environment than the current one (to realize a nuclear-free Japan)," Koizumi said.

He encouraged Abe to use his power as prime minister to create a huge project of abolishing all nuclear reactors and developing alternative energies.

The former prime minister gave a lecture for about an hour and then received questions from only four reporters.

He also addressed criticism that he is irresponsible for calling for the abolition of nuclear reactors without providing an alternative solution to the energy needs of the nation.

"It is impossible for me alone to show alternative proposals. If politicians adopt a broad policy, people with wisdom will undoubtedly present good ideas," he said. "The government should think about converting to and promoting renewable energies by gathering experts, bureaucrats and other intellectuals."

Pro-nuclear opponents have said use of thermal power generation in place of nuclear energy has proved costly in terms of imports of fossil fuels and emissions of carbon dioxide.

Koizumi responded: "Japanese technologies are quick in dealing with the changes of the times. The Japanese people and companies are also cooperative."

The core of Koizumi's anti-nuclear argument is that it is irresponsible for the government to promote nuclear power generation when it cannot secure space for nuclear waste disposal sites.

He repeated that his anti-nuclear stance stems from a tour to the Onkalo repository, the final disposal site for highly radioactive waste, in Finland in August.

Meaning "cave," Onkalo is an artificially constructed tunnel on an island in the Baltic Sea about 250 kilometers northwest of the Finnish capital of Helsinki.

Nuclear waste will be stored there in a square measuring 2 kilometers by 2 km around 400 meters below the surface.

It will take about 100,000 years for the nuclear waste to become harmless.
"Humans are curious," Koizumi said. "Until that time (100,000 years later), how should people tell later generations that the nuclear waste is dangerous so that future people will not try to dig it out thinking, 'What's this'?
"Letters and languages will change. Is it really possible to continue to store (nuclear waste) for such a long period?"
He also compared quake-free Finland and its stable bedrock to the situation in Japan.
"Onkalo will deal with waste from two nuclear reactors. In Japan, there are as many as 54 nuclear reactors," Koizumi said. "Besides, Japan is an earthquake-prone country and its bedrock is not strong. Where in Japan can we construct such a facility?"

Use "political clout" to achieve nuclear-free Japan

November 12, 2013

Pro-reactor incumbent's political capital high; public in right mood

Koizumi calls on Abe to ditch nuclear power

http://www.japantimes.co.jp/news/2013/11/12/national/koizumi-calls-on-abe-to-ditch-nuclear-power/?utm_source=rss&utm_medium=rss&utm_campaign=koizumi-calls-on-abe-to-ditch-nuclear-power#.UoMmFSewT9k

by Ayako Mie
Staff Writer

Prime Minister Shinzo Abe has abundant political capital and should declare an end to nuclear power, as the public mood for such a decision couldn't be better, predecessor Junichiro Koizumi said Tuesday.

"Nobody has had more favorable conditions to achieve a nuclear-free option than Abe," the popular ex-prime minister said in a rare news conference at the Japan National Press Club in Tokyo. "For first time in a long time, the Japanese are ready to support a project and I want him to use his strong political clout."

Tuesday's event was Koizumi's first official press conference since the Mainichi Shimbun reported in late August his call for Japan to immediately cease its reliance on atomic energy.

Over 350 reporters and club members attended the 90-minute speech and question-and-answer session, when Koizumi demonstrated his trademark no-nonsense style.

Koizumi, 74, said Abe is in a better position to accomplish a nuclear-free Japan, unlike when he dissolved the Lower House in 2005 to achieve the postal system privatization. Back then, Koizumi faced fierce opposition from both his Liberal Democratic Party and the opposition camp.

"Now the opposition camp advocates for a nuclear-free society, and only the LDP opposes it. But I think 50 percent of LDP lawmakers favor scrapping atomic energy," said Koizumi. "LDP lawmakers cannot voice opposition to nuclear power because Abe is promoting it. If Abe decides to scrap nuclear power, no one in the party will protest."

While Koizumi was prime minister, he, too, supported nuclear power. But he said the March 2011 Great East Japan Earthquake made him realize it was wrong to believe atomic energy is a source of clean and cheap energy, because nuclear power is uncontrollable.

He also noted Japan has no viable way to process or dispose of radioactive waste.

Koizumi was especially critical of an Oct. 8 editorial by the pro-nuclear Yomiuri Shimbun, which criticized his stance by saying it is the fault of politicians that Japan cannot find sites to dispose of nuclear waste.

"We have not been able to find nuclear waste disposal sites for the last 10 years," Koizumi said. "It is too optimistic and irresponsible for them to say that politicians should be responsible for not having a clear prospect (for radioactive waste sites) especially after the earthquake."

Koizumi has reportedly not met with Abe to talk about this issue. But Abe, who served as his chief Cabinet secretary and subsequent successor, has rejected going nuclear-free, saying it is irresponsible to chart such a course when energy costs are surging.

Koizumi may be retired but he still commands popularity. A recent Asahi Shimbun poll found 60 percent of respondents support his views, while 25 percent oppose them.

Koizumi: Japan should give up nuclear power now

http://www3.nhk.or.jp/nhkworld/english/news/20131112_34.html

Former Prime Minister Junichiro Koizumi says Japan should immediately give up nuclear power generation. He suggested that Prime Minister Shinzo Abe decide promptly on a zero nuclear policy.

Koizumi reiterated his opposition to nuclear energy at a news conference in Tokyo on Tuesday.

He rebutted criticism that he is irresponsible and overly optimistic for not offering an alternate energy plan. He said that what is most important in politics is to show a policy, and that if the government comes out with a policy of zero nuclear power, wise people will come up with good ideas.

On the timing of realizing zero reliance on nuclear power, Koizumi said he thinks immediately would be good.

Koizumi said the government wants to restart the country's nuclear reactors after confirming their safety, but that this plan is certain to face difficulties. He said there will not be many nuclear reactors to be restarted and that the gap should be filled by alternate energy sources. He pointed out that the government is still unable to find a final disposal site for radioactive waste.

Koizumi said most opposition parties are in favor of giving up nuclear energy. He said the governing Liberal Democratic Party officially supports nuclear power, but that about half of the party's lawmakers are probably against it in their hearts.

Koizumi urged Abe to make a decision. He said nobody would oppose him if he decided to give up nuclear power and create a state of natural energy sources.

Koizumi also commented on opposition from China and South Korea to visits by Cabinet members to Tokyo's Yasukuni Shrine. The shrine honors Japan's war dead. Those remembered include leaders convicted of war crimes after World War Two. He said leaders of every country visit memorial facilities to pay their respects to their war dead, and that only the leaders of China and South Korea criticize the practice.

Koizumi referred to Abe's current diplomacy towards China, saying it is on the right track. He said that if a summit meeting is not possible, other politicians should promote exchanges. He said there is no need for Japan to ask China for a summit.

Koizumi said a time will come when China feels embarrassed about its claims on the Yasukuni issue. He said Japan must maintain its present stance, as China knows the importance of maintaining friendly bilateral ties.

Majority of Japanese wants zero-nuclear country

November 13, 2013

55% of Japanese want zero-nuclear Japan: Mainichi survey

http://mainichi.jp/english/english/newsselect/news/20131113p2a00m0na002000c.html

Some 55 percent of Japanese agree with former Prime Minister Junichiro Koizumi's call for an end to nuclear power generation in Japan, a Mainichi opinion poll has found.

According to the survey conducted on Nov. 9-10, just 34 percent of those polled said they did not agree with abolishing nuclear power. Meanwhile, anti-nuclear sentiment ran particularly high among female respondents, at 60 percent. Only 27 percent of women disagreed with a zero-nuclear policy.

Even among respondents who said they support the Cabinet of Prime Minister Shinzo Abe -- which is considering replacing aging reactors with new ones -- 49 percent said they favored a zero-nuclear policy. Forty-two percent said they were against the idea. Among supporters of the ruling Liberal Democratic Party as a whole, the for and against camps came out nearly even, at 44 percent versus 46 percent, respectively.

Among supporters of the opposition parties, 59 percent of respondents backing the Democratic Party of Japan favored an end to nuclear power, as did 74 percent of Japan Restoration Party supporters, 67 percent of Your Party supporters, and 79 percent of Japanese Communist Party backers.

Among independents, 56 percent of respondents wanted atomic power abolished, versus 30 percent who said they were against such a move.

Abe has "power"

November 14, 2013

VOX POPULI: Abe has the power to settle the nuclear issue once and for all

http://ajw.asahi.com/article/views/vox/AJ201311140044

Vox Populi, Vox Dei is a daily column that runs on Page 1 of the vernacular Asahi Shimbun.

Though it feels longer, it has only been a year since then Prime Minister Yoshihiko Noda declared during a debate with Liberal Democratic Party President Shinzo Abe that he would dissolve the Lower House two days later.

I was there closely watching Noda's facial expressions during the Nov. 14 encounter. For some reason, he often cast his eyes upward. He was looking at a clock on the wall. The debate was short and whatever it took, he had to steer the discussion to make the declaration within his allotted time. I remember coming to the realization I was witnessing an unscripted verbal battle.

If a snap election were to be called, it was clear that Noda's Democratic Party of Japan would lose. An angry DPJ member echoed the sentiment among many in the party questioning "why the president of a company would choose to intentionally lead that company to destruction?" They were outraged. Noda was convinced the consumption tax rate had to be raised, no matter what. Noda played his trump card and exercised the power vested in him as prime minister. It was one of the most dramatic moments in Japanese politics.

I wonder if Noda had former Prime Minister Junichiro Koizumi's declaration to dissolve the Lower House to advance postal privatization in mind when he made the decision. While the outcome of the elections were the exact opposite, with the DPJ suffering a crushing defeat and the LDP scoring a landslide victory, both prime ministers launched a fight that turned their parties against them.

Now, Koizumi is calling on Abe, the current prime minister, to exercise those very same powers vested in him. During a public session with reporters at the Japan National Press Club on Nov. 12, Koizumi called on Abe to use his power to make the decision to end the use of nuclear power. News conferences where the word "**power"** is used so frequently are rare.

Koizumi said prime ministers have great power. Once Abe makes a decision, opposition will fall silent. The general public is also pinning their hopes on Abe to use that power. In that regard, no prime minister is luckier than Abe, he said.

Although the prime minister's authority stems from the people, power can be dangerous. If the prime minister puts it to good use while being aware of the dangers, I welcome it. Noda believed that raising the consumption tax rate was the right thing to do. Meanwhile, Abe seems to be less interested in realizing a nuclear-free society.

--The Asahi Shimbun, Nov. 14

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Vox Populi, Vox Dei is a popular daily column that takes up a wide range of topics, including culture, arts and social trends and developments. Written by veteran Asahi Shimbun writers, the column provides useful perspectives on and insights into contemporary Japan and its culture.

Vox Populi, Vox Dei is a daily column that runs on Page 1 of the vernacular Asahi Shimbun.

Ending nuclear power up to the public?

November 14, 2013

EDITORIAL: It is up to the public to end Japan's reliance on nuclear power

http://ajw.asahi.com/article/views/editorial/AJ201311140042

Former Prime Minister Junichiro Koizumi recently fired the latest salvo in his spirited campaign for weaning Japan from its dependence on nuclear energy.

In a speech Nov. 12 at the Japan National Press Club in Tokyo, Koizumi said, “I think it will be good (for Japan) to end (nuclear power generation) immediately.”

It was a brutally clear message from the mouth of a person who had long been at the center of political power.

Koizumi’s argument is very simple. Since it is not realistically possible to find a location to build final disposal facilities for radioactive waste in Japan, nuclear power plants should not be operated. This is the kernel of his case against using atomic energy.

People who are promoting nuclear power have criticized his argument from various angles.

Some of his critics say it is irresponsible to call for an end to nuclear power generation when the nation does not have strong prospect of coming up with reliable alternative energy sources to replace it. Other proponents of nuclear power warn that dependence on thermal power generation would drive up fuel costs and make further increases in electricity rates inevitable.

But it is difficult to refute the straightforward argument made by Koizumi, who says it is “too optimistic and irresponsible to assume that the site for final disposal of nuclear waste can be eventually found in today’s Japan.”

In an opinion poll conducted by The Asahi Shimbun last weekend, 60 percent of the respondents agreed with Koizumi. Among the supporters of the ruling Liberal Democratic Party, 58 percent agreed.

Prime Minister Shinzo Abe has pledged to reduce Japan’s reliance on nuclear energy as much as possible. But he has also said, “It would be irresponsible for me to promise now to completely abandon nuclear power.”

The Abe administration apparently intends to continue the struggling program to establish a nuclear fuel recycling system that is designed to reprocess spent nuclear fuel for reuse in reactors. However, even if the key reprocessing plant in Rokkasho, Aomori Prefecture, could start operation, the program would only further increase Japan’s already massive stockpiles of plutonium for which there is no realistic use. It is glaringly obvious that this program is fundamentally flawed.

This nation has experienced a catastrophic nuclear accident that still forces more than 100,000 people to live as evacuees away from their hometowns near the Fukushima No. 1 nuclear power plant. But the government and the business community are seeking a way back to the era before the March 11 disaster as if nothing happened.

Many Japanese, exasperated by the nonchalant attitude of political and business leaders toward the risks of nuclear power, have taken to the streets and the Internet to protest plans to restart idled reactors. But policymakers have turned a deaf ear to their voices, making them even more disgruntled. Koizumi's series of anti-nuclear remarks have resonated deeply among these people.

During his tenure from 2001 to 2006 as prime minister, Koizumi used his brand of sound-bite politics to capture the hearts and minds of people, frequently using catchy and powerful slogans like "I will destroy the LDP."

His simple and clear political style won overwhelming support of Japanese voters. Capitalizing on his great public popularity, Koizumi revived and pushed through the legislation to privatize the nation's postal services, a proposal that was once killed by the LDP.

That's why Koizumi's anti-nuclear campaign now is irritating and perplexing policymakers of the Abe administration.
The question is how Abe will respond to Koizumi's calls for the government to pull the plug on nuclear power.
It should not be forgotten that only the people's strong will to seek a future without nuclear power can give Abe the push he needs.

UN climate conference criticises Japan reduced CO2 goals

November 17, 2013

Japan's new CO2 goal dismays U.N. climate conference

http://ajw.asahi.com/article/economy/environment/AJ201311170028

REUTERS

TOKYO/WARSAW--China, the EU and environmentalists criticized Japan at U.N. climate talks on Nov. 15 for slashing its greenhouse gas emissions target after its nuclear power industry was shuttered by the Fukushima disaster.

The Japanese government on Nov. 15 decided to target a 3.8 percent emissions cut by 2020 versus 2005 levels. That amounts to a 3 percent rise from a U.N. benchmark year of 1990 and the reversal of the previous target of a 25 percent reduction.

"Given that none of the nuclear reactors is operating, this was unavoidable," Environment Minister Nobuteru Ishihara said.

Japan's 50 nuclear plants were closed on safety concerns after the March 2011 earthquake and tsunami wrecked the Fukushima No. 1 nuclear power plant northeast of Tokyo. Nuclear accounted for 26 percent of Japan's electricity generation and its loss has forced the country to import natural gas and coal, causing its greenhouse gas emissions to skyrocket.

Japan's new policy was widely criticized in Warsaw, where some 190 nations are meeting from Nov. 11-22 to work on a global climate pact, due to be agreed in 2015.

China's climate negotiator Su Wei said: "I have no way of describing my dismay" about the revised target.

The European Union also expressed disappointment and said it expected all nations to stick to promised cuts as part of efforts to halt global warming.

"It is regrettable," Christiana Figueres, the U.N.'s climate chief, told Reuters of Japan's goal. But she predicted that Japan's planned investments in energy efficiency and renewable power would prove that the target could be toughened.
"This move by Japan could have a devastating impact," said Naoyuki Yamagishi of environmental campaign group WWF Japan. "It could further accelerate the race to the bottom among other developed countries."

Climate Analytics, a think-tank, said Japan could still achieve a 17-18 percent CO2 reduction from 2005 levels by 2020 even if it replaced nuclear with its current fossil fuel mix.

GLOOM

Japan's decision added to gloom at the Warsaw talks, where no major countries have announced more ambitious goals to cut emissions, despite warnings from scientists about the risks of more heat waves, droughts, floods and rising sea levels.

Poor nations want the rich to commit to deeper emissions cuts while providing more finance to help developing nations deal with the impacts of climate change, a major issue at the talks after the Philippines was devastated by typhoon Haiyan, one of the most powerful ever recorded.

Australia has been criticized for watering down its climate policies, and Brazil reported on Nov. 14 a rise in the rate of deforestation in the Amazon--releasing more CO2 that had been stored in trees.

Natural-gas consumption by Japan's 10 utilities was up 8.4 percent in October from a year earlier and coal use was up 4.4 percent as the companies used more fossil fuels to compensate for the nuclear shutdown, industry data showed on Nov. 15.

Prime Minister Shinzo Abe advocates a return to nuclear, but says he wants to reduce Japan's reliance on it over time. The process of restarting reactors will begin next year at the earliest and some will never come back on line due to safety concerns.

With Abe facing opposition to nuclear power even from within his own party, the weaker emissions commitment could be an argument for restarting reactors, given that Japan for decades has touted the technology as clean energy.

The Japanese delegation got a standing ovation when it arrived at U.N. climate talks in Bangkok in 2009, weeks after then-Prime Minister Yukio Hatoyama announced the 25 percent target, the most ambitious by any major developed nation.

"Our energy mix, including the use of nuclear power, is currently being reviewed. In that context, we decided to set this target at this point," Chief Cabinet Secretary Yoshihide Suga said of the new goal.

Hiroshi Minami, Japan's chief negotiator at the U.N. talks, said the new goal "is based on zero nuclear power" in future. He said the original target was based on a nuclear share of more than 40 percent of electricity generation.

The nuclear shutdown could prove convenient for Abe in that it allows his government to abandon a target that some said was too optimistic. "Anyone could have seen that this was just impossible," said energy analyst Akira Ishii.

November 16, 2013
Japan's new CO2 reduction target fuels criticism

http://www3.nhk.or.jp/nhkworld/english/news/20131116_06.html

Delegates at the UN climate change conference in Warsaw have reacted sharply to Japan's decision to dramatically scale down its target to reduce greenhouse gas emissions.

The Japanese government on Friday officially decided to target a 3.8 percent emissions cut by 2020 from 2005 levels.

The figure is equal to a 3.1 percent rise from a UN benchmark year of 1990 and also reverses the previous 25 percent reduction target.

The Japanese government set the new target under the assumption that all its nuclear reactors will remain idled.

Japan's nuclear reactors have been offline following the accident at a nuclear plant in Fukushima in March, 2011.
Representative of the European Union said discussions are ongoing to give momentum to efforts to reduce global warming. He criticized Japan for making a move that clearly reverses the trend.

The Chinese climate negotiator said that he has no words to express his dismay over Japan's revised target.

Chief negotiator Hiroshi Minami said he expected Japan to come under harsh criticism for its new target. He said the Japanese delegation will try not to have a negative impact on the overall talks.

Greenhouse gas emissions reduction goal uncertain with reactors offline

http://ajw.asahi.com/article/behind_news/politics/AJ201311160030

THE ASAHI SHIMBUN

Uncertainty over the extent to which nuclear reactors will resume operations is severely limiting the government's ability to set long-term goals for the reduction of greenhouse gas emissions.

The government on Nov. 15 approved a goal of reducing greenhouse gas emissions in 2020 by 3.8 percent from 2005 levels.

However, later the same day, Environment Minister Nobuteru Ishihara said the goal would likely be revised next autumn, once it becomes clearer how many nuclear reactors will go back online.

Ministry officials indicated that a major impetus for such a review would be the summit meeting on climate change to be held next September and hosted by the secretary-general of the United Nations.

According to Ishihara, the approved goal is only a temporary one based on the precondition that no nuclear reactors are in operation.

"Given that we cannot foresee the extent to which nuclear reactors will resume operations, it represents the world's highest levels of energy conservation," he said.

The latest goal is a major step backward from the objective set in 2009 shortly after the Democratic Party of Japan took over control of government.

At that time, Prime Minister Yukio Hatoyama pledged to reduce greenhouse gas emissions by 25 percent from 1990 levels.

In addition to the new reduction goal, the government also announced its "aggressive diplomacy policy to fight global warming."

Among the measures included in that package are aid to developing nations over a three-year period totaling 1.6 trillion yen ($16 billion) and the launching in fiscal 2017 of a satellite to measure greenhouse gases.

In addition, 11 trillion yen would be set aside for domestic investment for technological improvements.

While such measures aimed at helping other nations are meant to counter criticism from the international community about the lower emissions reduction goal, representatives meeting in Poland at an international conference on climate change blasted Japan for not doing more.

A major objective of the 19th Conference of the Parties to the U.N. Framework Convention on Climate Change (COP 19) being held in Warsaw is to increase emissions reduction goals set by member nations.

Japan's new goal was criticized by the representatives of the European Union who expressed major disappointment at the weakening of Japan's goal.

While understanding was expressed for the problems Japan faces in the aftermath of the 2011 natural disasters and Fukushima nuclear accident, some EU representatives also said as an advanced nation Japan had to demonstrate leadership.

Su Wei, the deputy head of the Chinese delegation, said about Japan's new goal: "It is a retreat from the 6-percent goal set under the Kyoto Protocol. Japan should fulfill its responsibility."

The Climate Action Network, an international nongovernmental organization, selected Japan for its "Special Fossil of the Day" award for the weak new goal.

Meanwhile, Japanese business leaders had mixed reviews for the new goal.

Hiromasa Yonekura, chairman of Keidanren (Japan Business Federation), expressed opposition at setting a goal before all factors were considered.

"Thought should be given to whether the goal is achievable by also taking into consideration the appropriate burden to place on the public as well as the central government's economic growth strategy," he said.

However, Yasuchika Hasegawa, chairman of Keizai Doyukai (Japan Association of Corporate Executives), said, "There is meaning in transmitting the fact that the goal set by former Prime Minister Yukio Hatoyama was impossible to achieve."

While the latest goal pales in comparison to the one made by Hatoyama at a U.N. General Assembly session, the 2009 goal was based on the premise that about 40 percent of electricity generated in Japan would be through nuclear energy.

In the wake of the Fukushima nuclear accident, the Abe administration has not even been able to establish a new ratio for nuclear energy in terms of total power generation, despite the fact that reducing greenhouse gas emissions was once considered a specialty of Abe's.

In June 2007, during his first stint as prime minister, Abe proposed at a Group of Eight summit meeting that the world reduce such emissions by half by 2050.

However, Abe now faces a public strongly opposed to resuming operations at nuclear reactors. At the same time, setting a strong goal for reducing greenhouse gas emissions could prove to be a major burden on corporate performance, which in turn could slow down the effects of the "Abenomics" economic policy measures.

Restart nuclear plants also means building new ones

November 16, 2013

LDP official hints at building new nuclear plants

http://www3.nhk.or.jp/nhkworld/english/news/20131116_22.html

The secretary general of Japan's ruling Liberal Democratic Party has hinted at the possibility of studying building new nuclear power plants in Japan as long as their safety can be guaranteed.

Shigeru Ishiba spoke to reporters on Saturday about the country's future energy policy.

Ishiba said the government will first have to restart existing idled nuclear plants after ensuring their safety.

But he said even if the percentage of renewable energy increases in the country's total power supply, he would not deny the possibility of studying building new nuclear plants from the viewpoint of energy security.

Ishiba said new nuclear plants would be built if safer ones become available in response to the March 2011 accident at the Fukushima Daiichi power station.

He added that theoretically, it is impossible to accept restarting nuclear plants and reject building new ones.

Ishiba also spoke about the issue of building a final nuclear waste disposal site. Former Prime Minister Junichiro Koizumi cites the absence of such a disposal site in Japan as one of the reasons for his call for the country to abolish nuclear power plants.

Ishiba suggested that the government should take the initiative of designating which area would be

suitable for building a final nuclear waste disposal site, rather than wait for a local community to express its candidacy for hosting such a site.

Reality for Japan to face: Nukes no solution for India

November 14, 2013

Can Nuclear Power Be an Answer to India's Electricity Needs?

http://akiomatsumura.com/

Read in German.
M. V. Ramana

M. V. Ramana is with the Program on Science and Global Security at the Woodrow Wilson School of Public and International Affairs, Princeton University.

The Indian government is engaged in discussions with the Japanese government aimed at concluding a bilateral nuclear cooperation pact; this would allow India to import nuclear reactor parts from Japan. The primary argument given for India's plans to expand nuclear power is that the country already suffers electricity shortages and its electricity demand is fast growing.

There are at least three sad realities that underlie this discussion. The first, and perhaps most poignant, is that Japan, which is currently facing tremendous democratic opposition to restarting nuclear reactors within the country, is considering exporting nuclear reactor parts to a country where, again, there is significant opposition to nuclear power, especially at all the sites that have been selected for installing reactors imported from companies like Westinghouse, General Electric and Areva. Their reasons for such opposition are not difficult to discern. In the aftermath of 11 March 2011, people near an existing or proposed nuclear reactor can—and do—imagine themselves suffering a fate similar to those of the inhabitants of the areas around Fukushima. These nuclear reactors are also located in areas that support thousands of people living off farming, fishing, and other occupations, and these people see, quite correctly, the reactor as a major threat to their livelihoods. The Indian government's response to the opposition has been a combination of coercion, bribery, and propaganda. Support for the Indian government's nuclear efforts, therefore, cannot be considered respectful of democratic rights.

The second reality that I elaborate in my book, *The Power of Promise: Examining Nuclear Energy in India,* is that nuclear energy will not be the answer to India's electricity problems. The multiple reasons for this assertion include a history of failure, poor technology choices and a lack of organizational learning. To start with, the current nuclear capacity in the country—more than sixty years after the atomic energy program was established—is just 5,780 MW, about 2.5 percent of the total generation capacity. Even with optimistic assumptions about the future, this fraction is unlikely to increase to more than 5 percent for decades. But optimism is not warranted. The Indian Department of Atomic Energy (DAE) has long made ambitious projections and failed to deliver. The DAE's plans also involve constructing hundreds of fast breeder reactors. In the early decades of nuclear power, many countries pursued breeder reactor programs, but practically all of them have given up on breeder reactors as unsafe and uneconomical. The DAE has simply not absorbed the lessons from the sorry history of breeder technology globally, and thus shows a lack of organizational learning. In contrast, wind energy, which began in earnest only in the 1990s, has overtaken nuclear power, not just in terms of installed capacity, but in the number of units of electricity (kWhs) fed into the grid.

The third reality is that India, and industrializing countries in general, need electricity that is cheap and affordable. Nuclear power is in that sense badly suited to many of these because it is expensive. This has been amply borne out in the Indian case, where coal based thermal power has been much cheaper than nuclear electricity. Future reactors, both imported light water reactors as well as fast breeder reactors, promise to be much more expensive, which will make electricity generated in these unaffordable to the weaker sections of society. Expectations that the nuclear industry will learn from past experience and lower the construction costs have also been belied repeatedly.

Finally, what of the other commonly heard argument – that nuclear power would significantly reduce India's carbon emissions and thereby help with climate change mitigation. First, India's planners do not see it as a question of nuclear power or fossil fuels, but nuclear power *and* fossil fuels. Second, if nuclear power cannot expand rapidly and substantially, then it cannot help with climate change in any significant fashion, especially if the achieved expansion comes at the cost of investment in other potential solutions to these concerns. Third, because of its centralized character and the huge costs involved, nuclear power cannot play a significant role in solving the energy needs of the vast majority of India's population, much less do so in a way that offers any net environmental gains. In particular, trying to use nuclear power as a solution to climate change only brings with it two of the familiar—and so far insoluble—problems associated with nuclear energy: susceptibility to catastrophic accidents, and having to deal with radioactive waste that stays hazardous to human health for millennia.

To summarize, there is no justifiable case for supporting a large scale expansion of nuclear power in India. Japan's leaders should face up to this reality as they contemplate entering into nuclear commerce with India.

M. V. Ramana is with the Program on Science and Global Security at the Woodrow Wilson School of Public and International Affairs, Princeton University and the author of The Power of Promise: Examining Nuclear Energy in India *(Penguin 2012).*

3/11 has created business opportunities abroad

November 26, 2013

A total of 150 kilograms of plutonium is stored in 10 metal containers in an MOX fuel manufacturing factory in Marcoule, France, on Oct. 17. (Jun Ueda)

Fukushima accident has ripple effect in worldwide nuclear industry

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201311260071

THE ASAHI SHIMBUN

The Fukushima nuclear crisis is creating business opportunities for Britain's nuclear industry, helping Germany shutter its nuclear reactors and leaving questions over the future of Japan's nuclear fuel recycling ambitions.

Britain is awash in plutonium, some 120 tons, due in part to the nuclear crisis spawned by the March 2011 Great East Japan Earthquake and tsunami. The country now sees the opportunity to make money in storing unused plutonium.

Due to the accident at the Fukushima No. 1 nuclear power plant, the Japanese power companies with nuclear reactors that used mixed oxide (MOX) fuels consisting of a mixture of reprocessed plutonium and uranium suspended their operations. That, in turn, forced the closure of the British factory that manufactured the fuel in August 2011.

Given that Japanese electric power companies were its largest customers, that created a backlog of stored plutonium.

At present, more than 260 tons of plutonium is stored globally. Of that, 120 tons were located in Britain as of the end of 2012. Of that amount, 96 tons came from British nuclear facilities, with the remaining 24 tons coming from other countries, including 17 tons from Japan. No nuclear plants in Britain currently use MOX fuels.

CONVERSION TO STORAGE BUSINESS

As many as 1,300 nuclear related facilities, both military and non-military, make up the six-square-kilometer Sellafield nuclear complex in northwestern Britain. One of the core facilities at the complex is the Thermal Oxide Reprocessing Plant (THORP), which extracts plutonium from spent nuclear fuel.

THORP is scheduled to end operations in 2018 when it completes reprocessing of all of the spent nuclear fuel on hand. As a result, nearly 140 tons of plutonium will need to be stored in Britain.

In 2012, the British Nuclear Decommissioning Authority, which manages plutonium storage, constructed a plutonium repository, the size of a soccer field, next to THORP.

The windowless 30-meter-high facility, designed for long-term storage, is surrounded by thick walls and fences to protect the plutonium inside from terrorists.

The new facility is expected to target Japanese companies for future business given that most of the overseas plutonium in Britain already comes from the Asian nation. Japan also stores 17.9 tons of plutonium in France and another 9.3 tons back home.

Japan is also building its reprocessing plant in Rokkasho, Aomori Prefecture, which is expected to produce seven additional tons of plutonium a year. That surplus will need to be stored somewhere until Japan's nuclear plants go back online, if they clear tougher government safety regulations and are allowed to do so.

An official of the British government, who is involved in the new business, said that Britain is very interested in Japan's surplus plutonium.

Next to the THORP plant also stands the factory that manufactured MOX fuels before it closed. That factory was behind the 1999 quality falsification scandal on fuel that was to be used in the Takahama nuclear power plant in Fukui Prefecture. The factory has since been renovated.

GERMANY THINKS OUTSIDE THE BOX

After the Fukushima nuclear accident, Germany decided to decommission all of its nuclear power plants by 2022. Until then, it still has more than five tons of plutonium in Britain in the form of powder that it intended to turn into MOX fuel.

Germany hit upon the idea of a "swap." It suggested exchanging its plutonium in Britain with plutonium from Tokyo Electric Power Co., the operator of the Fukushima No. 1 nuclear plant, stored in France that could then be turned into MOX fuel at the factory in Marcoule. It also meant the plutonium had to travel shorter distances and was more easily secured.

In April this year, a German electric power company and TEPCO agreed to exchange 650 kilograms of plutonium stored in Britain with the same amount stored in France. Germany made similar

swaps with other countries of its remaining plutonium in Britain. Britain also was paid to accept what was left.

The plutonium exchange was convenient for TEPCO as well. It is still uncertain when, or if, the utility can restart its idled nuclear reactors. Therefore, even if it processes the plutonium into MOX fuels in France and then transports them back to Japan, they still have the problem of storage until they can be used.

According to internal German government documents, **Germany will process its plutonium into 164 MOX fuel assemblies for use in nuclear reactors. It expects to use all the assemblies by 2016, six years earlier than scheduled and achieve its goal of becoming "plutonium zero."**

Michael Sailer, former chairman of Germany's Reactor Safety Commission, said that even if Germany said that it will never manufacture nuclear weapons, France and other surrounding countries would not believe it. Severing Germany's relationship with plutonium will help allay those fears, he said.

On the other hand, Japan will continue to store its unused plutonium in Britain.

JAPAN NO CHOICE BUT TO RECYCLE NUCLEAR FUEL

Japan is set to venture in earnest into a nuclear fuel recycling program exactly at a time when the Fukushima nuclear disaster has tolled an alarm on the safety of similar nuclear operations.

Leading nations of the world began studying ways to use plutonium to generate electricity after U.S. President Dwight Eisenhower called for a peaceful use of nuclear power in "Atoms for Peace," a December 1953 speech at the United Nations.

The nuclear fuel recycling program was touted as a "dream" system, whereby use of plutonium in a fast breeder reactor would generate more fuel than the amount consumed.

Six decades later, the world has learned that reprocessing of spent nuclear fuel to extract plutonium is too costly to be commercially viable. Reprocessing also involves the risk of nuclear proliferation.

The United States and Germany were quick in backing out of a fuel recycling program.

By contrast, Japan is planning to soon start operations at a reprocessing plant in Rokkasho, Aomori Prefecture, to activate a nuclear fuel recycling program in earnest. In addition, Tokyo still pins its hopes on developing a fast breeder reactor, although many other countries have given up on similar plans.

Japan cannot decide to pull out of the nuclear fuel recycling program because doing so would make it impossible for the country to continue operating its 50 nuclear reactors. If the stockpile of spent fuel, currently lying in storage pools at nuclear plants, was to stop being a resource and be rebranded as waste, those storage pools would quickly fill up unless dumping grounds are located. That is leaving **Japan with no other option but to stick to the unrealistic policy of planning to reprocess all spent nuclear fuel**.

The ad hoc nature of Japan's nuclear policy is partly attributable to a "private business under national policy" setup, wherein the government sets the course and utilities are in charge of the actual operations. The locus of responsibility has also been made ambiguous under a system whereby reprocessing costs are included in the electricity rates, which are calculated by adding a certain profit margin to the expenses involved.

(This article was compiled from reports of Keiji Takeuchi and Rintaro Sakurai.)

Fukushima disaster, "a warning to the world", says Hirose

November 19, 2013

Source : The Guardian
http://www.theguardian.com/environment/2013/nov/19/uk-government-new-plant-fukushima-nuclear-disaster-warning?INTCMP=SRCH

Fukushima nuclear disaster is warning to the world, says power company boss

Exclusive: UK government must learn from Japan's catastrophe as it plans a new generation of plant, nuclear chief claims
Tuesday 19 November 2013 18.10 GMT

The catastrophic triple meltdown at the FukushimaDaiichi nuclear plant in March 2011 was "a warning to the world" about the hazards of nuclear power and contained lessons for the British government as it plans a new generation of nuclear power stations, the man with overall responsibility for the operation in Japan has told the Guardian.

Speaking at his Tokyo corporate headquarters , Naomi Hirose, president of the Tokyo Electric Power Company (Tepco), which runs the stricken Fukushima plant, said Britain's nuclear managers "should be prepared for the worst" in order to avoid repeating Japan's traumatic experience. "We tried to persuade people that nuclear power is 100% safe. That was easy for both sides. Our side explains how safe nuclear power is. The other side is the people who listen and for them it is easy to hear OK, it's safe, sure, why not?

"But we have to explain, no matter how small a possibility, what if this [safety] barrier is broken? We have to prepare a plan if something happens … It is easy to say this is almost perfect so we don't have to worry about it. But we have to keep thinking: what if …"

British ministers recently agreed a commercial deal with the French state-owned energy company EDF Energyto build the UK's first new nuclear reactor in a generation at Hinkley Point in Somerset. The agreement included the UK government providing accident insurance.

Tepco's Fukushima Daiichi facility on the coast about 124 miles (200km) north-east of Tokyo, comprising six nuclear reactors, was hit by a giant tsunami with waves peaking at 17 metres high caused by the Great East Japan earthquake on 11 March 2011. In what quickly became one of the world's worst nuclear disasters, operators lost control of the plant when the power supply, including emergency back-up, failed amid massive flooding. As cooling systems malfunctioned, reactors 1, 2 and 3 suffered meltdowns.

Reactor 4 was closed for routine maintenance at the time. But one of several hydrogen explosions blew the walls and roof off the reactor building. This week a delicate and lengthy operation to remove fuel rods from that reactor began.

Radiation leakage following the explosions forced the evacuation of tens of thousands of people from the surrounding area. An exclusion zone roughly 11 miles by 19 miles remains in force around the plant two and half years later. The entire facility is now being decommissioned, but Tepco's clean-up, which has been strongly criticised by environmentalists, is expected to take up to 40 years.

Hirose said that although the situation facing Fukushima Daiichi on 11 March was exceptional, measures could have been adopted in advance that might have mitigated the impact of the disaster. Tepco was at fault for failing to take these steps, he said.

"After I became president [in 2012], we formed a nuclear safety review committee. We focused mainly on what we could do, what we could learn. We had a lot of data by then. Three other reports, one from the Diet [Japan's parliament], one from government. We had a lot of information. Tepco's own report, too. We concluded that we should have avoided that catastrophic accident, and we could have. We could see what we should have done."

Preventative measures included fitting waterproof seals on all the doors in the reactor building, or placing an electricity-generating turbine on the facility's roof, where the water might not have reached it. In addition, wrong assumptions were made, he said.

"I don't know if I could have seen or thought this before the accident … Probably I assumed that people had discussed counter-measures to avoid a huge tsunami by something very special like a complete shutdown."

It transpired that the huge cost and technical complexity of a multiple shutdown, in what was considered the unlikely event of an abnormally large tsunami, had led managers to discount such a scenario as implausible and inefficient, he said.

"What happened at Fukushima was, yes, a warning to the world," he said. The resulting lesson was clear: "Try to examine all the possibilities, no matter how small they are, and don't think any single counter-measure is foolproof. Think about all different kinds of small counter-measures, not just one big solution. There's not one single answer.

"We made a lot of excuses to ourselves … Looking back, seals on the doors, one little thing, could have saved everything."

Tepco was willing to share its experience with British and other nuclear plant operators if they wished, Hirose said. "We can share all the information, all the data we obtained, that we learned from this accident, and then hope that people will use the data and information to prevent the same thing happening."

Hirose confirmed that his company has paid a large price for the disaster. It planned to "streamline" the business and shed hundreds of jobs through voluntary retirement to keep itself in business. "We have a huge debt for the compensation for damages and losses and for decommissioning … We have to be sustainable as a going concern."

Concerned that Tepco may be unable to cope and responding to criticism that the company has bungled parts of the clean-up operation, Japan's government has agreed to spend 47bn yen (£292m) on dealing with hundreds of static tanks to store radiated water at the plant.

It is also considering paying part of the cost to decommission Fukushima's damaged nuclear reactors. Tepco will reportedly seek 500bn yen (£3.1bn) in bank loans by the end of the year to help keep itself afloat.

Asked about the severe domestic and international criticism that followed the discovery in July of leaks from some of the tanks storing contaminated water, Hirose said the problem stemmed from a "simple mistake" in managing the tanks. Since the discovery, the monitoring system had been changed and new welded tanks installed, instead of the old bolted together versions.

Hirose said he could not state categorically that all leakage of contaminated groundwater into the sea had ceased, but the outflow was much reduced. "Probably there is some leakage. It is very difficult to say where it comes from and how much it is, but the harbour [radioactivity] level does not go down, so that means there is some leakage … We are trying to stop it."

Hirose said he felt deeply sorry for the estimated 150,000 local residents who have been forced to leave their homes due to potentially harmful radiation levels, and may in some cases never be able to return.

"I have visited Fukushima many times, met the evacuees, the fishing union, the farmers, many people whose businesses have been damaged very much. I feel very sorry for them. We have to compensate them fully for the damage we caused by our accident."

Tepco was investing in the area and creating jobs by building a new thermal power plant. But he acknowledged reconstruction and rebuilding would take many years.

After the Fukushima catastrophe, the UK's Office for Nuclear Regulation conducted a safety review and its chief inspector, Mike Weightman, concluded there were "no fundamental safety weaknesses" in UK nuclear plants. He said: "We already require protection of nuclear sites against the worst-case scenarios that are predictable for the UK."

But his report found 38 areas for improvement including risks associated with flooding and the state of preparedness for emergencies. In 2012, documents released under freedom of information rules showed that all eight coastal nuclear locations in the UK, including Hinkley Point, were at risk of flooding and coastal erosion, which would worsen with climate change. EDF Energy said it was confident its UK sites were adequately protected against storms and floods. "Without these arrangements in place the regulator would have the authority to close us down," said an EDF spokeswoman.

Hirose said that although there are currently no nuclear powerplants operating in Japan, nuclear power had a future in the country. Popular former prime minister Junichiro Koizumi called last week for Japan to abandon nuclear power altogether, saying it was demonstrably dangerous.

The best course for Japan and other developed countries was energy diversification, Hirose said, combining nuclear power with other forms of generation, including oil, gas and renewables.

Additional reporting by Damian Carrington

"Time to move beyond nuclear energy"

November 30, 2013

http://www.japantimes.co.jp/opinion/2013/11/30/commentary/imagining-post-nuclear-japan/#.Upom6yfij9k

Imagining post-nuclear Japan

by Jeff Kingston
Special To The Japan Times

Former Prime Minister Junichiro Koizumi has sent shock waves through the political establishment by calling for the end of nuclear power generation in Japan. "There is nothing more costly than nuclear power," Koizumi was quoted as saying during an interview with Tokyo Shimbun — something Japanese taxpayers are coming to understand very well.

Koizumi may be a late convert to the anti-nuclear movement, but he remains popular, persuasive and, on this issue, absolutely right. Prime Minister Shinzo Abe might get some reactors back online in 2014, but he risks a powerful popular backlash because people are not ignoring the lessons of Fukushima. Koizumi is correct in saying that most politicians would go along with Abe if he stood up to the nuclear village and declared "Abenomics" meant tapping the green growth potential of smart, renewable energy. This is a sustainable and affordable low-carbon model that is far more suitable for Japan and developing nations than pricy nuclear reactors.

The old motto of the nuclear village — "safe, cheap and reliable" — now seems like a bad joke. It is hard to put a price tag on the overall consequences of the meltdowns at Fukushima and the ballooning costs of bailing out Tokyo Electric Power Co., but by some estimates it's $100 billion and rising. There are still more than 100,000 nuclear refugees driven from their homes by the catastrophe. In early November, the government finally acknowledged that many can never return to their ancestral homes. Local farmers and fishermen have a deep hole to climb out of to regain consumer trust, while tourism has been hammered

and faces tough prospects. Lingering stigma and health concerns are also exacting a stiff psychological toll on residents.

In the global lexicon, Fukushima is shorthand for nuclear disaster in much the same way as Chernobyl before it. It is indelibly tarnishing the Japan brand and will linger ominously despite Abe's reassurances that the situation is under control. It doesn't help that polls show that only 11 percent of Japanese believe Abe, and even Tokyo Gov. Naoki Inose has suggested that Abe mislead the International Olympic Committee. The lesson of Fukushima, Mr. Abe, is not the need for better public relations.

Problematically, Abenomics relies heavily on nuclear energy. Abe wants to restart domestic reactors in order to lower fuel imports and, at the same time, reassure potential overseas customers of Japan's nuclear plant and technology exports. It gets back to the unpersuasive argument that nuclear energy is cheap. It is relatively cheap but only if all the associated costs are excluded from calculations. But associated costs related to rigorous safety inspections, repair and maintenance (most utilities saved money on this by falsifying reports), temporary and permanent radioactive-waste disposal, safety upgrades, more comprehensive and continuous training of workers, evacuation drills and the decommissioning of reactors are backend costs that boost the sticker price substantially.

The Economist magazine, like Koizumi, recanted and in a special report on nuclear energy argues that it is not commercially viable. Politically, however, the nuclear village is well entrenched in Japan, as it controls the commanding heights of national energy policy. This explains why Tepco is on government-funded life-support at the taxpayers' expense.

Abe knows that Japan's 50 viable reactors represent a huge investment and the vested interests in the nuclear village need reactor restarts to recoup their investments and pay off loans. Influential investors and lenders are fighting bankruptcy for Tepco so they don't have to take a haircut. These vested interests are members of Keidanren, Japan's most influential business lobby group, and have much to lose if the plug is pulled on nuclear energy and are counting on Abe to fast-track restarts and save their bacon.

But Koizumi's awkward questions about Japan's lack of a plan for permanently storing vast stockpiles of highly radioactive nuclear waste can't be shrugged off; temporary sites are more than 70 percent full. Pro-nuclear advocates have a faith-based policy that something will eventually work out, but in the meantime we have a house without a toilet.

Are renewable energy sources the answer to Japan's costly nuclear nightmare? Nuclear proponents argue that renewables can't serve as a baseload source of continuous power like nuclear reactors (when not idled, as they often are for periodic safety checks). They also argue that solar and wind power are expensive and require vast amounts of space that make them unviable alternatives. Thermal plant advocates made similar arguments against nuclear reactors decades ago just as landline phone companies pooh-poohed the potential of mobile phones and skeptics were slow to wake up to the computer revolution.

It is time to move beyond nuclear energy, a flawed "miracle" technology of the 20th century, to 21st-century technology in renewables and radical efficiency improvements made possible by information and communications technology. And Japan is already doing so at breathtaking speed.

Since the introduction of a feed-in tariff system in July 2012 that provides incentives for investment in a range of renewable energies, Japan has brought online about three reactors' worth of renewable electricity generating capacity, mostly solar. Anyone driving around depopulating rural Japan understands space is not a major constraint, and indeed renewable energy initiatives offer declining communities a lifeline. Decentralizing Japan's power generation away from centralized nuclear plants prone to cascading disasters also enhances disaster resilience and explains why so many local communities are funding renewable initiatives. Innovations mean that Japan's largest solar farm is now floating off the coast of Kagoshima and floating platforms now enable Japan to tap its vast wind power potential.

But the grid has to be modernized to tap the potential of renewables, and legislation now under consideration in the Diet might hasten the process by breaking up the utilities' current monopoly and decoupling electricity generation from distribution. The key is spreading smart-grid technologies essential to managing intermittent sources of energy and reducing energy consumption, an area where Japan is a world leader.

Andrew DeWit, a Rikkyo University energy policy specialist, notes that ongoing smart-city projects in Kitakyushu and Yokohama demonstrate the vast potential of information and communications technology. Major Japanese companies such as Panasonic, Toshiba, Mitsubishi, Mitsui and Hitachi are betting big on smart-city projects at home and targeting megacity projects around the globe. It's a huge potential market and Japan is well positioned to lead this green revolution. Japan is on the cusp of a breakthrough and, instead of squandering more money on nuclear power in an archipelago prone to major seismic events, it should incentivize investments in green technologies that offer enormous potential and greater disaster resilience. Koizumi reminds us what bold leadership looks like.

Atomic Energy Commission : What change?

December 5, 2013

Gov't to retain nuclear power promotion organization

http://mainichi.jp/english/english/newsselect/news/20131205p2a00m0na011000c.html

The government is likely to retain an organization to promote atomic energy despite calls to end Japan's reliance on nuclear power following the outbreak of the Fukushima nuclear crisis in 2011.

A government panel of experts released a report on Dec. 5, recommending either that the Atomic Energy Commission (AEC) of the Cabinet Office be retained after its organization is downscaled or that a new body to replace the AEC be set up.

Specifically, the report states that the reformed AEC or a new organization should work on the peaceful use of atomic power and nuclear non-proliferation as well as the disposal of radioactive waste including the nuclear fuel cycle project -- in which spent nuclear fuel is processed and reused. The AEC has so far played these roles.

Established in 1956 as the "command post" of Japan's nuclear energy policy, the AEC has drawn up a framework for the country's nuclear energy policy almost every five years, making calls to put fast-breeder reactors into practical use and to reprocess spent nuclear fuel.

The 2005 framework calls for an increase in the ratio of nuclear power to the total electric power consumed in Japan to 30 to 40 percent and to put fast-breeder reactors into practical use in 2050.

Since the March 2011 outbreak of the crisis at the tsunami-hit Fukushima No. 1 Nuclear Power Plant, however, panel members have discussed how to reform the AEC, including its abolition.

The panel has decided to abolish the atomic policy framework and instead recommended that the basic direction of Japan's nuclear policy be shown in the basic energy policy that the government is currently revising.

However, a majority of experts on the panel call for the retention of a nuclear energy promotion organization because the AEC has played an important role in Japan's atomic energy policy.

December 05, 2013(Mainichi Japan)

Role of Atomic Energy Commission to be changed

http://www3.nhk.or.jp/nhkworld/english/news/20131205_31.html

An expert panel reviewing the Japanese government's Atomic Energy Commission is set to recommend that it redefine its role in promoting the use of nuclear energy.

The 2011 Fukushima nuclear disaster prompted the review of the role played by the commission for more than 50 years. The panel agreed this year that the commission should no longer set the country's nuclear policy.

The panel on Thursday compiled a draft set of recommendations, including that the number of commissioners be cut from the current 5 to 3.

The draft says that to ensure the commission's neutrality, its secretariat should not accept employees on loan from power utilities or nuclear plant makers. It recommends using personnel from universities and research institutes.

It also says the commission should handle limited tasks that require cross-ministry efforts, such as disposal of radioactive waste.

It also recommends that the commission confirm that nuclear technology is used only for peaceful purposes such as power generation and research.

The panel is expected to finalize its recommendations next Tuesday.

Nukes will remain "important" in Japan, says Gov't

December 6, 2013

Motegi: Govt. to abandon nuclear-free energy plan
http://www3.nhk.or.jp/nhkworld/english/news/20131206_29.html

Japan's economy and industry minister, Toshimitsu Motegi, has repeated his view that the government plans to end the nuclear-free energy policy to maintain nuclear power generation.

Motegi told reporters on Friday about the government's draft of Japan's basic energy policy that will be submitted to a ministry panel later in the day.

The draft states that nuclear power generation is an important "base" source of electricity. The term refers to a power source capable of stably supplying a set amount of electricity.

Motegi said he understands that a debate is underway to continue nuclear power generation on the condition that the safety of power plants is ensured.

He added that this method of power generation allows the steady supply of electricity at a lower cost and without aggravating climate change.

Motegi said the government aims to compile a feasible, balanced and responsible energy plan as part of its efforts to review the contradictory energy policies of the past.

The remark implies that the government will reverse the energy policy of the previous Democratic government that seeks to end nuclear power generation in the 2030s.

Motegi also announced that the government will earmark funds worth about 470 million dollars in the current fiscal year's supplementary budget to deal with contaminated wastewater leaks and accelerate the decommissioning of the crippled Fukushima Daiichi nuclear plant.
Dec. 6, 2013 - Updated 04:33 UTC

New energy plan calls nuclear generation important

http://www3.nhk.or.jp/nhkworld/english/news/20131205_44.html

A draft of Japan's basic energy policy that government officials are composing calls nuclear power generation an important "base" source of electric energy.

The term refers to a power source capable of supplying a set amount of electricity stably.

Its inclusion in the draft appears to signal a major shift in Japan's energy policy under the administration of Prime Minister Shinzo Abe.

A policy drawn up last year by the government of the Democratic Party aimed to end nuclear power generation in the 2030s.

That policy also said Japan would not build any more reactors. The new draft policy is likely to drop these goals.

Government officials say the plan will not specify the percentages of different energy sources in the overall supply due to uncertainties about when nuclear reactors could go back online.

The government hopes to finalize the plan early next year.

December 6, 2013

Japan to say nuclear power is 'important' in draft energy plan

Kyodo

The Abe administration plans to say in a draft of the national medium-term energy plan that nuclear power should continue to be "important" in supplying electricity despite the Fukushima nuclear crisis, sources said.

The draft was to be presented Friday to a meeting of a panel tasked with compiling the so Basic Energy Plan before the end of December. The plan will become official after securing Cabinet approval, possibly early in the new year.

According to the sources, the draft will say nuclear power should be seen as an "important source of electricity," because relying too much on thermal power generation would mean having to import more fuel and damaging the trade balance.

Concerns also remain over being highly dependent on Middle East countries for fossil fuel, given the region's political instability.

Because it is unclear how many reactors will pass the stricter safety requirements compiled after the Fukushima catastrophe, the draft will not provide a concrete percentage for nuclear power's role in the medium-term.

The draft will, however, say the nation will try to reduce its reliance on nuclear power in the future by introducing more renewable sources and promoting highly efficient thermal power generation.

It also include a policy change on the method for selecting the final disposal site for high-level radioactive waste, a long-running problem.

The government is now seeking to choose candidate sites across Japan that are suitable for building a disposal facility, rather than waiting for local governments to step to the plate.

The previous Basic Energy Plan compiled in 2010 aimed to boost reliance on nuclear power to some 50 percent of the nation's energy needs in 2030 from around 30 percent.

After Fukushima, the previous administration led by the Democratic Party of Japan decided on an energy strategy aimed at phasing out nuclear power by the 2030s.

But it did not go so far as revising the Basic Energy Plan that was expected to stipulate detailed measures to achieve that strategy's goal.

Nuclear power there to stay...

December 6, 2013

Govt. to keep nuclear power as base source

http://www3.nhk.or.jp/nhkworld/english/news/20131206_48.html

Japanese government officials have drafted a basic energy policy designed to keep nuclear power generation as an important base source of electricity.

The draft presented on Friday to an industry ministry energy policy panel says Japan must reduce its reliance on nuclear power as much as possible.

But it also says the country will continue nuclear power generation if power plant safety is ensured. It

says the method produces a steady electricity supply at a low cost without worsening climate change.

The plan marks a major shift from a policy drawn up last year by the Democratic Party government aimed at ending nuclear power generation in the 2030s. It also called for a halt to building reactors.

The new draft does not mention any plan to build or rebuild nuclear power plants.

On renewable energy sources, the draft says Japan aims to promote renewable energy sources as promising domestic resources for the next 3 years or so.

The government plans to get the new policy approved by Cabinet early next year.
Dec. 6, 2013 - Updated 10:45 UTC

Back to square one: Nukes "important and fundamental"

December 13, 2013

Energy plan revised for nuclear emphasis

METI champions atomic power by blaming high electricity prices
http://www.japantimes.co.jp/news/2013/12/13/business/energy-plan-revised-for-nuclear-emphasis/#.Uqt0gyfij9k

Kyodo

The Ministry of Economy, Trade and Industry has redrafted the nation's national long-term energy plan by adding words that place more emphasis on nuclear power, it was learned Friday.

Nuclear power is an "important base-load power source that serves as a foundation" for the stability of Japan's energy supply, the new draft says. The previous version just said it is an "important base-load power source."

Base-load power refers to sources of electricity that are cheap, stable and usable on a continuous basis.

The ministry is expected to present the revised draft to a panel tasked with devising the Basic Energy Plan. The panel is likely to endorse the draft because many of its members are supportive of nuclear power despite the weaknesses in handling it that were laid bare by the triple core meltdowns at the Fukushima No. 1 power plant in 2011, which was termed a "man-made disaster" that has cost trillions in damage and will cost trillions more in compensation, decontamination and cleanup.

The revised draft also promotes the reactivation of the reactors since idled by writing in detail about the negative impact of rising electricity prices driven by the growing cost of importing fuel for thermal power generation to offset the loss of atomic power.

Japan's imports of liquefied natural gas jumped to ¥6 trillion in 2012 compared with ¥3.5 trillion in 2010. The economy also logged its first annual trade deficit in 31 years in 2011.

The revised draft states that higher electricity rates are causing companies to transfer production abroad and that some have been forced to go out of business. But it doesn't discuss the government's hamstrung effort to expose Japan's regional power monopolies to real competition and liberalize the electricity market to welcome generators of renewable energy. New entrants only accounted for about 3.6 percent of the power sold to large-lot clients in fiscal 2011 as legacy generators charged them exorbitant fees for using the existing power grid.

The government is legally required to review the Basic Energy Plan at least every three years by taking into consideration changes in the energy situation. The 2010 plan aimed to boost Japan's reliance on nuclear power to some 50 percent of its energy needs in 2030 from around 30 percent — the assumed level before the Fukushima catastrophe.

Last year, the government led by the Democratic Party of Japan, now the main opposition party, decided on what it called an "energy strategy" of aiming to phase out nuclear power, but the content raised hackles, and the government didn't go so far as revising the 2010 Basic Energy Plan that was expected to stipulate detailed measures to bring the strategy to fruition.

Coal, LNG use hits record

BLOOMBERG

The regional power companies burned a record amount of coal and liquefied natural gas for November as they relied on the fossil fuels to make up for lost output from offline nuclear reactors.

The 10 electricity utilities increased their use of LNG by 1.9 percent to 4.6 million metric tons, the biggest volume ever for a November, according to data from the Federation of Electric Power Companies.

Coal consumption climbed 20.5 percent to 4.78 million tons, a record for the month, according to the industry group, which started compiling the data in 1972.

All 50 of Japan's reactors are shut pending safety reviews by the Nuclear Regulation Authority. With no dates set for restarting the units, utilities will need to rely on thermal power to meet electricity demand.

Nuclear energy accounted for 29.2 percent of all electricity in Japan in the fiscal year that ended March in 2010, before the Fukushima nuclear crisis led to the shutdown of all reactors. Power plants using LNG, coal and crude provided more than 60 percent, the Ministry of Economy, Trade and Industry said in an annual report published in June 2010.

Last fiscal year, atomic power generated about 2 percent of the country's total electricity, according to METI data.

The utilities, consisting of the 10 regional monopolies, generated 54.15 billion kilowatt-hours of electricity using thermal power in November, up 2.1 percent from a year earlier, the industry group said in a statement Friday.

The firms had no output from nuclear stations after Kansai Electric Power Co. shut two reactors at its Oi plant in Fukui Prefecture in September for maintenance.

December 13, 2013
Japan should embrace nuclear power, government panel says

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201312130094

REUTERS

Japan should embrace nuclear power as an "important and fundamental" energy source, a government panel said on Dec. 13, in advice that looks almost certain to be accepted, despite widespread anti-nuclear feeling after the Fukushima disaster.

Prime Minister Shinzo Abe is keen to restart Japan's idled nuclear reactors to cut the cost of fossil fuel imports used by power stations, which have swelled the trade deficit to a record and driven up electricity prices.

The recommendation, if adopted, could put atomic power back into Japan's energy mix after the previous government decided to abandon it following triple meltdowns at the Fukushima No. 1 nuclear power plant north of Tokyo, the world's worst nuclear disaster since Chernobyl in 1986.

"Nuclear energy is an important and fundamental base energy source that will support the stability of energy demand and supply," the panel wrote in its report, adding that securing safety was paramount in utilizing atomic power.

There was no recommendation on the proportion of energy that should come from nuclear power.

The panel is headed by Akio Mimura, honorary chairman of Nippon Steel & Sumitomo Metal Corp, Japan's largest steel maker and one of its heaviest electricity users.

The Fukushima disaster highlighted regulatory shortcomings and lack of preparation in an industry long cosseted by Abe's Liberal Democratic Party, which swept back to power a year ago.

The panel also said Japan should publicize information on safety measures taken after the disaster, its new regulatory standards and the economics of nuclear power.

The crisis led to the gradual shutdown of all Japan's nuclear reactors. They remain idled, while a new, more independent regulator assesses their ability to withstand natural disasters, such as the earthquake and tsunami that wrecked the Fukushima nuclear plant.

The previous Democratic Party of Japan government had accepted a recommendation from a similar panel to abandon nuclear power sometime in the 2030s.

Opposition to atomic energy remains high and all of Japan's political parties, including the LDP's coalition partner, oppose nuclear power, which provided about 30 percent of electricity before the Fukushima disaster in 2011.

Prior to the disaster the government had envisaged increasing the contribution of nuclear energy to 50 percent.

Nuclear - A pact with the devil

December 17, 2013

Making a nuclear pact with the devil

http://mainichi.jp/english/english/perspectives/news/20131217p2a00m0na009000c.html

Is the government hurtling toward post-war national policy on nuclear power? I actually think it's having second thoughts, like Faust in the face of the Mephistopheles's temptations: "Come on, nuclear power is easy. Just take it."

A report compiled earlier this month by a subcommittee of the Ministry of Economy, Trade and Industry's Advisory Committee for Natural Resources and Energy on the government's three-year energy plan stated that nuclear power was an important base-load electricity source. Meanwhile, the report also said that Japan would reduce its reliance on nuclear power as much as possible.

The report has been criticized as a regressive step from the Democratic Party of Japan (DPJ) administration's plan for zero nuclear power. However, the recent report is much more cautious than the 2010 basic energy plan compiled prior to the March 2011 disasters, when Japan was still drunk on the nuclear renaissance.

Take, for example, the painstaking choice of the phrase "base-load electricity source." This means that the committee sees nuclear power as a power source necessary for the stable supply of electricity, and carries the nuance that we are resigned to using it in order to avoid blackouts.

Compare this to the basic plan laid out three years ago, which called nuclear power a core energy source, and said the government would promote it with enthusiasm.

The theme of the German legend "Faust" is the making of a deal with the devil. Faust trades in happiness in the next life for pleasure in the present. If we substitute the next life in "Faust" with the happiness of our children and grandchildren, the nuclear dilemma is the same as the dilemma faced by Faust.

Nuclear power may guarantee ample electricity and economic activity, but a disaster could rob people of their land and cause genetic damage. Even without a disaster, nuclear reactors continue to produce extremely toxic radioactive waste for which we have yet to develop the technology to control, and that future generations must contend with.

I was reminded of Faust upon reading the contents of a lecture given by the economist Sadakazu Chikaraishi immediately after the March 11, 2011 triple disasters.

"We should no longer increase our energy consumption, utilize oil and natural gas on a small and long-term scale, and commit 100 percent to the development of green energy," he said. "It's ridiculous to make a Faustian pact and rely on nuclear energy."

Chikaraishi, 87, had provided theoretical support to the All-Japan Federation of Students' Self-Governing Associations (Zengakuren) in its early stages, soon after World War II. He studied in what is today Kyoto University's humanities department, where he was exposed to German literature, and the faculty of economics at the University of Tokyo. I still remember his smile as a popular host of an NHK television program on economics in the 1970s.

The professor emeritus of Hosei University, who is spending his retirement in Zushi, Kanagawa Prefecture, sent me a copy of the speech he made at his alma mater. Surprisingly, his argument in the speech is almost exactly the same as the one he made in an article in the May 1977 issue of the monthly journal "Sekai" (The World).

How did Chikaraishi have such insight back in 1977, when neither the Chernobyl disaster nor the Three Mile Island accident had yet to take place? When I met him to ask this question, I noticed that his smile had not changed over the years.

"Contemporary technology merely combines the laws of physics and chemistry in an excessive pursuit of convenience, speed, and economizing. Environmental biology is ignored. Nuclear power is a classic example. Even though the technology is incomplete, it has been promoted with the idea that 'we'll figure it out sooner or later,' which goes against the principles of technology assessment. We have to shift our selection of technology toward that which is ecologically sound."

The social structural reforms associated with such a shift in technological selection are difficult. There are bound to be countless views on such potential change.

However, we've had enough of the "we'll figure it out soon" line of thinking of his country's pro-nuclear advocates. In October, operations of the Rokkasho Nuclear Fuel Reprocessing Facility in Aomori Prefecture were postponed for the 20th time. Even the U.S. and France have abandoned their fast-breeder nuclear reactor programs. When is Japan going to wake up? (By Takao Yamada, Expert Senior Writer)

Democratic Party & gov't energy policy

December 18, 2013

Democratic Party criticizes govt.'s energy policy
http://www3.nhk.or.jp/nhkworld/english/news/20131217_46.html

Members of the opposition Democratic Party have harshly criticized a government draft energy policy designed to retain nuclear energy as an important basic source of electricity.

The government's draft policy presented earlier this month says Japan will continue to utilize nuclear power generation if plant safety can be ensured, in order to secure a steady supply of low-cost electricity, without worsening climate change.

At a meeting on Tuesday, many Democratic Party members in charge of energy policy criticized the government's draft.

One member said it is irresponsible to restart nuclear reactors while there is nowhere to dispose of high-level nuclear waste.

Another said nuclear power is not low-cost energy, if the costs of decommissioning reactors and compensation after nuclear disasters are taken into account.

The members hope to wrap up their energy proposal in line with their party's policy of aiming to end nuclear power generation by the 2030s.

They will present the proposal at the party's convention in February.

The Nagasaki view

December 23, 2013

Japan anti-nuke stance to reflect Nagasaki view

http://www3.nhk.or.jp/nhkworld/english/news/20131223_08.html
Japan's Foreign Minister says he will reflect the views of the atomic-bombed city of Nagasaki in the government's efforts toward nuclear arms reduction.

Fumio Kishida is scheduled to give a lecture on nuclear disarmament at Nagasaki University on January 20th.

He plans to say the government's first aim is to achieve a reduction in the number of nuclear weapons so

that it can promote nuclear disarmament in a realistic manner, while Japan remains under the US nuclear umbrella.

Kishida also plans to explain that as the only atomic bombed country, Japan will continue to stress the horror of nuclear weapons.

The foreign minister says he hopes for a frank exchange with audiences so their views can be included in the government's efforts toward nuclear arms reduction.

In October, Japan for the first time signed up to a UN committee statement saying nuclear weapons should never be used under any circumstances.

The government plans to hold an international conference on disarmament and nuclear non-proliferation next April, in the country's other atomic-bombed city of Hiroshima.

Q & As on Japan's energy plan

December 22, 2013

News Navigator: What are the key points of the new basic energy plan?

http://mainichi.jp/english/english/perspectives/news/20131222p2a00m0na002000c.html
The Mainichi answers some common questions readers may have about the key points of Japan's long-term energy plan, a draft of which was recently approved by a government panel.

Question: The country's new energy policy has been firmed up, hasn't it?

Answer: You are talking about the Basic Energy Plan, aren't you? Resource-poor Japan drew it up for the first time in 2003 as its medium- to long-term program to secure a stable energy supply. The government reviews it every three years in principle. The basic plan lays out targets for improving energy self-sufficiency through nuclear and solar power generation, promoting resource development, and reducing greenhouse gas emissions, among other measures. The targets are nonbinding, but they serve as key guidelines for businesses to decide which energy sectors they should place priority on for their investments. The draft basic plan was approved on Dec. 13. The new Basic Energy Plan is expected to be formally approved by the Cabinet as early as next January.

Q: What are the key points of the basic plan?

A: The biggest point is where the country's nuclear policy will stand. The draft basic plan lists nuclear power as an "important base-load electricity source," setting out a government policy of maintaining nuclear power on a certain scale. The plan paves the way for building new nuclear power stations or rebuilding existing ones.

Q: That is quite different from the policy adopted by the previous government led by the Democratic Party of Japan (DPJ), isn't it?

A: The DPJ-led government, which had initially planned to proactively use nuclear power under its policy of combating greenhouse gas emissions, worked out a basic energy plan in June 2010, which would boost the ratio of power generated by nuclear reactors to the total electricity produced in the country to at least 50 percent by 2030. But in September, 2012 in the wake of the outbreak of the Fukushima nuclear crisis, the government shelved the basic plan and instead drew up the Innovative Strategy for Energy and the Environment, which called for a "zero nuclear" policy. But the strategy itself is different from the basic plan, and therefore it was not approved by the Cabinet.

Prime Minister Shinzo Abe's government, weighing economic growth, reviewed the "zero-nuclear policy." Many members of an advisory panel of the Ministry of Economy, Trade and Industry were replaced in March this year by those complying with views of the ruling Liberal Democratic Party (LDP). The new panel members have been discussing a new basic energy plan in the direction toward endorsing the use of nuclear power. Therefore, attention is being focused on to what extent the nuclear policy will be reversed.

Q: What will be the ratio of nuclear power to Japan's overall electricity supply?

A: Although nuclear reactors, that are currently offline, must pass the Nuclear Regulation Authority (NRA)'s safety checks in order to be restarted, it still remains unclear which reactors will actually pass the screening. Because of all this, the government will unlikely be able to set the target ratio for the time being of power generated by nuclear reactors to the total electricity produced in the country as previously planned. Some NRA members argue that it is "irresponsible" not to show the ratio. (Answers by Wataru Okubo, Tokyo Economic News Department)

Toshiba in UK nukes

December 24, 2013

Toshiba gets 50% stake in UK nuclear consortium
http://www3.nhk.or.jp/nhkworld/english/news/20131224_13.html

A major Japanese electronics firm, Toshiba, has decided to buy a 50 percent stake in a British consortium. The conglomerate plans to construct a nuclear power plant.

Spanish utility Iberdrola made the announcement on Monday. The utility had a 50 percent stake in the British outfit NuGeneration.

Toshiba agreed to buy all of Iberdrola's 50 percent stake in NuGeneration. The deal is worth 85 million pounds, or about 139 million dollars.

The British company plans to construct a 3.6-gigawatt nuclear plant in Sellafield, England, on the coast of the Irish Sea.

Toshiba wants to expand its nuclear construction business overseas due to uncertainty in the domestic market.

Rival Japanese firm Hitachi last year acquired a utility that plans to build up to 6 nuclear reactors in Britain.
Dec. 24, 2013 - Updated 01:43 UTC

Nukes as "transitional" option

December 30, 2013
LDP group seeks semantic solution to energy revamp
http://www.japantimes.co.jp/news/2013/12/30/national/ldp-group-seeks-semantic-solution-to-energy-revamp/#.UsHa27T8nIU

Kyodo

A group of lawmakers from the Liberal Democratic Party seeking to phase out nuclear power has compiled a proposal for drastically revising the nation’s basic energy plan that is to be approved by the Cabinet in January, according to sources close to the group.

While the current draft version of the energy plan says nuclear power is an important power source that serves as a foundation for a stable energy supply, the group’s proposal would describe nuclear power as a “transitional” energy source, the sources said.

The group, led by Deputy Secretary-General Taro Kono, also wants the Abe administration to present a road map for lowering dependence on nuclear power in line with an LDP campaign pledge in the general election last year.

How will energy demand be met in 2014?

December 31, 2013

Energy rivals to face eased demand

Reactor restarts sought but OKs no given; LNG, coal also figure

by Eric Johnston
Staff Writer
http://www.japantimes.co.jp/news/2013/12/31/national/energy-rivals-to-face-eased-demand/#.UsMkOLTrXIU

Even as new renewable energy projects come online and changes in the law designed to increase competition and use power generated from all sources more efficiently start to come into effect this year, predictions for the nation's energy landscape show total energy consumption slightly down.

However, the real issue is how many idled nuclear reactors will be restarted in 2014. At present, the nation's 50 viable reactors are offline, a legacy of the Fukushima meltdown calamity that started on March 11, 2011.

The economic impact such restarts will have, regardless of whether nuclear energy will still be cost-competitive with liquefied natural gas, which Japan is pushing to increase, and, most importantly, what will happen to the atomic waste the restarted reactors generate, are all questions that must be addressed in the coming months.

The Institute of Energy Economics, Japan noted in mid-December that projections on how many reactors are in operation by the March 31, 2015, end of fiscal 2014 depend on how long the Nuclear Regulation Authority takes to inspect candidate units under new safety rules that took effect in July.

It is assumed that it will take nine months to inspect and actually put a reactor back online. This includes time required for gaining local government consent for the restart. Officially, local approval is not required, but it has always been sought. To break that precedent would create political problems for both the central government and the utilities.

"This (nine-month scenario) would result in no nuclear power plant restarts within this fiscal year, which ends in April 2014," the IEEJ said

.

However, if the NRA assessment and approval period took six months, the IEEJ predicts 16 reactors could be restarted and operating for an average of seven months in fiscal 2014.

On the other hand, an inspection and approval period of a year means only six reactors would be operating by the end of fiscal 2014. If there was an increase in the number of NRA inspection staff from April, and a smooth restart application process by the utilities, the time could be shortened to the point where the IEEJ sees 22 restarted and operating for an average of eight months during fiscal 2014.

Compared with 2010, the last year nuclear plants were running, the additional cost of importing fossil fuels in 2014 to replace atomic power is expected to be ¥7.3 trillion, according to the IEEJ.

Restarting 22 reactors will save ¥2.4 trillion. But the IEEJ also predicts the restarted units would not be generating electricity at the 2010 cost of ¥8.2 per kilowatt-hour. If 16 reactors were restarted, the cost would be ¥11.4/kwh, which is more expensive than generating power from some fossil fuels.

The IEEJ prediction is comprehensive. But it assumes the NRA will not reject most applications. Nor does it address either long-term issues related to nuclear power that are rapidly becoming short-term issues, or questions about costs that are more political than economic.

Restarting reactors in 2014 may mean more electricity. But it also means Japan will have to quickly address a fundamental problem that nobody has an answer for, which is what to do with the spent nuclear fuel.

Nationwide, spent fuel pools at 17 reactor sites are about 70 percent full on average. The spent fuel pools at 33 of the remaining 50 reactors will be completely full within six years if those reactors are restarted and run at pre-3/11 levels. Another 14 reactors could see their spent fuel pools fill up within a dozen years.

“In order to restore public trust in nuclear power, it’s critical that Japan address the issue of what to do with its spent fuel, of which 17,335 tons was in storage as of September,” said Tasujiro Suzuki, vice chairman of the Japan Atomic Energy Commission.

The Rokkasho reprocessing plant in Aomori Prefecture was supposed to recycle spent fuel, and there are still hopes it will finally open next fall. But the NRA is reviewing the Rokkasho construction plan to ensure it meets the new earthquake safety standards and it is unclear what or when its final decision will be.

Unknown variables such as the intensity of local opposition to a restart and local government heads demanding that Tokyo first guarantee funding for their pet projects before granting approval will also determine the timing of any restart.

Assuming 16 reactors will be restarted, the IEEJ predicts a slight increase in natural gas and coal imports but an 8.8 percent decrease in oil exports for 2014, and a slight total decrease in total energy consumption. Domestic demand for natural gas is forecast to reach 91.1 million tons in fiscal 2014. That's 1 percent higher than the expected 90.2 million tons for fiscal 2013.

To meet domestic energy demand, two new coal plants with a total capacity of 1,600 megawatts are due to begin operation soon, while 2014 and 2015 will see 14 new gas-fired plants coming online that will consume about 5.8 million tons of LNG annually.

Six utilities have already raised electricity bills between 6 and nearly 10 percent for certain customers. Price hikes due to external factors, a colder than predicted winter or a hotter than predicted summer, could also affect utility bills in 2014. At the same time, the April sales tax hike to 8 percent may curb some energy use.

Renewable energy, solar in particular, made great gains in 2013, a year after a feed-in tariff was introduced, and increased capacity is expected for 2014. Operating capacity of renewable energy is predicted to reach 36.6 gigawatts by the end of fiscal 2014, an increase of 6.8 gigawatts over this year.

This year will see Japan's largest mega-solar power plant open in Oita Prefecture. Built by Marubeni, the 81.5 megawatt plant, big enough to supply about 30,000 homes, will sell power to Kyushu Electric. The Oita plant follows a 70 megawatt mega-solar plant that went online in November with enough power to supply about 70,000 homes within the prefecture. In July, a joint solar park operated by Mitsui & Co. Ltd. and SB Energy Corp., a subsidiary of SoftBank, will open in Osaka, providing about 19.6 megawatts, enough for 5,700 homes.

Due to land issues, grid connection costs, a lack of financial incentives, political opposition locally and in Tokyo, by the nuclear power lobby, the future of new mega-solar parks after 2014 is uncertain.

On the other hand, this year is likely to be one of anticipation for new firms looking ahead to changes in the law that are designed to liberalize the nation's power market between 2015 and 2020 in three phases. Last April, Prime Minister Shinzo Abe's Cabinet approved electricity reform that included expanding the operation of wide-area electrical grids, fully liberalizing the retail market for power generation, and legally separating the power transmission and distribution networks at the utilities.

In November, the law was revised to meet the goals of the first phase, which begins in 2014 and includes establishing a new authorized entity to monitor the state of national electricity supply and demand and to order utilities to supply power when demand is tight. It is also supposed to arrange for renewable energy generation, which can vary greatly, to be distributed more widely and effectively.

Turning back to Nuclear Power (NHK video)

December 26, 2013

http://www3.nhk.or.jp/nhkworld/newsline/201312261107.html

Japan should play leading role in global nuclear disarmament

January 4, 2013

Japan expected to lead nuclear disarmament
http://www3.nhk.or.jp/nhkworld/english/news/20140105_02.html

Japan is expected to come under pressure from the international community this year to play a leading role in the push for nuclear disarmament.

Government officials recently made the historic decision to commit Japan to a United Nations statement that opposes the use of nuclear weapons under any circumstances.

Previously they said this policy was incompatible with the country's reliance on the US nuclear umbrella.

The UN statement came amid arguments between countries that want a treaty banning atomic weapons, and those favoring a more gradual approach that allows for nuclear deterrence.

An international conference in Mexico next month will study the humanitarian impact of a nuclear attack.

Japan also plans to host an international conference in April to discuss nuclear disarmament. The meeting of foreign ministers from countries that do not possess nuclear arms will take place in Hiroshima, the site of a nuclear attack in World War Two.

Meiji Gakuin University Professor Takao Takahara says the international community hopes Japan, the only country to have suffered atomic bombings, will play an active role in global nuclear disarmament.

India, Turkey: Nuclear pacts

January 7, 2013
New Komeito seeks nuclear pact with India

http://www3.nhk.or.jp/nhkworld/english/news/20140107_14.html

The head of the junior party in Japan's governing coalition is hoping to hasten the conclusion of a nuclear pact with India.

New Komeito chief Natsuo Yamaguchi, met with Indian Foreign Minister Salman Khurshid in New Delhi on Monday.

He said the Japanese public is very sensitive about nuclear power, due to the atomic bombings of Hiroshima and Nagasaki, as well as the Fukushima accident.

So he said the pact, which would allow Japan to export nuclear power technology to India, must be advanced with the understanding of the public.

Yamaguchi said his party has no major differences with its coalition partner, the Liberal Democratic Party, and that he hopes for flexibility in working-level talks.

Khurshid commented on the controversial visit to the war-related Yasukuni Shrine in Tokyo by Prime Minister Shinzo Abe. He noted that it is best to learn from the past and go forward.

Yamaguchi replied that Japan must humbly accept the concerns expressed about the visit by not only China and South Korea, but by the US, Russia and EU countries as well.

He said Prime Minister Abe must better explain Japan's position that it desires world peace and never start a war again.
Jan. 7, 2014 - Updated 02:43 UTC

Erdogan in Japan to discuss EPA and nuclear pact
http://www3.nhk.or.jp/nhkworld/english/news/20140107_19.html

Japan welcomed Turkish Prime Minister Recep Tayyip Erdogan with a ceremony at Tokyo's Akasaka palace on Tuesday.

Prime Minister Erdogan and Prime Minister Shinzo Abe received an honor guard salute. The Turkish prime minister was also greeted by Deputy Prime Minister Taro Aso and other Cabinet ministers.

A summit between Erdogan and Abe is scheduled for later on Tuesday. The leaders are to discuss opening bilateral talks for an economic partnership agreement.

They are also likely to confirm that the 2 sides will strive for the early implementation of a civil nuclear cooperation pact.

The pact would allow the export of Japanese nuclear technology to Turkey, where a Japanese-French consortium has won an order to build a nuclear plant.

The meeting will be the 3rd between the 2 premiers, following talks last May and October. Abe is apparently hoping to bolster ties with Turkey, whose economy is growing steadily.
Jan. 7, 2014 - Updated 03:38 UTC

Concerns about proliferation of nuclear weapons

January 7, 2014

Japan's energy pact with Turkey raises nuclear weapons concerns

http://ajw.asahi.com/article/behind_news/AJ201401070060

THE ASAHI SHIMBUN

A pact required for Japan's first nuclear plant export after the Fukushima disaster faces opposition over concerns about a possible proliferation of nuclear weapons.

Debate over the issue is expected when the government seeks Diet approval for the nuclear energy agreement with Turkey during a session that convenes this month.

Japan and Turkey agreed to conclude the nuclear energy pact, a precondition for exporting nuclear technology, in May. It requires the recipient country to use technology, as well as equipment and materials, only for peaceful purposes.

However, the pact includes a provision allowing Turkey to enrich uranium and extract plutonium, a potential material for nuclear weapons, from spent fuel if the two countries agree in writing. A senior Foreign Ministry official said the clause was added at the request of Turkey.

The agreement would also pave the way for exporting Japan's enrichment and spent nuclear fuel reprocessing technologies if revisions are made.

The provision has sparked criticism that it contradicts Japan's stance against nuclear weapons.

"There is a risk that (the government) accepts unreasonable demands in relation to projects sponsored by a prime minister," Shigeaki Koga, a former industry ministry bureaucrat, said.

A consortium that includes Mitsubishi Heavy Industries Ltd. won a contract to build four nuclear reactors in the Black Sea city of Sinop with strong backing from Prime Minister Shinzo Abe, who is pushing nuclear plant exports as part of his growth strategy.

Abe and his Turkish counterpart, Recep Tayyip Erdogan, met in Tokyo on Jan. 7. The two leaders discussed the project and overall atomic energy cooperation when Abe visited Turkey in May and October.

The Sinop project will be Japan's first nuclear plant export after the triple meltdown at the Fukushima No. 1 nuclear power plant triggered by the March 2011 Great East Japan Earthquake and tsunami.

The senior Foreign Ministry official stressed the need to swiftly conclude the pact with Turkey.

"(The agreement) will not be in time for the first reactor scheduled to start operations in 2023 unless it is approved by the Diet soon," the official said.

Although the opposition Democratic Party of Japan promoted nuclear plant exports when it was in power, some of its lawmakers, including those from areas affected by the Fukushima nuclear accident, are against the pact.

The Japan Restoration Party, another opposition party, has decided to oppose the agreement.

Even the foreign affairs division of Abe's ruling Liberal Democratic Party withheld its approval in October because some members said the provision on uranium enrichment and plutonium extraction will run counter to nuclear nonproliferation.

The LDP division gave its approval only after Foreign Minister Fumio Kishida offered reassurances in the Diet that Japan will not allow spent fuel reprocessing in Turkey.

Japan placed restrictions on enrichment and reprocessing in its nuclear energy agreements with Vietnam, South Korea, Jordan and Russia, which took effect in 2012.

The agreements with Vietnam and Jordan, as well as the pact with the United Arab Emirates, which has yet to be approved by the Diet, basically say enrichment and reprocessing will not be conducted in those countries.

Yuki Tanabe of the Japan Center for a Sustainable Environment and Society, a nonprofit organization, also pointed out a seismic risk in Turkey, where more than 17,000 people died in a major earthquake in 1999.

"Even if Japanese nuclear reactors are highly resistant to earthquakes, an accident could occur when facilities around them are damaged," Tanabe said.

Erdogan is trying to acquire nuclear and other technologies from abroad to promote economic growth, which has underpinned his more than 10-year-long administration.

It is important for Turkey, which aims to eventually build nuclear plants on its own, to win support from Japan not only on nuclear technology but also on human resources development.

Japan promised to set up a science and technology university in Turkey when Abe visited in May.

Turkey is also discussing a project with Japan to establish a joint venture between a local company and MHI to produce engines for tanks used by its military.

(This article was compiled from reports by Sachiko Miwa in Tokyo and Kazuyuki Kanai in Istanbul.)

Caution should be exercised before deciding on nuclear pacts

January 8, 2014

EDITORIAL: Urgent rethink needed on Japan-Turkey nuclear energy pact

http://ajw.asahi.com/article/views/editorial/AJ201401080039

Prime Minister Shinzo Abe met Jan. 7 with his Turkish counterpart Recep Tayyip Erdogan and confirmed that Japan would export its nuclear reactor technology to Turkey.

The export strategy is a pillar of the Abe administration's push for economic growth. In this matter, we urge caution for the simple reason that a serious accident at a plant exported by Japan could have ramifications far beyond the country in question. That could result in Japan being held accountable.

Moreover, how to store or permanently dispose of spent nuclear fuel is a matter of mounting international concern. But the Japan-Turkey nuclear energy pact addresses this only in vague terms.

Diet approval is necessary for the bilateral pact to take effect. Lawmakers of both the ruling and opposition parties would be well advised to get the Abe administration to rethink the pact. That, we believe, is their responsibility as members of the legislature.

The pact contains a provision that would enable Turkey to eventually enrich uranium and extract plutonium by reprocessing spent nuclear fuel. But this could be problematic because the technologies for uranium enrichment and plutonium extraction can lead to the production of nuclear weapons. In this matter, the international community has been acting with extreme caution.

But even after the bilateral nuclear energy pact takes effect, Turkey will not be able to go right ahead and reprocess spent nuclear fuel.

Foreign Minister Fumio Kishida assured the Diet during the previous session that Japan would not approve fuel reprocessing by Turkey.

But this was not spelled out in the bilateral pact, and the reported reason is that Japan complied with Turkey's request that "affirmative wording" be used. The Abe administration compromised, apparently because it wanted to conclude the pact as soon as possible to pave the way for exports of nuclear-related technology to Turkey.

Until recently, only a limited number of countries relied on nuclear power generation. But the reliance is now spreading among developing nations that suffer from energy shortages. And it is precisely these nations that Abe is targeting in his efforts to sell Japanese technology and hardware.

A number of these countries that are eager to have their own nuclear power plants are undemocratic or are in politically unstable regions. Great care needs to be exercised in selling nuclear energy technologies.

If too little thought is given, and countries can get away with dictating the terms of nuclear energy pacts, the world's already shaky framework of nuclear nonproliferation would be further destabilized.

It has been pointed out that there are limits to what the International Atomic Energy Agency can do, given its lack of the power to fully enforce its inspections.

Japan has failed to make its nuclear fuel recycling system a going concern. Japan's massive surplus plutonium, which has been stockpiled by entrusting fuel reprocessing to contractors overseas, has become a matter of global concern.

It is the Abe administration's responsibility to focus on resolving these problems at home and live up to its international obligations by working out how nuclear waste should be managed or disposed of.

Opposition parties in this country are against hasty exports of nuclear power plant technology and the Japan-Turkey nuclear energy pact. Even some members of the ruling Liberal Democratic Party are preaching caution.

We hope that both the ruling and opposition camps will work together to prove their mettle as responsible members of the legislature.
--The Asahi Shimbun, Jan. 8

Lack of coordination on nukes delays decision on new energy policy

January 11, 2013
Gov't to delay Cabinet decision on new energy policy
http://mainichi.jp/english/english/newsselect/news/20140111p2a00m0na010000c.html

The government will postpone a Cabinet decision on Japan's new basic energy policy to February or later due to a lack of coordination among ruling coalition members on nuclear power, and the Tokyo gubernatorial election that month, government sources said.

The decision came as members of the ruling Liberal Democratic Party (LDP) and its coalition partner New Komeito have failed to agree on a draft policy that would position atomic energy as a foundational power source to support a stable supply of energy. The decision also suggests the government is looking to put off setting energy policy until after the Feb. 9 Tokyo gubernatorial election as former Prime Minister Morihiro Hosokawa, an anti-nuclear power advocate, looks increasingly likely to enter the race.

Chief Cabinet Secretary Yoshihide Suga told a news conference on Jan. 10 that establishing a responsible energy policy needs thorough discussion, taking into account some 19,000 comments from the public on the matter. While Suga denied any relationship between the Cabinet decision delay and the Tokyo election, the government is likely to settle on an energy policy after the February race.

Meanwhile, Akira Amari, minister in charge of economic revitalization, commented, "I want the government to work on a basic policy that is applicable for 10 to 20 years. It is understandable that such an important plan takes time to form."

The government had initially planned to reach a Cabinet decision on the policy this month after reviewing the public's input. However, some LDP politicians, such as Deputy Secretary-General Taro Kono, are set to propose drastic changes in the draft policy, claiming that the draft is inconsistent with the party's manifesto for the 2012 House of Representatives election. That document stated the party will work to create a socio-economic structure that does not rely on nuclear power.

LDP policy chief Sanae Takaichi on Jan. 7 demanded that the government handle the matter carefully for fear that pro- and anti-nuclear power members of the party could clash head-on.
Meanwhile, New Komeito is not at all satisfied with the basic policy ideas, as the party has campaigned for a zero-nuclear power society in the future.
January 11, 2014(Mainichi Japan)

Tokyo governor race & nukes

Tokyo governor race wide open as former premiers join forces on anti-nuclear platform
Source : AFP
http://www.scmp.com/news/asia/article/1405380/tokyo-governor-race-wide-open-former-premiers-join-forces-anti-nuclear

Junichiro Koizumi announces backing for fellow ex-prime minister Morihiro Hosokawa as candidate in Tokyo poll focused on the future of Japan's nuclear power industry

PUBLISHED : Tuesday, 14 January, 2014, 3:33pm
UPDATED : Tuesday, 14 January, 2014, 3:33pm

Agence France-Presse in Tokyo

Japan's popular former prime minister Junichiro Koizumi said on Tuesday he was backing fellow ex-premier Morihiro Hosokawa in the race to become the next Tokyo governor, setting the stage for an electoral clash over nuclear power.

Hosokawa, who served in the nation's top job in 1993-4 as head of a now-defunct coalition, announced his independent candidacy and scored a ringing endorsement from the influential Koizumi, with the two men both playing up their anti-atomic stance.

"I have made my decision to run in the Tokyo governor election," Hosokawa said. "I have a sense of crisis myself that the country's various problems, especially the nuclear issue, are matters of survival for the country."

The move positions him as the main alternative to the candidate backed by current premier Shinzo Abe and his pro-business Liberal Democratic Party (LDP), which wants to restart the nation's mothballed nuclear power plants.

Japanese voters have become wary of nuclear power since the tsunami-sparked disaster at Fukushima began in March 2011, but the issue failed to materialise in the national polls that brought Abe to power, with his opponents' apparent haplessness neutralising their anti-nuclear stance.

Tokyo's governor oversees a budget of some US$60 billion and exercises control over the economic, political and cultural heart of Japan. The position is one of the most powerful roles in Japanese public life.

In addition to numerous powers to set policy, the Tokyo government is also a major shareholder in Tokyo Electric Power (Tepco), the operator of the Fukushima plant, as well as several other nuclear power stations.

An anti-nuclear governor could use this position to curb the utility's drive to re-start its shuttered reactors.

Koizumi, whose flamboyant style and luxurious head of hair made him a popular prime minister between 2001 and 2006, has become an anti-nuclear convert in recent years, putting him at odds with his status as an LDP grandee.

"I will work hard and actively for Mr Hosokawa's election," Koizumi told reporters.

"The election will be a battle between a group of people who say Japan cannot advance without nuclear power and another group of people who say Japan can."

Observers say with Koizumi's backing, Hosokawa, who celebrates his 76th birthday on Tuesday, is a serious challenger to the current favourite, former health minister Yoichi Masuzoe.

The post of Tokyo governor fell vacant last month when Naoki Inose stepped down in a money scandal after admitting he had been naive to accept an undeclared US$500,000 from a hospital tycoon.

Inose, 67, had been one of the main faces of Tokyo's successful bid to host the 2020 Olympics.

A former air defence force chief with outspoken nationalist views, an anti-nuclear liberal lawyer and others have already thrown their hats in the ring.

Candidates have to formally declare themselves during office hours on January 23, and the vote takes place on February 9.

No need to rush

January 14, 2014

Motegi: Basic energy policy won't be rushed

http://www3.nhk.or.jp/nhkworld/english/news/20140114_27.html

Japan's industry minister Toshimitsu Motegi says he doesn't want to rush the process of finalizing the government's new basic energy policy, which includes the future of nuclear power.

Speaking to reporters on Tuesday, Motegi indicated that parts of the ministry's draft need to be amended and Cabinet approval could be put off until next month. The ministry had aimed at gaining approval by the end of this month.

Motegi noted that the government has received more than 19,000 comments on energy policy from the public. He also said the ruling Liberal Democratic Party has given a questionnaire to its legislators.

Motegi said that opinions on nuclear power are greatly divided and more in-depth discussions are necessary, especially on how to ultimately dispose of nuclear waste.

Motegi disclosed that the new basic policy would not include specific plans on construction of new nuclear power plants.

Governor race causes political waves

January 15, 2014

Koizumi's support of Hosokawa in gubernatorial race creates political waves

http://mainichi.jp/english/english/perspectives/news/20140115p2a00m0na010000c.html

Former Prime Minister Junichiro Koizumi, who has been gathering public attention recently over his anti-nuclear stance, has thrown his full backing behind another former prime minister, Morihiro Hosokawa, as a candidate in next month's election to choose a new governor of Tokyo.

Public opinion is split over the restarting of nuclear reactors in Japan -- an issue that could end up taking the wind out of the sails of the robust-looking administration of Prime Minister Shinzo Abe. By declaring his intention to play a central role in the election, Koizumi has managed to garner support from across the political spectrum, as lawmakers look to form an anti-Abe element.

Koizumi's declaration of support for Hosokawa came after Abe's ruling Liberal Democratic Party (LDP) threw its backing behind former Health Minister Yoichi Masuzoe. The fact that Koizumi, a former major actor in the LDP, has confronted the current administration head-on has dealt a blow to the ruling party.

Elaborating on his position in a news conference to announce his support for Hosokawa, Koizumi, 72, spoke firmly.

"There is no election that could influence national politics as much as the upcoming Tokyo gubernatorial election," he stated. "It's a battle between the group that says, 'Japan can develop even without nuclear power,' and the one that says, 'Japan can't develop without nuclear power.'"

Koizumi earlier proved his strength in the 2005 election, as he moved to privatize Japan Post. Now he has simplified the election issues by drawing a line between supporters and opponents of nuclear power. At first the LDP had thought it would be easy to beat the 76-year-old Hosokawa, who could face a tougher job winning recognition from younger voters. But now Koizumi has entered the picture and declared that focus will be placed on eliminating nuclear power. Accordingly, the LDP's opponent has evolved into a Hosokawa-Koizumi alliance.

As Koizumi advances, the ruling LDP has at times remained steadfast and at other times been left on the back foot. In a news conference, Chief Cabinet Secretary Yoshihide Suga stated that it would be lying to say that Koizumi wouldn't have any effect on the party's election strategy, but he stressed that there would be no great effect. At a news conference in Kyoto, Natsuo Yamaguchi, leader of the LDP's coalition partner New Komeito, sided with the LDP, telling reporters that the elimination of nuclear power "is not what Tokyo residents are interested in."

However, aware of Koizumi's impact, some LDP members sense danger. One senior party member who served under Koizumi warned, "If Koizumi goes to the streets (to back Hosokawa), then it's all over. He'll be causing headaches for Prime Minister Shinzo Abe."

Another former prime minister, Yoshiro Mori, commented in a speech before Koizumi announced his support that Koizumi would probably hesitate to go up against Abe as he had raised Abe up in the political sphere like a younger brother. But Koizumi's latest move proved him wrong.

Koizumi's attack on nuclear power has seen the governing LDP waver over the fate of nuclear power plants in Japan. Economy, Trade and Industry Minister Toshimitsu Motegi explained at a news conference that the government's basic energy policy that currently aspires to maintain nuclear power would be revised to emphasize the introduction of renewable energy -- something Koizumi has called for. Meanwhile, a party caucus on energy policy that has been hesitant to promote nuclear power has gained momentum, with members confirming in a meeting on Jan. 14 that they would compile a recommendation to abolish nuclear power plants and the so-called nuclear fuel cycle in the future.

The opposition parties, which have been looking for a way to stand up against the ruling coalition, are happy to lean on Koizumi's popularity. On Jan. 14, the opposition Democratic Party of Japan (DPJ) decided to support Hosokawa in the gubernatorial election, though not officially. At the same time, members of the opposition Japan Restoration Party who hail from the Osaka Restoration Association and support the elimination of nuclear power are also poised to back Hosokawa.

Social Democratic Party leader Tadatomo Yoshida, who is supporting anti-nuclear candidate Kenji Utsunomiya, commented, "It would be desirable to unite the anti-nuclear candidates." However, even if anti-nuclear opinion is aligned, there exists no figure to take the reins, and with parties differing in their closeness to the current administration and their position on realignment of the government, many unknown elements lie on the road to forming an anti-Abe movement.

Masuzoe, meanwhile, is trying to avoid simplification of the election issues, raising topics such as the Olympic Games, disaster prevention, and the declining birth rate in addition to a declaration of an eventual departure from nuclear power. Masuzoe came out on top in an election survey prediction conducted by the LDP at the end of last year, but it is possible Hosokawa could win many votes from unaffiliated voters.

One LDP official commented, "There's nothing to do but to wage a thorough, organized election. If it turns into a 'Koizumi theater' and the voting rate goes up, then we've lost."

Nukes in the spotlight but not so for Fukushima evacuees

January 15, 2014
Editorial: Nuclear power a major point of contention in Tokyo gubernatorial race

http://mainichi.jp/english/english/perspectives/news/20140115p2a00m0na005000c.html

The issue of nuclear power has emerged as a major point of contention in the upcoming Tokyo gubernatorial race as former Prime Minister Morihiro Hosokawa announced on Jan. 14 that he will throw his hat in the ring on an anti-nuclear power platform.

Former Prime Minister Junichiro Koizumi, who has insisted that Japan should end its reliance on atomic power, has pledged to extend all-out support to 76-year-old Hosokawa. Former Health, Labor and Welfare Minister Yoichi Masuzoe, 65, has also affirmed his candidacy in the race, clashing head-on with Hosokawa. Others who intend to run include Kenji Utsunomiya, 67, former head of the Japan Federation of Bar Associations who also calls for the elimination of atomic power, and Toshio Tamogami, 65, former chief of staff at the Air Self-Defense Force.

The official campaign for the election kicks off on Jan. 23 and voters go to the polls on Feb. 9. Vote counting will start immediately after polling stations are closed.

Since the election will pick the leader of Japan's capital, candidates should have thorough debate on the nuclear power issue, which is a major theme in national politics. It is hoped that a variety of candidates will run in the election, heightening Tokyo voters' interest in the race and spurring policy discussions during the campaign.

Hosokawa, who had retired from politics, has been interested in the country's energy policy. When he declared his candidacy, the former prime minister said the issue of nuclear power will determine the fate of Japan. His alliance with Koizumi, who is skillful in dispatching messages that impress the public, will have a huge impact on his election campaign.

Critics argue that the nuclear power issue should not be a point of contention during the gubernatorial race, with some saying that it is not an issue suitable for a local election.

However, questions should be raised over such arguments. The election to pick the leader of the capital is not just one of ordinary local elections. It is of great significance to debate the pros and cons of the nuclear power policy in Tokyo, which consumes the largest amount of electrical power of all local bodies even though it does not host a single nuclear plant.

Despite the outbreak of the unprecedented disaster at the tsunami-ravaged Fukushima No. 1 Nuclear Power Plant, the nuclear power policy was not sufficiently debated in the two post-disaster national elections. This is because both the Liberal Democratic Party (LDP), which took over power after winning the December 2012 general election, and the Democratic Party of Japan (DPJ), which was in government at the time of the nuclear accident, were reluctant to make the issue a point of contention. The governor and the metropolitan assembly blocked a move to hold a local referendum in Tokyo on the pros and cons of restarting idled nuclear reactors.

The Tokyo Metropolitan Government is a major shareholder in Tokyo Electric Power Co. (TEPCO), the operator of the crippled nuclear power station. As Koizumi points out, the outcome of the election will have a huge impact on the direction of national politics. Tokyo, characterized by an excess concentration of the population, central government functions and industry, is the perfect place to debate the nuclear power issue as a major point of contention in elections

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In the campaign, Hosokawa should discuss specific energy policy, including power supply and the final disposal of spent nuclear fuel, rather than simply calling for the elimination of atomic power. His ability to convince Tokyo voters that the capital can do without nuclear power, just as Koizumi says, will be tested during the campaign.

Response to the aging of the population and measures to prevent powerful natural disasters from devastating the capital are also important issues during the gubernatorial race. The number of elderly people aged 75 or over will likely reach 2 million in Tokyo in 2025, and a magnitude-7 earthquake occurring directly beneath the metropolitan area is estimated to leave up to 23,000 people dead. Candidates should not disregard important issues other than nuclear power as they aim to take the helm of the capital's administration.

Major political parties have decided which candidates they will support even though they were initially swaying. The gubernatorial election should be an opportunity for the whole nation to think about challenges that Japan faces through discussion on policies that the capital should pursue.

January 15, 2014(Mainichi Japan)

Fukushima evacuees show tepid response to Tokyo gubernatorial candidates' nuclear policies

http://mainichi.jp/english/english/newsselect/news/20140115p2a00m0na012000c.html

Japan's nuclear power policy has come under the spotlight following former Prime Minister Morihiro Hosokawa's announcement of his candidacy in next month's gubernatorial race, but for many Fukushima Prefecture residents who have evacuated to Tokyo the race bears little meaning for them.

As of December last year 8,048 people who evacuated in the aftermath of the March 2011 Great East Japan Earthquake, tsunami, and ensuing nuclear disaster were living in the capital. Around 1,100 of them reside in Shinonome Jutaku, a residential complex for civil servants in the capital's Koto Ward. Most of these residents are from Fukushima Prefecture.
On Jan. 14, the day Hosokawa announced his intention to run in the gubernatorial election, around 20 elderly residents had a get-together. One of them intently read a Fukushima newspaper, but no one brought up the Tokyo race.

"I'm anxious because I don't know how long I'll have before I'm told to leave. If I had some reassurance that I could stay here a long time I could plan out my life, but as it is I can't even buy furniture," said evacuee Kozo Misawa, 71. His home is in Minamisoma, Fukushima Prefecture, near the crippled Fukushima No. 1 Nuclear Power Plant and within an area still under government evacuation orders.

Since the nuclear disaster, the Tokyo Metropolitan Government has been offering metropolitan government-managed housing and housing for civil servants free to disaster evacuees. In September last year it extended the original three-year accommodation period by another year. Shinonome Jutaku is considered "temporary housing" and could be subject to additional extensions, but for now residents are only assured they can stay through March next year.

What Misawa wants is stability in his life. He feels that Hosokawa's anti-nuclear stance is just a ploy to get votes.

"I wish he'd first focus on the many other issues (like how to support evacuees)," says Misawa.

A 38-year-old woman who evacuated with her husband and child is similarly worried about how long she can stay in the complex.

"After my child starts going to school, it won't be easy to switch to another one. Honestly, I'd prefer the candidates in the gubernatorial race to talk about what they'll do for evacuees, rather than about nuclear power plants," she said.

Many evacuees, keeping the option of returning to Fukushima on the table, have not changed their registered addresses to Tokyo and so cannot vote in the election.

Hisako Sanpei, 59, who evacuated from Tomioka, Fukushima Prefecture, to the city of Machida, is one such evacuee.

"Until now, Tokyo used as much electricity from the Fukushima power plant as it liked. This (gubernatorial race, in which nuclear power is an issue) will provide a good chance for people in Tokyo to think about their responsibility for having used that power and the dangers of nuclear plants," she says.

On her inability to vote, she says, "It's frustrating because we're here living in Tokyo. Even if it's small, my one vote could bring change."

In June last year, the Science Council of Japan proposed that evacuees be given the same residential rights as they have at their registered homes. Hosei University professor Harutoshi Funabashi, who was involved in putting together the proposal, commented, "Many evacuees cannot decide whether to change their registered address, due in part to the national government's vague policies. It's absurd that almost three years after the start of evacuations the evacuees don't have the right to vote in the areas they have evacuated to. If nuclear power policy is to become an issue in the gubernatorial race, I hope they'll also look at this and other situations that evacuees face."

Why the Tokyo election is important

http://akiomatsumura.com/2014/01/the-nuclear-olympics-crisis-and-opportunity-in-tokyos-election.html

The Nuclear Olympics: Crisis and Opportunity in Tokyo's Election
January 15, 2014Japan, Nuclear, Politics

Akio Matsumura

Since the Fukushima accident, I have presented the opinions of several eminent scientists on the Fukushima disaster and we have received many insightful responses from other experts in many fields. Many thanks to our friends for constantly translating this work into French, Spanish, Japanese, and German – hard work that brought in thousands of new readers. Our joint efforts have gained a high level of international credibility and helped bring these issues the urgent attention they deserve.

Over these past three years I have begun to understand nuclear power and how its heavy risks – 10,000 years of environmental damage – are beyond what most are willing to accept as reality.
Next month the Japanese people have an opportunity to question Fukushima's safety again. A special election for the governor of Tokyo will take place February 9, an election the entire world will watch and comment on, and one which include serious discussion of energy. Candidates have already declared themselves for or against nuclear power.

Why is a gubernatorial election of international importance? The honor and responsibility of hosting the 2020 Summer Olympic Games.

Over the next weeks, as election debates revisit the question of the ongoing crisis at Fukushima and nuclear power's safety, it is useful to review the lessons learned from the March 2011 and the disaster that ensued.

8. We have arrived at a very basic realization: every potentially dangerous machine should have an emergency "off" switch that shuts everything down completely — but nuclear power reactors don't have one, because radioactivity cannot be shut off and therefore the irradiated nuclear fuel will continue to produce dangerous amounts of heat for many years after the plant's shutdown.
9. While nuclear power plants are generating electricity, they are also mass-producing enormous quantities of radioactive poisons that remain dangerous for centuries after the plant has been permanently shut down — poisons capable of contaminating food and water supplies long after they have been released to the environment.
10. Water used to cool a damaged reactor core becomes radioactively contaminated, and as the cooling must continue for years the volume of contaminated water grows very large and is difficult to keep out of the environment; this is especially true of subterranean waters
11. We have no radioactive waste repository in Japan where irradiated nuclear fuel can be safely isolated from the environment for 100,000 years, not do we have an interim radioactive waste repository for the temporary safe storage of these nuclear wastes for one hundred to two hundred years.
12. Japan cannot complete the decommissioning and removal of the radioactive cores of the crippled Fukushima nuclear power plants for at least 50 years, during which time radioactivity may continue to be emitted into the atmosphere, the soil, and the groundwater, while contaminated water will continue to flow into the Pacific Ocean.
13. Because nuclear power plants raise national security issues, governments try to hide the internal workings of these plants from public attention, including failures and episodes of mismanagement that could compromise public safety.
14. Since the medical effects of radiation exposure such as the appearance of thyroid disorders, cancers, leukemia, and damage to the gene pool will take several years or decades to become apparent, society will experience a gradually flowering crop of radiation-induced illnesses.
15. Exporting our nuclear power technology to developing countries can increase the risk of more uncontrolled nuclear disasters from this immature technology not only from accidental causes but as a result of conventional warfare or terrorist attack in politically unstable regions.
16. Every nuclear reactor also produces a man-made element called plutonium, which is the primary nuclear explosive material used in the world's arsenal of nuclear weapons, and which will remain available for tens of thousands of years after the last reactor has been shut down.

These nine truths are easily digested here, but operators, bureaucrats, and many journalists let them sit shrouded mystery for the past three years. Public worries are further compounded with no good solution to contain the radiation emanating from the crippled reactors and a still-unknown number of children affected by thyroid and other cancers, a number we will only see over the next five to ten years.

Coinciding with that period is the preparation for the Tokyo Summer Olympics. There are few events more prestigious to host. The Games are a huge investment of money and pride – Japan has budgeted more than $8 billion, and their international reputation depends on a smooth performance. The foremost concern for the IOC and Japan during the bidding process was safety: what impact will Fukushima and its radiation have on athletes and spectators? Japan satisfied the IOC's qualms. The IOC president Jacques Rogge said to Japan, "You have described yourself as a safe pair of hands." The information coming from

Fukushima should have led to a different conclusion. I hope this is more directly addressed through the debates as Tokyo elects a governor.

The best way to address Fukushima as a safety threat to the Olympic Games will be when the "safe hands" include those of Japan, the IOC, and international scientific and engineering experts. It will be this concerned consortium that will assess and confirm that everything that can be done to mitigate the threat from Fukushima has been identified and that appropriate and timely action has been taken. That will be the most respected Gold Medal of the games.

Five candidates will race to govern Tokyo and the city's 13.2 million inhabitants. The next governor of Tokyo will be in a once-in-a-century position to help Japan build new international relations and a new energy policy. The ideal candidate will have unique qualifications: long term perspective, first-rate diplomatic skills, a clear grasp of energy policy, and municipal experience. With this special skill set in mind, Mr. Morihiro Hosokawa, a former Prime Minister and former Governor of Kumamoto who entered the race earlier this week, stands a head above the rest.

I wish Tokyo a successful Olympic Games. The city's people can show they wish this as well by putting their confidence in a leader cut out to find opportunity in the crisis ahead.

Nukes in the (election) spotlight

January 16, 2014

Election spotlight on nuclear power

http://www.japantimes.co.jp/opinion/2014/01/16/editorials/election-spotlight-on-nuclear-power/#.UtkQ2rTrV1s

Whether Japan should rely on nuclear power generation will be a main theme in the Feb. 9 Tokyo gubernatorial election as a result of former Prime Minister Morihiro Hosokawa's announcement Tuesday that he will run in the election on a "zero nuclear" platform.

His entry will have a great impact on the gubernatorial race as he has secured the wholehearted support of former Prime Minister Junichiro Koizumi, who has renounced his earlier stance favoring nuclear power and now is a strong anti-nuclear advocate, causing embarrassment to Prime Minister Shinzo Abe and his Liberal Democratic Party. One issue that is likely to come back and haunt Hosokawa, however, is his

questionable borrowing of ¥100 million from Sagawa Express Co., which led to his resignation as prime minister in April 1994. He should give a full explanation.

Making a zero-nuclear goal the focus of policy debate in the gubernatorial election is both timely and welcome in view of the devastation that the meltdowns at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant have caused and of the fact that Japan is a quake-prone country. Moreover, there is no established technology that will ensure safe storage of high-level radioactive waste from nuclear power plants for tens of thousands years.

Kenji Utsunomiya, a former head of the Japan Federation of Bar Associations, had already announced his candidacy focusing on abandoning nuclear power. However, Hosokawa's entry into the gubernatorial race will likely arouse more interest than Utsunomiya's candidacy in both the election and the nuclear issue, because Hosokawa, especially given Koizumi's backing, wields much greater political weight.

Although the election is a local one, it will give voters in Tokyo, which has the highest energy usage among Japan's prefectures — accounting for some 10 percent of Japan's total electricity consumption — a chance to express their views on Abe's energy policy. The Abe administration is pushing the restart of nuclear power plants — despite the ongoing struggle to contain the nuclear disaster in Fukushima — by overturning the Democratic Party of Japan government's policy of ending nuclear power generation by the end of the 2030s. The DPJ government's policy was based on nationwide deliberative polls. The Abe administration is trying to change the energy policy without taking any such step.

Tepco is effectively under the central government's control, but the Tokyo Metropolitan Government still owns a sizable stake in the power company. If an anti-nuclear candidate becomes Tokyo governor, he could use this position to put a brake on Tepco's attempt to restart its shuttered nuclear power plants.

More importantly, if Hosokawa becomes the top leader of Japan's capital with the backing of Koizumi, a former LDP prime minister who was a political mentor of Abe, it will have a strong impact on the Abe administration not only in the area of energy policy but also in an overall political context.

Whether Japan should abandon nuclear power or not will be a major election issue. Given the scope of the Fukushima nuclear crisis, the vulernability of nuclear power plants in this quake-prone country and the absence of technology to safely store high-level radioactive waste, clearly much is at stake regarding Japan's future.

Hosokawa said he feels a sense of crisis because the nuclear issue relates to the question of the state's very life and death. Koizumi said that the Tokyo gubernatorial election will be a contest between two

groups — a group that thinks Japan can advance without nuclear power and a group that does not think so.

Meanwhile, former health and welfare minister Yoichi Masuzoe, another candidate, said that he also has been calling for the abandonment of nuclear power since the Fukushima crisis but that he does not follow Koizumi's black and white thinking. He should present more details on his nuclear power policy.

While the nuclear issue is important, it is not the only pressing concern. Each candidate also must come up with policy proposals to deal with other important items such as bolstering Tokyo's quake resistance, improving social welfare, eradicating poverty and management of the 2020 Tokyo Olympics and Paralympics.

In short, each candidate must present voters with convincing policy proposals on a variety of issues.

Tokyo a model for energy-saving?

January 16, 2014
Hosokawa states determination to transform Tokyo into model city for saving energy
http://mainichi.jp/english/english/newsselect/news/20140116p2a00m0na015000c.html

Former Prime Minister Morihiro Hosokawa, who is set to run in the Feb. 9 Tokyo gubernatorial race on an anti-nuclear power platform, has said that if elected, he is determined to transform Tokyo into a model city for saving energy.

"I'd like to showcase Tokyo to the world as a model for saving energy," Hosokawa, 76, said in an exclusive interview with the Mainichi Shimbun in the capital on Jan. 15. "I'd like to create bases for renewable energy in Fukushima and other parts of the Tohoku region, and to supply power generated in these areas to Tokyo."

The former prime minister said with regard to the 2020 Summer Olympics, which are scheduled to be held in Tokyo, "I'd like to make sure that Tohoku will benefit from the Games. I thought of holding the marathon event there, but it turned out to be difficult. I'm now considering setting up a site there for soccer training and player dormitories."

Hosokawa criticized "Abenomics," the economic policy mix promoted by Prime Minister Shinzo Abe, for placing too much emphasis on economic growth -- citing the government's efforts to export nuclear plants.

Hosokawa also expressed concerns about the deadlock in Japan's diplomacy toward Asia. "I'd like to promote inter-city diplomacy," he said.

The former prime minister revealed that 88-year-old philosopher Takeshi Umehara had sent him a message encouraging him to run in the gubernatorial election, which he says helped him to affirm his candidacy.

Hosokawa said additionally that he will clarify suspicions surrounding a 100 million yen loan that he obtained from the Tokyo Sagawa Kyubin parcel delivery company, which forced him to step down as prime minister in 1994 after only nine months in office.

"I'll clearly express my view on the case, including the contents of the Diet deliberations that took place at the time (that the scandal surfaced)," he told the Mainichi Shimbun.

Hosokawa said that he is presently working out the details of his policy pledges, which he will announce at a news conference that he intends to hold on Jan. 20.

Vietnamese doubts about nukes ?

January 18, 2014

Nuclear safety concerns in Vietnam could delay Japanese project

http://ajw.asahi.com/article/asia/south_east_asia/AJ201401180056

THE ASAHI SHIMBUN

Growing safety concerns in Vietnam could affect the Abe administration’s strategy of making exports of nuclear energy technology a pillar of Japan’s economic growth strategy.

Vietnamese Prime Minister Nguyen Tan Dung indicated that construction of the country’s first nuclear plant scheduled to start this year could be delayed until 2020, the Vietnam newspaper Tuoi Tre reported.

At a Jan. 15 meeting, Dung instructed PetroVietnam to secure a sufficient supply of fuel for power generation to prepare for a possible delay in construction, according to the report.

"Building nuclear power plants will be done with the highest safety and efficiency, and the project will not go ahead unless standards are met," Dung reportedly said.

It was the first time Dung has mentioned the possibility of a delay.

The nuclear plant in question will be built at Phuoc Dinh in Ninh Thuan province in southern Vietnam. A Russian company was awarded the contract to build two reactors at the plant.

But a postponement in the project could affect plans for a second nuclear plant in Vinh Hai, also in Ninh Thuan province. A Japanese consortium of companies won a contract to build two reactors there.

"While we believe the latest move is directed at construction of the nuclear plant by Russia, we will continue to carefully monitor the situation for possible future effects," said an official with Japan's Ministry of Economy, Trade and Industry, which is promoting the export of nuclear technology.

Vietnamese officials have increasingly indicated a need to review the safety of nuclear technology since the 2011 accident at the Fukushima No. 1 nuclear power plant.

Nguyen Quan, the science and technology minister, has touched on the possibility of a delay in construction work because of nuclear safety concerns.

The plan by the Russian company calls for starting construction on the reactors this year and to begin operations in 2020 and 2021, respectively.

The project won by the Japanese consortium would have had a total construction cost of about 1 trillion yen ($9.6 billion), with the plant starting operations around 2020.

The Vietnamese government has placed priority on the first nuclear plant and has not decided on the type of reactor to be used for the second plant.

The Japanese consortium won the project in October 2010 through efforts made by the Democratic Party of Japan government led by Prime Minister Naoto Kan. Among the Japanese companies involved are Toshiba Corp., Mitsubishi Heavy Industries Ltd. and Hitachi Ltd.

Tokyo Electric Power Co., the operator of the Fukushima No. 1 plant, would also have been involved as plant operator.
An official with a Japanese company tried to put the best light on Dung's recent comment.

"The Fukushima accident had heightened concerns about nuclear safety, and since no decision had yet been made on the type of reactor, we felt there would likely be a delay in the start of operations," the official said.

The Japanese government is pushing exports of nuclear technology to such regions as the Middle East, Eastern Europe and Asia as a major element of its economic growth strategy. The government says that sharing the experience and lessons learned from the Fukushima nuclear accident will contribute to an improvement in global nuclear plant safety.

Last autumn, Prime Minister Shinzo Abe personally visited Turkey to gain a general agreement for the export of nuclear technology to that nation.

Toward the end of last year, Abe met with Dung when he visited Japan and confirmed their intention to cooperate in construction of the nuclear plant.

Michiko Yoshii, a professor at Mie University who is knowledgeable about the nuclear energy issue in Vietnam, said suspicions about nuclear safety in the country became much more deep-rooted after the Fukushima nuclear accident.
"The former head of the national nuclear energy research institute called for a 10-year delay in the construction plan from the standpoint of safety and the lack of human resources," she said. "Quan, the science minister, has also repeatedly said the development of human resources would not keep pace with the construction plans."

Yoshii said when she visited Vietnam last September, she was asked to give lectures and contribute a piece to a national newspaper about life in Japan after the Fukushima nuclear accident.

"The Vietnamese government likely could not ignore such opinions, and that may have led to the decision to delay construction," she said.

(This article was written by Manabu Sasaki in Hanoi and Yuriko Suzuki in Tokyo. Izumi Sakurai contributed to this article.)

Hosokawa to pledge immediate breakaway from nukes

January 18, 2014
Hosokawa to pledge 'immediate zero-nuclear' policy in Tokyo election

http://mainichi.jp/english/english/newsselect/news/20140118p2a00m0na013000c.html

Former Prime Minister Morihiro Hosokawa is poised to pledge an immediate breakaway from nuclear power as part of his election promises in the upcoming Tokyo gubernatorial race, it has been learned.

Hosokawa, 76, who earlier announced his intention to throw his hat into the ring for the Feb. 9 election, decided to make the pledge a main pillar of his campaign promises. He is planning to announce the decision at a press conference on Jan. 22.

By putting forward a policy to disallow the restart of idled reactors in Japan, Hosokawa aims to move in step with former Prime Minister Junichiro Koizumi, an anti-nuclear advocate who has expressed his support for Hosokawa. Hosokawa's move is also apparently aimed at distinguishing himself from other competitors, including former Health Minister Yoichi Masuzoe, 65.

According to sources in Hosokawa's camp, the policy goal of an immediate departure from nuclear power and measures for sustainable energy will top the handful of election promise "pillars" that Hosokawa is going to announce next week. He is also set to call for cultural promotion and disaster-resistant urban development.

When Hosokawa announced his planned candidacy in the Tokyo election on Jan. 14, he hadn't clarified how to proceed with a breakaway from nuclear power, while describing nuclear power as "an issue that has bearings on the survival of the country."

While rival candidate Masuzoe has also expressed his support for breaking away from nuclear power generation, he maintains that the decision to restart reactors should be left up to the Nuclear Regulation Authority and local governments hosting nuclear power stations.

"It will become a main campaign issue because there are candidates who advocate discontinuing nuclear power," a source close to Hosokawa who is formulating the former premier's campaign pledges said on Jan. 17.

Under the current legal system, however, governors of prefectures that do not host nuclear power stations do not have a say over whether to allow reactor restarts.

Kenji Utsunomiya, 67, another anti-nuclear candidate who formerly served as head of the Japan Federation of Bar Associations, has also spoken out against reactor restarts and nuclear plant exports. Public attention now turns to how Hosokawa will go about presenting specific measures toward an "immediate zero-nuclear policy."

Hosokawa: end of nukes by 2020

January 18, 2014

Double trouble: Ex-Prime Ministers Morihiro Hosokawa (left) and Junichiro Koizumi face reporters in Tokyo on Tuesday. | AFP-JIJI

http://www.japantimes.co.jp/news/2014/01/18/national/hosokawa-eyes-no-nukes-by-2020/#.UtrzK7TjJ1t

Hosokawa eyes no nukes by 2020

Tokyo gubernatorial candidate, wielding Koizumi's clout, has LDP on defensive, probing for weaknesses

KYODO

Former Prime Minister Morihiro Hosokawa will pledge in his campaign for the Feb. 9 Tokyo gubernatorial election to set out a road map for Japan to break with nuclear power generation by 2020, according to a close aide.

"By making 2020 his target year, he will change Tokyo and Japan, with the focus on a complete end to nuclear energy," Shusei Tanaka, who was a special adviser to Hosokawa during his 1993-1994 prime ministership, said Friday in an interview.

With Tokyo slated to host the Olympics in 2020, Hosokawa, if elected, will "present (the road map) at the Olympics as an example" to the international community, Tanaka said.

Also in the event of a Hosokawa victory, "Japan will never be able to restart nuclear reactors," Tanaka said, adding, "No restart of reactors means 'zero' nuclear power generation."

Hosokawa's decision to run has made the outcome of the Tokyo gubernatorial race harder to predict, since he is backed by Junichiro Koizumi, who remains popular with voters more than seven years after leaving the prime minister's office.

The two former prime ministers were brought together by their common goal of phasing out nuclear energy, and Hosokawa is expected to be the main rival of former health minister Yoichi Masuzoe.

Hosokawa is slated to announce his candidacy and campaign pledges on Wednesday after postponing the press conference twice.

In the absence of strong contenders, the 65-year-old Masuzoe was expected to be able to cruise to victory when Prime Minister Shinzo Abe's Liberal Democratic Party pledged earlier this month to support him.

But the Hosokawa-Koizumi alliance changed the picture, prompting the LDP to go on the defensive. The ruling party is now reassessing the possibility of a Masuzoe victory amid persistent public distrust in the safety of nuclear power in Japan and the robust attention Koizumi always garners.

"Mr. Hosokawa is past tense, but we have to watch out for Mr. Koizumi, who is still very popular," said a senior LDP member in the Tokyo Metropolitan Assembly.

According to a source in the Hosokawa camp, he is also considering apologizing for the money scandal that ended his stint as prime minister in just nine months and explaining why he once opposed Japan hosting the 2020 Olympics.

In an interview in a book published by journalist Akira Ikegami last year, Hosokawa said Japan would be praised around the world if Prime Minister Shinzo Abe were to give up on Tokyo hosting the Olympics because of the problems at the Fukushima No. 1 nuclear plant.

As prime minister, Hosokawa formed a ruling bloc to end the LDP's 38-year rule in August 1993. But in 1994, he was found to have borrowed ¥100 million from a transport firm in September 1982, allegedly off-the-book funds, before he was elected as the governor of Kumamoto.

Hosokawa, 76, has been away from politics and making pottery since he quit the Lower House in May 1998.

Ahead of the Tokyo gubernatorial race, the LDP will have to go through another challenging local election in Okinawa. In Nago, an LDP-backed candidate has to upset incumbent Mayor Susumu Inamine, who is seeking a second four-year term and opposes the hosting of a new U.S. military base amid safety concerns.

The dominant party wants to avoid seeing LDP-backed candidates lose both Sunday's Nago mayoral election and the Tokyo gubernatorial election.

If that happens, opposition parties such as the Democratic Party of Japan will likely be able to step up pressure over pressing national issues when the Diet opens later this month.

Since Abe became prime minister for the second time in December 2012, the LDP-led government has moved toward restarting idled nuclear reactors and exporting the country's nuclear technology.

As the Hosokawa-Koizumi alliance is widely expected to put emphasis on their anti-nuclear agenda in the gubernatorial campaign, the LDP leadership is trying to weaken the pair's momentum by calling attention to other issues related to voters in Tokyo, such as the shortage of day-care centers and the rapidly aging population.

LDP executives including Secretary-General Shigeru Ishiba and Chief Cabinet Secretary Yoshihide Suga have asserted that energy policy is the realm of the central government, not the Tokyo Metropolitan Government.

Many voters, however, may cast ballots for anti-nuclear candidates because the man-made Fukushima disaster, triggered by the massive earthquake and tsunami on March 11, 2011, raised questions about the viability of Japan's future.

Naoto Kan of the DPJ, also a former prime minister, is urging Tokyo residents in his blog to concentrate on backing Hosokawa if they think Japan should phase out nuclear power, calling Hosokawa's run "a nightmare for the LDP."

"Japan has faced many problems, and the issue of nuclear power generation leads to the fate of this country," Hosokawa said after securing Koizumi's support.

In an apparent bid to foil Hosokawa's challenge, Suga posed a question about the way Hosokawa quit as prime minister in April 1994 after being in office for only about nine months.

"He resigned over a money scandal involving Sagawa Express Co. We'll see how Tokyo citizens take that," Suga said Tuesday.

Hosokawa to end Tokyo's dependence on nukes

January 22, 2014

Ex-prime minister finally announces policy pledges

Hosokawa to play Tokyo nuke card

http://www.japantimes.co.jp/news/2014/01/22/national/hosokawa-to-play-tokyo-nuke-card/#.UuAcPrTjJ1t

by Masaaki Kameda and Reiji Yoshida
Staff Writers

Morihiro Hosokawa pledged Wednesday he would try to end Tokyo's dependence on nuclear power as he finally made his candidacy for governor official just a day before campaigning officially starts.

The 76-year-old former prime minister said he would set up a strategic panel of experts to explore basic energy policies to abolish nuclear power.

"In order to realize a Tokyo that is not dependent on nuclear energy, I would prompt the public and private sectors to generate renewable energy as well as to ask for cooperation from the residents of Tokyo to conserve energy," Hosokawa told a news conference, finally revealing his election pledges after two delays.

He said he would like to set the year 2020, when Tokyo will host the Summer Olympics, as a target for creating a "new Tokyo and Japan." He acknowledged that he did not initially welcome the successful bid to bring the Olympics to Tokyo because resolution of the Fukushima nuclear crisis is not yet in sight.

He said as governor he would also address the capital's needs in disaster prevention, welfare and support for households raising children.

Other candidates also talked Wednesday about their election pledges.

Former health minister Yoichi Masuzoe, another of the leading candidates, appeared to back off from his earlier anti-nuclear stance by saying it is up to the Nuclear Regulation Authority and the central government to decide whether to restart the nation's idled reactors.

Earlier, Masuzoe said he advocated "datsu-genpatsu" (phasing out nuclear power) by saying all nuclear plants should eventually be mothballed.

The ruling Liberal Democratic Party, which urges reactor restarts once they clear the NRA's new safety tests, is giving semi-official support to Masuzoe, an apparent reason for toning down his stance.

At another news conference at the Japan National Press Club, candidate Kenji Utsunomia, a former chairman of the Japan Federation of Bar Associations, said he will not hold talks with Hosokawa to unify the anti-nuclear forces for the election.

Some anti-nuclear activists have urged Utsunomia, an opponent of nuclear power, not to run and thus avoid a split in the no-nukes vote

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Utsunomiya pointed out that Hosokawa had not made public his campaign pledges yet, and he could not forgo his candidacy just because of his anti-nuclear policy.

“This is an abnormal gubernatorial election. Candidates have already decided to run, but we can’t have a policy debate yet,” Utsunomiya said.

Toshio Tamogami, a former chief of staff of the Air Self-Defense Force, said Wednesday he would use his crisis-management experience as a top military officer to improve Tokyo’s preparedness for a major disaste

Ex-PM Hosokawa set to pledge to turn Tokyo into world's most energy-efficient city

http://mainichi.jp/english/english/newsselect/news/20140122p2a00m0na003000c.html

Former Prime Minister Morihiro Hosokawa will pledge to press for "zero nuclear power" and try to make Tokyo the most energy-efficient city in the world in his campaign platform for the Feb. 9 Tokyo gubernatorial election, sources in his camp have revealed.

In his campaign platform due to be announced at a news conference on Jan. 22, Hosokawa, 76, will vow to set up a "Tokyo Energy Strategic Council" of experts to draw up a medium- to long-term road map for Tokyo's energy policy, the sources said.

After official campaigning for the Tokyo gubernatorial election kicks off on Jan. 23, Hosokawa will take to the streets every day to drum up voter support, as will former Prime Minister Junichiro Koizumi, 72, according to the sources.

The platform consists of five pillars: pursuing zero nuclear power; taking measures for disaster prevention and landscape protection; hosting a "simple" 2020 Tokyo Olympics; upgrading urban infrastructure; and creating an urban model that is child- and elderly-friendly.

As for nuclear power, Hosokawa says it "has a fatal flaw in that radioactive waste cannot be disposed of," and that "now is the only chance to make a political decision to stop the reactivation (of idled nuclear reactors)." He emphasizes that a shift in the energy policy will create new growth. Pledging not to give the central government a free hand over the power policy, Hosokawa says the Tokyo Metropolitan Government will tackle reforms in Tokyo Electric Power Co. (TEPCO) as a shareholder.

On the 2020 Tokyo Olympics, Hosokawa says Tokyo will take measures to promote culture and hold events jointly with cities in the Tohoku region in order to show the world how the disaster-hit region has been restored. He also proposes to host a simple Tokyo Olympics unique to Japan and set up a "Tokyo Volunteer Team" designed to spread Japanese-style hospitality known as "omotenashi" throughout the world. He says he will review over-the-top construction plans for Olympic facilities. As for disaster prevention, Hosokawa vows to press for a policy that values forces of nature and "risk communication" with citizens and create a "corridor of water and green" that doubles as a landscape preserver.

Meanwhile, former Japan Federation of Bar Associations President Kenji Utsunomiya, who plans to run in the Tokyo governor's race, released the details of his campaign platform at his campaign office in Tokyo's Shinjuku Ward on Jan. 21. Utsunomiya, 67, has pledged to make Tokyo the world's best place to work and live and enact ordinances to regulate so-called "black companies," or firms with poor labor practices, as

well as so-called "dappo houses," or small living quarters that skirt the law. He also vows to consider making medical treatment for people aged 75 and older free of charge and maintain subway fares at current levels even after the consumption tax is raised.

As for nuclear power, Utsunomiya stands against any move to reactivate nuclear reactors and vows to extend support for victims of the crisis at the Fukushima No. 1 Nuclear Power Plant. "While I have not had a chance to hold policy debates with other people who plan to run in the election, I made the effort to present my policies to make the election fruitful," he said.

January 22, 2014(Mainichi Japan)

"The path Tokyo should take in the election is clear"

January 20, 2014

Weighing the risks of nuclear power against a zero-nuclear society

http://mainichi.jp/english/english/perspectives/news/20140120p2a00m0na012000c.html

As the capital's gubernatorial election approaches, the elimination of nuclear power is not just one of many issues. It's a major point of contention that will determine Tokyo's future. Those who see it as a central issue aim to reform society and people's lifestyles, while those who consider it a mere side issue are trying to maintain the status quo. That's what the situation boils down to. It's certainly not a case of people who place emphasis on the elimination of nuclear power being simple-minded and those who don't attach much weight to the issue being balanced.

The race to elect a new governor on Feb. 9 is already under way. Former prime ministers Morihiro Hosokawa, 76, and Junichiro Koizumi, 72, have teamed up in a call for the elimination of nuclear power, but suspicions over money borrowed by Hosokawa in the past and his previous comment about giving up the Olympic Games have surfaced in line with his bid to be elected.

While Hosokawa's camp appears to show concern for issues, it also seems to be lacking in preparation. I would urge it to show some prudence. Don't go forming illicit alliances or turning to surprise moves in the pursuit of fleeting success. Have the backbone to choose a rational defeat over a muddy victory, and value the quality of debate in the election.

On Jan. 10, the state minister in charge of economic revitalization poked fun at Hosokawa during a news conference, suggesting he was going mad. His remark was no more than an early skirmish in the run-up to the election. But other comments he made during the news conference demand attention.

"All of Japan's nuclear power plants are now idle. We're discharging 10 billion yen of our national gains overseas each day (due to increased imports of fuel being used as a substitute for nuclear power). I think any politician who leaves this discharge unattended isn't putting enough effort into their job," he said.

I don't want to argue that the minister is wrong. What I do want to say is that his statement is no more than the expression of a political decision founded on a particular set of values. And such an argument is not something that those calling for the elimination of nuclear power will sit back and listen to without any objections.

It's a fact that imports of liquid natural gas (LNG) and other fuels are rising due to reliance on thermal power generation, and Japan's trade deficit is increasing as a result. But as our economics textbooks tell us, a trade deficit in and of itself does not equate to a "loss" or a "defeat." In the same way, a trade surplus is not a "gain" or a "win."

Beneath the trade deficit is the acquisition of goods corresponding to the amount spent. The government has boosted its purchases of LNG since the March 2011 disasters, to safeguard conveniences that were available prior to the disasters. This is simply the manifestation of a political decision recognizing that there is value in keeping the situation unchanged, and refusing to accept the risk of change.

Naturally, if the trade deficit continues without end, then debt will balloon to an enormous amount. The zero-nuclear camp wants to alter the quality of economic society before that happens, but those critical of a zero-nuclear policy won't listen to them; they take the optimistic view that it will be possible to control nuclear power plants, and search for ways to maintain the current situation, relying on nuclear power.

Those seeking the total elimination of nuclear power plants take a different approach. They say it is impossible to control nuclear plants, and have made the political judgment that it is necessary to introduce fundamental changes that will turn Japan into a society that does not rely on nuclear power.

Both sides face risks. Zero-nuclear proponents face the risk of reforms failing. Those critical of a zero-nuclear policy, meanwhile, face the risk of having national wealth stored up, only for it to be siphoned out of state coffers in the form of funds to cover another nuclear disaster should one occur -- an expense that could range anywhere from several trillion yen to tens of trillions of yen. At the heart of the upcoming Tokyo gubernatorial election is a choice between these two risks.

Last week, I went to Fukushima Prefecture with a group from the Japan National Press Club covering the Fukushima nuclear disaster, and we toured the Fukushima No. 1 Nuclear Power plant by bus. The airborne radiation level was as high as 600 microsieverts per hour near the plant's No. 3 reactor -- equal to 60 percent of the upper yearly limit for the general population (1,000 microsieverts). I felt that the cleanup was still a long way off from being completed.

The state of melted fuel inside the No. 1-3 reactors at the plant is still unknown, and I haven't been able to find any grounds to support the optimistic view that nuclear power plants can be controlled. I think the path that Tokyo should take in the election is clear. (By Takao Yamada, Expert Senior Writer)

January 20, 2014(Mainichi Japan)

Gobernatorial campaign kicks off

January 23, 2014

Tokyo governor race kicks off with nuclear energy issue looming large

http://ajw.asahi.com/article/behind_news/politics/AJ201401230070

THE ASAHI SHIMBUN

Campaigning kicked off Jan. 23 in the race for a new governor of Tokyo, a closely watched contest with the future of the nation's nuclear energy policy shaping up to be a key issue.

"At issue is whether we will abolish nuclear reactors and build a vibrant nation with renewable energy or will we hold on to nuclear reactors and have our country decline," Morihiro Hosokawa, a former prime minister, said outside the Tokyo metropolitan government building in Shinjuku Ward.

The 76-year-old Hosokawa devoted much of his speech to his key agenda of weaning Japan from nuclear power and turning the nation into a leader in renewable energy.

"I felt a strong sense of crisis about the government trying to restart nuclear reactors on grounds that they are essential for growth," Hosokawa said, standing next to Junichiro Koizumi, another former prime minister who has become staunchly anti-nuclear.

Speaking to drum up support for Hosokawa, Koizumi, 72, said, "The most important issue is what to do with the nuclear reactors."

Nuclear energy emerged as a major issue for the Feb. 9 election after Hosokawa announced his candidacy on Jan. 14. He decided to run after enlisting support from Koizumi, a vocal critic of the Abe administration's nuclear energy policy.

The nation's 50 nuclear reactors all remain offline for safety checks after the triple meltdown at the Fukushima No. 1 nuclear power plant triggered by the March 2011 Great East Japan Earthquake and tsunami.

Prime Minister Shinzo Abe is moving to restart the reactors once their safety has been confirmed by the Nuclear Regulation Authority, the watchdog set up after the Fukushima nuclear disaster.

Yoichi Masuzoe, 65, a candidate backed by the ruling Liberal Democratic Party and junior coalition partner New Komeito, did not touch on the nuclear energy issue during his speech outside JR Shinjuku Station, one of the capital's main rail hubs, on Jan. 23.

He has said that Japan must reduce its dependence on nuclear energy over the long term, but cannot dispense with it immediately.

Masuzoe started his campaign by emphasizing that the capital will host a successful Summer Olympics in 2020.
"Some things cannot be done even in 10 years, but we can advance them in six years if we work for the Olympics," he said, standing with chiefs of the Tokyo chapters of the LDP and New Komeito.

Masuzoe, who served as welfare minister for two years, pledged to transform Tokyo into a city with the most advanced welfare services in the world.

According to sources, a survey conducted by the LDP showed that Masuzoe has been extending his comfortable lead over Hosokawa.

"Hosokawa's initial momentum has been losing steam," said a senior administration official. "We do not have any concern."

Lawyer Kenji Utsunomiya, endorsed by the Japanese Communist Party and the Social Democratic Party, is another outright opponent to nuclear energy in the governor's race.

"Let's make a stride toward a nuclear-free society from Tokyo," the 67-year-old said at a different entry and exit point to JR Shinjuku Station on Jan. 23.

"Tokyo was the largest user of electricity generated at the Fukushima plant," he said. "The Tokyo metropolitan government is also a major shareholder of (plant operator) Tokyo Electric Power Co."

Utsunomiya, former president of the Japan Federation of Bar Associations, also stressed the need to narrow wealth gaps and expand welfare services.

"Tokyo will be turned into the easiest place to live in for everyone--the elderly and the young, men and women, and those with disabilities," he said.

Citizens groups working for a nuclear-free Japan had tried to persuade either Utsunomiya or Hosokawa to drop out of the race, fearing the anti-nuclear vote would be split.

But their efforts failed partly because Utsunomiya called for a public debate with Hosokawa. The Hosokawa camp also declined support from any organization, even though the Democratic Party of Japan, the People's Life Party and the Unity Party, all part of the opposition bloc, are backing Hosokawa on their own volition.

Other contenders include Toshio Tamogami, 65, a former chief of staff of the Air Self-Defense Force, Kazuma Ieiri, 35, an executive of an Internet-related company, and inventor "Doctor" Nakamatsu, 85.

Tamogami, who has the support of former Tokyo Governor Shintaro Ishihara, co-head of the Japan Restoration Party, has said Japan can continue to use nuclear power by addressing safety concerns.

Ieiri supports lowering Japan's reliance on atomic energy, while Nakamatsu is calling for the development of new energy sources.

In addition to the issues of nuclear energy, the Tokyo Olympics and social welfare, the candidates will discuss improving disaster preparedness and enhancing education during the 17-day campaign.

Hosokawa touches on nuclear power, past problems ahead of Tokyo gubernatorial race

http://mainichi.jp/english/english/newsselect/news/20140123p2a00m0na012000c.html

Former Prime Minister Morihiro Hosokawa announced on Jan. 22 his intention to wage a "historic" battle to be elected governor of Tokyo, stating that the focal point of the election was the elimination of nuclear power.

Hosokawa made the remarks in a packed news conference at the Tokyo Metropolitan Government headquarters a day ahead of the commencement of campaigning for the Feb. 9 election. Roughly 200 reporters attended, and some were unable to squeeze into the conference room. Hosokawa, who said it was the first time in a long time for him to wear a tie, was hit by a barrage of camera flashes as he sat down for the conference.

The former prime minister said the risk of another major nuclear accident prompted him to make the elimination of nuclear power a focal point in his election bid.

"This is something that is related to the lives and finances of Tokyo residents," he said. He added that if there were any requests Tokyo needed to make regarding the state of the central government, he would make them.

Referring to comments during his term as prime minister that Japan needed to "advance the use of nuclear power," he said, "I was told that it was green and safe, and I swallowed that explanation. I'm ashamed of my lack of insight."

Speaking on his reasons for turning against nuclear power, Hosokawa said a documentary on a radioactive leak in Britain and a film released in 2006 on the Rokkasho Nuclear Fuel Reprocessing Facility in Aomori Prefecture had enlightened him on the issue. He said the March 2011 earthquake and tsunami that triggered a disaster at the Fukushima No. 1 Nuclear Power Plant was a decisive turning point for him.

He said that if Japan didn't hammer out a zero-nuclear policy now, it would probably not be able to avoid reliance on nuclear power for the next 50 or 100 years. He said that he was determined to stand with the people who believed that Japan could develop without nuclear power.

Hosokawa brought along documents relating to his borrowing of 100 million yen from Tokyo Sagawa Kyubin -- an incident that triggered his resignation as prime minister. He said the documents were based on Diet records and other information.

"I provided a sincere explanation before the Diet, but I couldn't get the opposition parties to understand me," Hosokawa recounted, casting his eyes on the documents several times. "I spent 10 years paying back the full amount," he added. "There hasn't been a day over the last 20 years in which the thought that I let everyone down has left my mind." He did not provide any new documents relating to his borrowing or return of the money.

Referring to a statement made during an interview for a book that was published last year that could be taken as a suggestion that Tokyo should have bowed out of hosting the 2020 Olympic Games, Hosokawa said he had rethought his position. He said he wondered if the disaster-hit Tohoku region could play some role in the games.

When questioned why he had taken some time to hold a news conference after announcing his candidacy in the gubernatorial election, he said, "One week has passed since I declared my intention to run. I can't say anything careless about nuclear power, and I had to work through the details." Accordingly, he said any criticism that he had wanted to make a move after other candidates had made theirs was unwarranted.

Touching on a Cabinet member's jibe that he was out of his mind, he drew laughs by commenting, "You couldn't turn up at a place like this unless you were out of your mind."

At first a joint news conference for candidates in the gubernatorial race had been planned at the Japan National Press Club on Dec. 22, but Hosokawa announced he would be absent so the conference ended up as a series of interviews with each candidate, leaving little room for debate.

Another candidate in the race, Toshio Tamogami, questioned the lack of debate, saying, "It's the mission of candidates to provide Tokyo residents with information on the election through policy debate. Is the sort of election that resembles a popularity vote really all right?"

Fellow candidate Yoichi Masuzoe, said that he had not compiled a list of policies because the election was being held suddenly and he had simply not had enough time. At the same time he said, "It would have been better to have more debate with everyone gathered together."

Candidates in Tokyo gubernatorial race differ sharply over nuclear policy
http://mainichi.jp/english/english/newsselect/news/20140123p2a00m0na008000c.html

Major candidates running in the Feb. 9 Tokyo gubernatorial election are taking quite different approaches to the country's nuclear energy policy -- the biggest campaign issue that could affect the future of the Japanese capital and the entire nation.

Official campaigning kicked off on Jan. 23. Four people who planned to run in the election -- former Prime Minister Morihiro Hosokawa, 76, former Health Minister Yoichi Masuzoe, 65, former Air Self-Defense Force Chief of Staff Toshio Tamogami, 65, and former Japan Federation of Bar Associations President Kenji Utsunomiya, 67 -- presented their views on nuclear power at news conferences on Jan. 22.

Utsunomiya and Hosokawa both called for an immediate breakaway from nuclear power, but Utsunomiya said, "The most important thing is whether to make Tokyo the best place to work and live." Hosokawa, on the other hand, differentiated himself from Utsunomiya by saying that he would place top priority on efforts to carry out a zero nuclear policy. Masuzoe said he would pursue a policy of reducing the country's dependence on nuclear power on a long-term basis. Tamogami distanced himself from all of the other three candidates over nuclear power and expressed his intention to accept nuclear power.

Utsunomiya, Tamogami and Masuzoe attended separate news conferences hosted by the Japan National Press Club, while Hosokawa held a news conference at the Tokyo Metropolitan Government building and formally announced his candidacy for the election.

Hosokawa said, "If an accident occurs at the Kashiwazaki-Kariwa Nuclear Power Plant (in Niigata Prefecture), for example, the citizens of Tokyo will suffer catastrophic damage. It is indisputable that the nuclear power issue is the most important theme." He concentrated his efforts on explaining the significance of promoting energy-saving and renewable energy. He said he would set up a "Tokyo Energy Strategic Council" of experts to discuss Tokyo's energy policy in order to realize a breakaway from nuclear power. He then said that one of the options would be to hold a local referendum in Tokyo over whether to pursue an immediate breakaway from nuclear power ahead of next year's unified local elections.

Utsunomiya also emphasized the significance of Tokyo pressing for a zero nuclear policy, saying, "If Tokyo takes a step, it will greatly affect the country." He said he would urge the central government to refrain from reactivating idled nuclear reactors and exporting nuclear facilities and technology. He also said his Tokyo government, if elected, would propose Tokyo Electric Power Co. (TEPCO) decommission the Kashiwazaki-Kariwa Nuclear Power Plant as a major shareholder. But he did not treat the nuclear issue as a top policy priority.

On the evening of Jan. 21, he revealed that he had been asked by those who wanted to see only one anti-nuclear candidate running in the election to withdraw his bid to succeed Naoki Inose, who stepped down as Tokyo governor over a money scandal. But Utsunomiya said he had turned down the request.

Masuzoe, who showed his stance to break away from nuclear power on a long-term basis, said, "If we are to eliminate nuclear power immediately, what will be the alternatives?" He said that whether the country can reduce its dependence on nuclear power hinges on the advancement of technological innovation. On the issue of whether to reactivate idled nuclear reactors, Masuzoe said, "Experts with the Nuclear Regulation Authority will decide and the central government will then make decisions from there on."

Meanwhile, Tamogami said there was nothing wrong with reactivating idled nuclear reactors, saying, "We will be able to use nuclear power plants while fully ensuring their safety." He denounced views that nuclear power is dangerous as "unscientific." On the fact that Tokyo is consuming massive amounts of electricity produced outside the capital, he said, "Tokyo can make contributions to local regions as profits generated in Tokyo, the center of economic activities, reach out to rural regions."

As of Jan. 22, there were 10,820,567 eligible voters in Tokyo -- the largest number in the history of Tokyo gubernatorial elections. Voters will go to the polls on Feb. 9 and vote counting will start immediately after polling stations are closed on the same day.

January 22, 2014

Hosokawa to call for nuclear-free Japan in Tokyo governor race

http://ajw.asahi.com/article/behind_news/politics/AJ201401220060

By SACHIKO MIWA/ Staff Writer

Former Prime Minister Morihiro Hosokawa announced that a departure from nuclear energy will be a major part of his campaign promises for the Tokyo gubernatorial election a day before official campaigning gets under way on Jan. 23.

“I decided to run because I received a strong message from former Prime Minister (Junichiro) Koizumi, my ally in our efforts to abandon nuclear power, that I should perform my last public service,” Hosokawa, 76, said at a news conference at the Tokyo Metropolitan Government building in Shinjuku Ward.

Hosokawa led a short-lived eight-party coalition government that ended 38 years of Liberal Democratic Party rule in 1993. He resigned after eight months as prime minister and retired from politics in 1998, before returning to run in the Feb. 9 Tokyo gubernatorial poll.

Hosokawa said his entry into the race was also spurred by the nation’s political situation.

“I am alarmed by the direction Japan is heading and the manner it is proceeding on issues such as the Constitution, national security and relations with neighboring countries,” he said.

Sources in Hosokawa's camp said he will call for blocking restarts of Japan's idled nuclear reactors. Currently, Japan is effectively nuclear-free as none of the nation's 48 reactors are online.

The Abe administration is pushing to restart idle reactors after their safety is confirmed by the Nuclear Regulation Authority. Hosokawa, who opposes Prime Minister Shinzo Abe's stance on the nuclear issue, has co-opted some policy lines championed by Koizumi, a popular LDP prime minister from 2001 to 2006, who has come out publicly in support of Hosokawa.

The 72-year-old Koizumi, widely seen as Abe's mentor, now is openly at odds with his former protege over the nuclear issue. Hosokawa will stand side by side with Koizumi when he makes his first campaign speech Jan. 23, the sources said.

The call for doing away with nuclear energy tops the list of five items in Hosokawa's campaign promises. "Now is the time for making a political decision to stop reactor restarts," the pledge says.

It also promises to turn Tokyo into "the world's leading energy-saving city" by introducing pioneering measures to help achieve Tokyo's existing goal of having renewable energy sources account for 20 percent of all its energy supply by 2020.

Hosokawa will also pledge to set up a panel of experts to help realize Tokyo's original energy policy, and to take aggressive action to enhance the transparency of Tokyo Electric Power Co.'s management and optimize the utility's electricity rates.

The Tokyo metropolitan government is the fourth-largest shareholder in TEPCO, operator of the Fukushima No. 1 nuclear power plant, which suffered meltdowns after the March 2011 Great East Japan Earthquake and tsunami.

The campaign promises also include a review of plans for venues and facilities for the 2020 Summer Olympics in Tokyo, which have been criticized as being too grandiose and costly.

"I will design an Olympic Games that embraces the natural world with Japan's iconic simplicity and elegance instead of flaunting gaudy facilities," the pledge says. Hosokawa's platform also calls for jointly planning Olympic events with communities in northeastern Japan that were affected by the 2011 disaster.

Can't ignore nukes

January 23, 2014

Can’t bury the nuclear issue

http://www.japantimes.co.jp/opinion/2014/01/23/editorials/cant-bury-the-nuclear-issue/#.UuJh87Qo-aQ

Campaigning kicked off on Thursday for the Feb. 9 Tokyo gubernatorial election, which will not only decide the leader of the nation’s capital but also influence the debate on whether Japan should continue to rely on nuclear power — a major issue that will help determine the shape of Japan’s future.

The nuclear issue has assumed great importance because former Prime Minister Morihiro Hosokawa has entered the race with the backing of former Prime Minister Junichiro Koizumi and is running on a “zero nuclear” platform — a stance shared by Koizumi. Both Hosokawa and fellow candidate Kenji Utsunomiya, a former head of the Japan Federation of Bar Associations, are calling for the immediate halt of nuclear power generation. They oppose the Abe administration’s plan to restart idled nuclear power plants if their safety is confirmed by the Nuclear Regulation Authority.

Candidate Yoichi Masuzoe,a former health and welfare minister, calls for ending Japan’s reliance on nuclear power over the long term while another candidate, former ASDF Gen. Toshio Tamogami, favors the continued use of nuclear power.

Some people, in particular Prime Minister Shinzo Abe, oppose the idea of treating nuclear power as a major issue in the Tokyo gubernatorial election. In an apparent effort to prevent the nuclear power issue from rousing wide interest among Tokyo voters, Abe said energy policy is an issue not just for Tokyoites but for all Japanese, adding that various issues that the Tokyo governor must deal with should be discussed in a balanced manner.

Yet Tokyo, which consumes about 10 percent of Japan's total electricity, is the biggest power user among Japan's 47 prefectures. And it must not be forgotten that the Fukushima nuclear disaster happened as a result of the central government's long-standing policy of promoting nuclear power generation without taking sufficient steps to ensure that these plants were managed in a proper manner by both the government and the power companies.

To say that nuclear power should not be an issue in the Tokyo gubernatorial election is ludicrous as the question of what to do about nuclear power affects everyone in this small, quake-prone country — including the tens of millions of people living and working in the nation's capital. Discussions of technological, environmental and ethical problems related to the nation's need to permanently store high-level radioactive waste from nuclear power plants and what kind of society Japan should evolve into should be embraced rather than avoided. But Abe is eager to avoid such discussions because he is keen to continue doing "business as usual" in the area of energy policy.

Apparently in view of the devastation caused by the Fukushima nuclear crisis, Hosokawa said he feels a sense of crisis because the nuclear issue relates to the question of the state's very life and death. Koizumi said the Tokyo gubernatorial election will be a contest between two groups — a group that thinks Japan can advance without nuclear power and a group that does not think so. Their statements are anything but trivial.

The Tokyo Metropolitan Government can do quite a few things in the field of energy, such as making serious efforts to save power, promote green energy and using waste heat to generate electricity. Through such efforts it should strive to present an urban model that greatly reduces or ends reliance on electricity generated by nuclear power plants. This would not doubt impact the policies of other local governments as well as the central government.

It is true that Tokyo faces many problems, and the credibility of the candidates advocating a zero-nuclear policy will also depend on whether they can also present viable proposals on issues such as improvements in social welfare, bolstering preparedness against a large earthquake expected to strike in the not-too-distant future, job creation and eradication of poverty, and astute management of the 2020 Olympics and Paralympics. Let the debates begin.

Energy plan revision

January 24, 2014
Gov't to alter description of nuclear power in basic energy policy plan
http://mainichi.jp/english/english/newsselect/news/20140124p2a00m0na012000c.html

The government is set to change the description of nuclear power in the draft of its basic plan on energy, it has emerged.

The draft currently describes nuclear power as an "important base power source that serves as the foundation" for energy.

"We'd like to come up with an appropriate description while considering opinions within the ruling coalition," Economy, Trade and Industry Minister Toshimitsu Motegi told a news conference on Jan. 24.

Motogi denied that the government will change the phrase, "base power," meaning electricity that is constantly generated and consumed.

"Base power refers to electricity that is constantly used, even if it accounts for only 1 percent of power consumed in the country," Motegi said.

However, the minister added, "If such a description gives the public the impression that it corresponds to a large amount or high priority, we'd like to consider changing the wording according to context."

In December last year, an advisory panel to the Ministry of Economy, Trade and Industry drafted a basic plan on energy calling for a departure from the policy of ending Japan's reliance on nuclear power under the previous government led by the Democratic Party of Japan.

However, some ruling coalition members have voiced concerns that the draft could give the public the impression that the government intends to revive its policy of promoting atomic power.

The government will make a final decision on the description of atomic power in its basic plan on energy after the Tokyo gubernatorial race, in which the pros and cons of restarting nuclear plants is a major point of contention.

Energy plan revision eyed to avoid nuclear reliance 'misunderstandings'

http://www.japantimes.co.jp/news/2014/01/24/business/energy-plan-revision-eyed-to-avoid-nuclear-reliance-misunderstandings/#.UuJhD7Qo-aQ

Kyodo

The Abe administration will consider revising a draft energy policy so it doesn't stir "misunderstandings" that the nation will rely heavily on nuclear power in the medium to long term, industry minister Toshimitsu Motegi said Friday.

The draft says nuclear power is an "important base-load power source," but Motegi said "base-load power" refers to an electric source that is used continuously regardless of how much power it supplies.

"I do not intend to change the term 'base-load power.' But if it is perceived as an electricity source used for an extremely large amount . . . I will consider changing the context," he told a news conference.

The administration is in the final stage of deciding the Basic Energy Plan, which will be the first of its kind since the Fukushima nuclear disaster started in 2011, having already solicited opinions from the public.

The plan also says Japan will seek to reduce nuclear dependence as much as possible, but this has stirred controversy among ruling party lawmakers who see it as still taking too strong a pro-nuclear tone.

Nuclear policy has become one of the key issues in the Tokyo gubernatorial campaign that kicked off Thursday, with former Prime Minister Morihiro Hosokawa tying up with fellow former Prime Minister Junichiro Koizumi in calling for an end to nuclear power.

The administration is apparently wary the high-profile effort will provoke anti-nuclear sentiment still lingering from the Fukushima debacle

Nukes not the only issue

January 23, 2014
Other issues getting overlooked
Tokyo voters unhappy with nuclear focus
http://www.japantimes.co.jp/news/2014/01/23/national/tokyo-voters-unhappy-with-nuclear-focus/#.UuJgibQo-aQ

by Atsushi Kodera**,** Magdalena Osumi**, and** Tomohiro Osaki
Staff Writers

As campaigning for the Tokyo gubernatorial race got under way Thursday, just a little more than a month since Naoki Inose resigned over a money scandal, voters expressed bewilderment over how fast the focus seems to have turned to nuclear energy.

A 50-year-old construction company employee from Itabashi Ward said he was disappointed.
"It's completely wrong (for nuclear power to become a key issue)," he said. "I think the (2020 Tokyo) Olympics is a big subject. Inose's resignation came so unexpectedly it has clouded what the real issues are."

The man, who did not want his name used, added that none of the 16 candidates has earned his vote yet in the Feb. 9 race.

According to pre-campaign polls conducted by media organizations, the strongest contenders are former health minister Yoichi Masuzoe and former Prime Minister Morihiro Hosokawa, followed by lawyer Kenji Utsunomiya and nationalist Toshio Tamogami.

Hosokawa, after spending the last 15 years away from politics, has enlisted support from another former prime minister, Junichiro Koizumi, to push his anti-nuclear agenda.

The Hosokawa-Koizumi duo has quickly become a favorite among those who consider nuclear power the most important issue.

But Yoshitaka Shimoda, a 20-year-old university student, said his vote will go to Masuzoe.
While admitting that none of Masuzoe's pledges resonate with him, Shimoda said he finds the former health minister the most affable candidate, citing his telegenic smile.

"Plus he's the only one (of the candidates) I can recognize by name," he said.

Meanwhile, foreign residents expressed what they want the next Tokyo leader to do.

Pole Piotr Grzywacz, 38, who works for a major U.S. company specializing in Internet-related services, said his natural interest in politics has weakened somewhat, influenced by what he described as Japan's general political apathy.

Grzywacz said that during his 13 years in Japan he hasn't noticed any major changes in his daily life despite many changes on the political stage.

He added, however, that the tourism infrastructure in Tokyo should be made more convenient for foreigners, especially those who can't speak Japanese.

While refraining from commenting about the candidates, 36-year-old German Stephan Matthiesen said he expects some changes in economic policies.

"The economy is growing now," said Matthiesen, a financial controller at a firm in Tokyo. "The question is how you can stimulate the domestic economy sustainably, and deregulating and opening the country more towards foreign investors is one of the key issues."

Asked his opinion about nuclear energy, Matthiesen said that the country is not ready to build the infrastructure for a grid in which nuclear power plays no role.

"You need to build the whole infrastructure and you can't do it over one night. It takes a couple of decades," he said.

Besides nuclear energy and the Olympics, preparing for a major earthquake and child-rearing support have climbed to the top of the election agenda.

Candidates are also expected to be scrutinized for corruption because of Inose's resignation.

But Japan's strained relations with South Korea and China appear to have strengthened support for Tamogami, a nationalist whose platform features building disaster preparedness through use of the Self-Defense Forces.

Tamogami is said to enjoy strong support from the Internet crowd in particular, making him a wild card in the race.

A 24-year-old university student who came to listen to Tamogami deliver a speech Thursday morning in front of Shibuya Station expressed support to the nationalist candidate.

The student, who only gave his family name, Miura, said he supports Tamogami because he finds the former top Air Self-Defense Force officer most ideologically consistent and agrees with his hawkish stance.

Miura, a self-acknowledged frequent Internet user, also said he supports Prime Minister Shinzo Abe.

January 23, 2014

Editorial: Tokyo election a chance to tackle national problems

http://mainichi.jp/english/english/perspectives/news/20140123p2a00m0na010000c.html

The battle for the Tokyo governor's chair officially began on Jan. 23, and it's shaping up to be a fierce fight among first-time gubernatorial candidates.

The Feb. 9 poll will also be to choose the face of the capital that will host the 2020 Summer Olympics. However, the candidates will lock horns over a whole raft of serious issues, such as atomic power policy in the post-Fukushima nuclear disaster era, the quickly aging Tokyo metropolitan population, and disaster prevention. In other words, the election will be fought over issues of national importance, and will address not just the state of Tokyo but the state of Japan.

On Jan. 22, the day before the start of the campaign, 76-year-old former Prime Minister Morihiro Hosokawa officially announced his candidacy. He joined a slate that already included former Health Minister Yoichi Masuzoe, 65, former Japan Federation of Bar Associations President Kenji Utsunomiya, 67, former Air Self-Defense Force Chief of Staff Toshio Tamogami, 65, and inventor Doctor Nakamatsu, 85.

All the major candidates are running as independents. However, the Tokyo branches of the Liberal Democratic Party (LDP) and New Komeito are endorsing Masuzoe, and the Democratic Party of Japan (DPJ), Unity Party, and People's Life Party are effectively backing Hosokawa. The Japanese Communist Party (JCP) and Social Democratic Party (SDP) have endorsed Utsunomiya, while Tamogami has the support of Japan Restoration Party (JRP) co-leader and former Tokyo Gov. Shintaro Ishihara. It's notable that, as has been the case for the past several Tokyo gubernatorial elections, the major parties were unable to take the lead in finding candidates to back.

Due in great part to the candidacy of Hosokawa and his high-profile backer, former Prime Minister Junichiro Koizumi, the election battle this time around will almost certainly be fought over nuclear energy policy.

Hosokawa has declared that he will not accept the restart of any nuclear reactors in Japan. He has also pledged to make Tokyo the top city in terms of energy conservation and the adoption of renewables, blazing a path for growth that does not depend on nuclear power. Of Fukushima No. 1 nuclear plant operator Tokyo Electric Power Co. (TEPCO), in which the Tokyo Metropolitan Government owns stock, Hosokawa demanded transparent management and reasonable electricity charges.

The Great East Japan Earthquake of March 2011, which knocked out many power stations in a system that had become increasingly concentrated in just a few rural locations, laid bare the fragility of Tokyo's electricity supply. As such, it would be strange for the local government to leave energy policy entirely up to the central government.

Going cold turkey on atomic power, however, would at least in the short term leave Tokyo, and Japan as a whole, dependent on fossil fuels for energy, and very likely push up electricity prices. It would also be necessary to consider ways for Tokyo to help promote the economic livelihood of the local governments forced to watch as nuclear plants in their jurisdictions -- major sources of funds and employment -- were shut down for good.

Hosokawa says that, if elected governor, he'll establish an expert committee to propose concrete policy measures. If, however, he is to emphasize a breakaway from nuclear power as the most important point at issue, those concrete policy measures must be debated during the campaign so that we the voters can pass judgment on them. We also need to hear a convincing explanation from Hosokawa about the 100 million yen loan from courier company Sagawa Express Co. that triggered his resignation as prime minister back in 1994.

Utsunomiya is also running on a zero-nuclear power platform, while Masuzoe has emphasized the need to break Japan's dependence on atomic energy. Masuzoe, however, has the support of Rengo Tokyo, a labor union that has the Federation of Electric Power Related Industry Worker's Unions of Japan under its umbrella -- in other words, power company workers. The Cabinet of Prime Minister Shinzo Abe, leader of the LDP, is moving toward reactor restarts, so Masuzoe must explain exactly what route he plans to take as Tokyo governor.

Former air defense chief Tamogami, on the other hand, approves of atomic energy. What, though, does he think about how to dispose of highly radioactive nuclear waste? Whether or not nuclear power ends in Japan, as the country's greatest consumer of electricity, Tokyo must take some responsibility for energy policy.

However, the Tokyo election also must not be fought solely over nuclear power. While the Olympic mood may be in the air in the capital, Tokyo has serious problems to contend with.

Two especially pressing issues are how Tokyo will deal with its quickly aging population, and the need to set up anti-disaster policies in preparation for a possible powerful earthquake right under the city.

Five years after the Olympics has left town, it's estimated that the number of people in metro Tokyo aged 75 and over will reach around 2 million. The metropolis is, in other words, a microcosm for the sudden aging that will hit all of Japan's major cities.

In 2020, when the Olympic party comes to Tokyo, the city's population will just have begun to decline. It's estimated that there will be 3 million fewer Tokyoites in 2060 than there are now, and there are already wards in the capital with waiting lists a thousand names long for places at intensive-care homes for the

elderly. The problem is made more acute by the honestly weak bonds among Tokyo residents. So how will the city create an effective medical, nursing care and social welfare system?

In the disaster-prevention realm, the metro government must learn from major earthquake measures of other areas of Japan and present a concrete plan to establish "damage reduction" policies in cooperation with local residents. The problems that face Japan as a whole are distilled in Tokyo, so Tokyo should present plans that can be models for the rest of Japan.

Of course, how Tokyo will host its second Olympics will also come up for debate in the campaign, and not just the tremendous cost of the new National Stadium. Compared with the 1964 Summer Games, which were the symbolic embodiment of Japan's economic re-emergence, the 2020 Games will be much more about the vision for Tokyo's future, including issues like environmental conservation, the distribution of public works, transportation network maintenance, and the potential lifting of the city's ban on casinos.

The Tokyo gubernatorial election has often vividly reflected changes in Japanese society and politics. The 1995 election of independent Yukio Aoshima to the post signaled a sudden shift away from mainline party-sponsored candidates, while it could be said that the long run of former Gov. Ishihara presaged the Japanese conservative resurgence that brought Shinzo Abe back to power.

We are bothered by how late the debate on policy has begun in the current election. With Hosokawa waiting until the day before the campaign's start to formally announce his candidacy and his policies, no public debate or news conference with all the candidates was possible before the contest officially began.

Metro Tokyo's population now stands at 13.29 million, its GDP roughly equivalent to that of the Netherlands. The governor of Tokyo is the face of Japan. The battles over nuclear power, social welfare and disaster preparedness that will play out in the gubernatorial election race will work to push us to consider the state of Japan as a whole after such an accelerating centralization in Tokyo.

As such, the election has the significance of questioning the way the capital should stand ahead of the 2020 Olympics. Utilizing Internet campaigning and other means will help ignite the belated start of real debate. We sincerely hope that this election becomes a chance for not just the voters of Tokyo but also the whole nation to consider the present and future of this country.

"An incredible opportunity for Japan"

January 23, 2014

Nuclear energy fight highlights aging economy

http://www.japantimes.co.jp/opinion/2014/01/23/commentary/nuclear-energy-fight-highlights-aging-economy/#.UuJhtbQo-aQ

by William Pesek
Bloomberg

Even mayoral elections often have the biggest repercussions. Japanese Prime Minister Shinzo Abe might want to ponder that as he considers what went wrong in Nago, Okinawa (population 62,000).

Abe's Liberal Democratic Party failed to dislodge incumbent Mayor Susumu Inamine in Sunday's contest, putting Japan-U.S. relations at risk. Inamine has pledged to block the relocation of a U.S. air base to his district, something that Abe had assured Washington was a done deal.

Apparently not.

The question now is what the LDP's setback in Nago says about the Feb. 9 gubernatorial election in Tokyo, one that could topple a central pillar of Abe's economic program.

Morihiro Hosokawa, prime minister from 1993 to 1994, is running for Tokyo governor, arguably the second-most influential job in Japan. The LDP's knives are out for him: Shintaro Ishihara, Tokyo's popular governor from 1999 to 2012, has flatly declared Hosokawa isn't qualified for the job.

The establishment's real gripe with Hosokawa has less to do with his credentials than his policies, which threaten Japan's nuclear-industrial complex — the LDP's political base. This "nuclear village" is at the root of the cronyism, corruption and inertia that continue to prolong Japan's malaise and dent its competitiveness.

Abe's surrogates are trying to paint Hosokawa as some kind of crazed Japanese Che Guevara who would drag the nation backward with his green policies.

But in Hosokawa's corner stands none other than Junichiro Koizumi, Abe's political mentor and the nation's most celebrated economic reformer in decades — hardly a Marxist.

In all the excitement over Abenomics and Tokyo hosting the 2020 Olympics, it's easy to forget the nuclear-disaster zone 215 km away. Radiation has been leaking from the crippled reactors at Fukushima for going on three years now, and nuclear sludge is contaminating groundwater and the Pacific Ocean.

How much?

We don't know. The hapless Tokyo Electric Power Co., which owns the power plant, has consistently hedged the truth about the disaster, enabled by the government. Abe's new national secrets bill ensures we will know even less.

Hosokawa and Koizumi are doing Japanese a favor by highlighting the crisis. If the March 2011 earthquake that damaged Fukushima demonstrated anything, it's that Japan's 54 reactors have no place in such a seismically active nation.

The tragedy also helped expose the nuclear village — a network of power companies, regulators, bureaucrats and researchers that holds great sway over Japanese elections and media.

Just like Hosokawa, the two prime ministers prior to Abe, Yoshihiko Noda and Naoto Kan, hail from the Democratic Party of Japan and sought to rein in this pro-nuke cabal. Noda, for example, pledged to phase out nuclear power by 2040. When the LDP returned to power in December 2012, Abe's first act was to scrap that plan.

Why? It's the easy road. Revitalizing a bloated, aging economy is harder when energy costs are rising.

The difficult route would be to find an alternative to nuclear power. It would also be the more lucrative one.

In October, Koizumi turned on Abe and the LDP and called for a reactor-free Japan. The former prime minister has argued that devising and selling alternatives to nuclear power could be the ultimate growth industry.

At the moment, Abe is traversing the world hawking nuclear technology for Hitachi Ltd. and other companies. But launching a new generation of renewable-energy companies could create millions of jobs and unprecedented wealth.

When it comes to energy efficiency and conservation, few places can trump Japan. Why not harness those capabilities to raise living standards?

All Abe is doing is doubling down on the last 20 years: pumping money into a tired economy, building more bridges and highways, and bailing out Sony Corp. with a weak yen.

Hosokawa and Koizumi are thinking bigger. It would be oddly poetic for Japan — the only country that has suffered a nuclear attack — to rid our planet of an energy source that from Three Mile Island to Chernobyl to Fukushima has proven itself to be anything but safe, clean or cheap.

Unless we can construct reactors out of rubber or elevate them on huge shock absorbers out of the reach of temblors or tsunamis, they shouldn't be part of Japan's future. Arguably, the same holds true for India, Indonesia and Turkey — places to which Japan Inc. is trying to export its vulnerabilities.

If high-technology, hyper-conservative and rules-obsessed Japan couldn't avoid or contain Fukushima, what hope do far more graft-prone political systems have? Even the prime minister's wife, Akie, wants her husband to stop these sales.

Abe's party is circling the wagons to stop Hosokawa. BNP Paribas says investors should sell their stock if Hosokawa becomes Tokyo governor. But I see this moment as an incredible opportunity for Japan.

Call me crazy.

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Abenomics and nuclear

January 25, 2014

Abe-genda': nuclear export superpower

A lot is riding on Prime Minister Shinzo Abe's push to export nuclear technology abroad. As Abe visits New Delhi on the occasion of India's Republic Day, we examine the nuclear component of 'Abenomics' infrastructure-exports growth strategy

by Jeff Kingston

http://www.japantimes.co.jp/news/2014/01/25/world/abe-genda-nuclear-export-superpower/#.UuQIhrTjJ1s

Prime Minister Shinzo Abe is now in New Delhi to celebrate the 53rd anniversary of the founding of the Indian Republic. His presence speaks volumes about closer diplomatic, security and economic ties and, at least from Tokyo's perspective, a common agenda on responding to the rise of China. India remains ambivalent, pursuing a shrewd hedging strategy rather than siding with either Beijing or Washington/Tokyo, eager to maximize concessions from all sides.

"The Emperor visited India last month — a huge symbolic event — and now Abe has been invited to be the chief guest at the Republic Day celebrations on Jan. 26 — no other Japanese prime minister has been invited to this before — an invitation extended only to close friends and partners," says Punendra Jain, professor of Asian Studies at Adelaide University in Australia. "This symbolizes their closer and evolving political and strategic relationships. Of course, the elephant in the room is China."

Tensions with China and South Korea have spiraled upward over the past year and thus "Abeplomacy" seeks to offset Japan's isolation in East Asia by nurturing closer ties with the member states of the Association of Southeast Asian Nations and India. Warming ties with New Delhi marks a sharp turnaround

from 1998 when Japan imposed economic sanctions on India (and Pakistan) for conducting a series of nuclear tests. These sanctions were lifted in 2001, at Washington's behest, to reward their support for the U.S.-led "war on terror." Since 2003, India has been the largest recipient of Japanese economic assistance, and economic ties are growing due to the 2011 Comprehensive Economic Partnership Agreement. Bilateral trade in 2011-12 reached $18.43 billion, up 34 percent from the previous year, but remains modest given the $334 billion in Sino-Japanese trade in 2012.

"The Indian nuclear tests of 1998 marked the lowest point in bilateral relations, as Japan reacted strongly to the nuclearization of the subcontinent," says Harsh Pant, professor of international relations at King's College London. "Tokyo suspended economic assistance for three years as well as put on hold all political exchanges between the two nations. This strong reaction from Japan was in many ways understandable, given that the Japanese are the only people to have experienced attacks by nuclear weapons."

However, Pant explains, "many in India saw the Japanese reaction as hypocritical for apparently brushing aside India's genuine security concerns even as Japan enjoyed the security guarantee of the U.S. nuclear umbrella."

Japan, as the sole nation to suffer a nuclear attack, has strongly opposed nuclear proliferation on principle, and as such been an outspoken critic of India's nuclear weapons program and refusal to join the 1968 Nuclear Non-Proliferation Treaty (NPT) or 1996 Comprehensive Test Ban Treaty (CTBT). However, India also bases its nonparticipation in these regimes on principle: the nuclear weapons possessing nations granted themselves a monopoly on nuclear weapons and have not followed up on pledges to eliminate their nuclear arsenals.

From the Indian government's perspective, these nonproliferation agreements created an exclusive club of status quo powers that left their nation marginalized and vulnerable. The 1962 border war with China was an unmitigated disaster for Prime Minister Jawaharlal Nehru's friendly diplomacy toward Beijing, based on the false assumption that the two nations shared a common agenda and could cooperate to reciprocal advantage. The comprehensive defeat was also a shock for the Indian armed forces, exposing inadequate military preparation. Upping the ante China then detonated a nuclear device in 1964, sending shock waves through India's security community and ensuring that it would follow suit. In 1974, India conducted its first nuclear test, dubbed "Smiling Buddha," and its last tests in 1998. India maintains that its nuclear arsenal is for deterrence only and has declared a nuclear no-first-use policy.

In 2008, the International Atomic Energy Agency reached an agreement with India to allow it access to India's civilian nuclear reactors. This agreement paved the way for the Nuclear Suppliers Group (NSG), under intense U.S. pressure, to grant India a waiver in 2008 allowing it access to civilian nuclear technology and fuel from the 48 member states. Since the waiver was granted, India has reached an agreement with the U.S. and France, among others, because they regard India as one of the most promising markets for nuclear reactor exports. Ironically, India's 1974 nuclear test triggered the

establishment of the NSG, but now Washington has abandoned the sanctions regime it once imposed and U.S. President Barack Obama backs India's membership in the group.

Let's make a deal

The 2008 U.S.-India Civil Nuclear Agreement brokered by the administration of President George W. Bush has become the template for subsequent agreements, meaning that India's unilateral pledge to refrain from nuclear tests has been accepted as sufficient guarantee. Until then, the NSG only cooperated with nations that signed the NPT. Under the terms of the agreement, in the event that India does conduct a nuclear test, any decision to terminate the accord and cut access would only be invoked after a year of consultations.

This is where Japan comes in. Exports of nuclear components and technology, as well as conventional arms, are potentially key elements of "Abenomics" and much is riding on the outcome. In 2013, Abe concluded Japan's first nuclear reactor export agreement with Turkey for $22 billion and others are pending with Saudi Arabia and the United Arab Emirates, while the prime minister has also lobbied governments in Central Europe, Vietnam and Indonesia. This is a remarkable turnaround from 2011 when the prospects for post-Fukushima Japan relying on nuclear energy, let alone exporting it, looked unlikely.

Three major nuclear vendors have bagged contracts in India estimated at roughly $60 billion, but the final price will probably balloon given a history of cost overruns. For example, Finland's order for Areva's Evolutionary Pressurized Reactor (EPR) has nearly tripled in cost to €8.5 billion from the original price tag of €3 billion and India has ordered six of these reactors. Each of the major vendors feature significant Japanese stakes — GE/Hitachi, Westinghouse/Toshiba and Areva/Mitsubishi — and all produce key reactor components in Japan. As such, they need the Japanese government to agree to the NSG waiver and hammer out an accord with India. Abe is keen to cut a deal despite reservations within his party and ruling coalition, and has the numbers in the Diet to ignore public opposition as he did when ramming the notorious secrecy legislation through the Diet in December.

Negotiations have stalled since 2008 mostly due to Japan's insistence on India relinquishing its right to conduct nuclear tests and an immediate cessation of cooperation if India violates its self-imposed moratorium. Japan also opposes India's desire to reprocess spent fuel. However, a recent pact with Turkey has a provision that allows it to enrich uranium and extract plutonium if agreed in writing, paving the way for exports of relevant Japanese technologies, so it is hard to imagine that India will settle for less.

Furthermore, the Japanese government wants India to formally restate its commitment to India's no-first-use nuclear weapons policy and support for nonproliferation in the pact. India's position remains clear: Japan should accept the same deal as the U.S. and other NSG members that don't include such provisions.

Discussions were suspended after the Fukushima nuclear reactor meltdowns in March 2011, but resumed in May 2013. At the end of December, negotiators had not yet bridged differences on civilian nuclear

cooperation or the sale of US-2 amphibious search-and-rescue military aircraft produced by ShinMaywa. The plane deal is seen as a significant boost to growing bilateral defense cooperation. To skirt the existing ban on military exports, a stripped down "civilian" version of the plane would be sold without the Identify Friend or Foe system. The Indian Navy is keen to acquire this aircraft and plans to equip it with an Israeli IFF system. Lifting the arms export ban to help Japan's defense sector industries is an Abe priority in 2014.

Abe wants to finalize these deals during this trip because politics might postpone agreement until the next Indian-Japan summit at the end of 2014. With Indian national elections due by May 2014 at the latest, there are countervailing pressures.

"Whether the two nations are able to sign the pact during Abe's January visit would depend on how much risk he is willing to take on the nuclear front and whether it would be a good idea for him to sign a deal with a lame-duck government in Delhi," Pant says. "The Indian government would not be able to deliver any significant change in its posture as elections are round the corner and they can't dilute their traditional stand on the CTBT."

While postponement is possible, Jain believes that "the deal is going to go ahead. I don't see much difference between the BJP (Indian People's Party) and Congress as far as Japan-India relations are concerned. If anything, BJP might seek closer ties with Japan."

"The expectation is to sign the deal when Abe is in New Delhi," Jain says. "As you know, in India, the agreement will be welcomed in all quarters; strategic analysts, former diplomats and military leaders are writing strongly in favor."

Dissensus

But not everyone agrees. Japan's first lady, Akie Abe, who has openly expressed opposition to her husband's support for nuclear energy exports, told a Dec. 29 television program that, "It remains anybody's guess if proper maintenance will be provided overseas. I wonder how Japan would cope in case of an emergency."

According to opinion polls, her doubts are shared by a majority of Japanese, including the mayor of Nagasaki who criticized the deal in August.

Citizens in India worry, too. "(The deal) pushes India's ill-conceived nuclear expansion ahead, creates a bad precedent of rewarding India for its nuclear tests while others face sanctions . . . and the whole dynamics of India, Japan and U.S. cozying up to contain China (will) destabilize Asia," says P.K. Sundaram from the Coalition for Nuclear Disarmament and Peace, India.

He acknowledges that Indian parties across the political spectrum support nuclear energy, but believes that large, sustained public protests against nuclear reactors, especially near a new nuclear plant sited at Kundankulam in Tamil Nadu, represent fallout from Fukushima and widespread skepticism about nuclear safety.

Pankaj Mishra, an acclaimed writer from India, chides the Indian government for blaming "an unspecified 'foreign hand' for the (anti-nuclear) protests. Never mind that the much-despised foreign hand helped build the Kudankulam plant, along with much of India's nuclear infrastructure."

M.G. Devasahayam, a former official of the elite Indian Administrative Service, asked me whether Abe would approve the deal. I said yes, venturing that Abe is pro-India. He replied that he shouldn't. "It is morally inappropriate for a country that has suffered the worst from nuclear holocausts in war as well as in peace to supply nuclear reactors and equipment to an over-populated country like India with limited land and water resources," Devasahayam says. "India needs electricity that is cheap and affordable whereas nuclear power is expensive. If all costs — construction, commissioning, operation, decommissioning and safe storage of spent-fuel — are honestly factored in, nuclear power is way costlier than any other source of electricity."

He worries that "Japan's long-term relationship with India will be seriously jeopardized once the Indian public comes to realize the ill-effects of nuclear power on their life, livelihood, environment and future generations."

A.V. Ramana, a nuclear physicist based at Princeton University, agrees that nuclear energy does not make sense for India due to the high costs and safety concerns. In his book "The Power of Promise: Examining Nuclear Energy in India," Ramana argues that nuclear energy is inappropriate for India on environmental, economic and technological grounds.

"Japan, which is currently facing tremendous democratic opposition to restarting nuclear reactors within the country, is considering exporting nuclear reactor parts to a country where, again, there is significant opposition to nuclear power, a history of failure, poor technology choices and a lack of organizational learning," Ramana says.

He cites the continued emphasis on breeder reactors, abandoned by other nations due to cost and safety concerns, as evidence of institutional myopia. "Because of its centralized character and the huge costs involved, nuclear power cannot play a significant role in solving the energy needs of the vast majority of India's population (and) only brings with it two of the familiar — and so far insoluble — problems associated with nuclear energy: susceptibility to catastrophic accidents and having to deal with radioactive waste that stays hazardous to human health for millennia," he says.

"Their reasons for such opposition are not difficult to discern. In the aftermath of March 11, 2011, people near an existing or proposed nuclear reactor can — and do — imagine themselves suffering a fate similar to those of the inhabitants of the areas around Fukushima," he says.

These anxieties appear warranted after A. Gopalakrishnan, former chairman of India's Atomic Energy Regulatory Board, revealed in April 2013 that the Russians used substandard components in building the Kundankulam reactors, planting a potential time bomb in southern India.

Nuclear liability of suppliers is a key issue because it's a potential deal breaker. According to Arun Jaitley, the BJP opposition leader in India's Upper House, the issue of liability remains murky despite government efforts to finesse the issue. Nuclear vendors are relying on a clause in contracts signed with the Nuclear Power Corp. of India that is designed to insulate them from any right to recourse, but Jaitley argues that legally this won't stand. Without an ironclad waiver on liability, however, most nuclear suppliers won't proceed. As Ramana says, "the nuclear industry doesn't like this business of being liable for anything at all."

Rivals suppliers in Russia and South Korea might capitalize on Japan's misgivings. Seoul signed a civilian nuclear agreement with India in 2011 and earlier this month Park Geun-hye visited New Delhi to explore nuclear prospects. And then there is the geo-strategic angle; China recently announced it would fund and build a nuclear plant in Karachi, Pakistan — India's arch-enemy. The pressures on Japan from the global nuclear industrial complex are also intense, reinforced by lucrative contract awards to consortium involving Japanese firms, including the GE/Hitachi nuclear project in Gujarat, where the presumptive next Indian prime minister, Narendra Modi, is now chief minister.

Abe, the pitchman-in-chief, is determined to seal the deal worth tens of billions while millions of fingers are crossed that his gamble doesn't lead to "Abegeddon."

What if anti-nuke candidate wins on Feb 9?

January 25, 2014
Win by anti-nuclear candidate could affect Japan's policy to restart idled reactors
http://mainichi.jp/english/english/perspectives/news/20140124p2a00m0na010000c.html

The outcome of the Feb. 9 Tokyo gubernatorial election could seriously affect the policies of Prime Minister Shinzo Abe's government.

Former Prime Minister Morihiro Hosokawa is calling for an immediate end to nuclear generation in his election campaign, while Tokyo voters are under scrutiny as residents of a region that consumes massive volumes of electricity.

Evacuation orders are still in place for some residents around the crippled Fukushima No. 1 Nuclear Power Plant, and interest in the central government's energy policy remains strong. There is a possibility that the Abe government may be pressured to review its energy policy depending on how Hosokawa and anti-nuclear candidates like Kenji Utsunomiya, the former president of the Japan Federation of Bar Associations, fare in the Tokyo election.

Former Prime Minister Junichiro Koizumi said in a stump speech for Hosokawa in front of JR Shinjuku Station on Jan. 23, ''The Tokyo gubernatorial election this time will have a bigger impact on national politics than any previous elections.''

The Nuclear Regulation Authority has conducted safety screenings with an eye to restarting idled nuclear reactors, and the central government cannot ignore the outcome of the Tokyo gubernatorial election when deciding whether it will approve restarts or not.

The ruling Liberal Democratic Party (LDP) is supporting former Health, Labor and Welfare Minister Yoichi Masuzoe, who approves of the restarting of reactors, while trying to divert public attention to social security and disaster-prevention measures. The pro-nuclear positions held by Masuzoe and former Air Self-Defense Force chief Toshio Tamogami are similar to that of Prime Minister Abe. If either of the two candidates wins, the central government is expected to proceed with measures to restart Japan's idled reactors.

The Abe government has postponed a Cabinet decision on a basic energy program, a guiding principle for the nation's mid- and long-term energy policy, until after the Tokyo election. Economy, Trade and Industry Minister Toshimitsu Motegi told a news conference on Jan. 14 that the government needs to conduct more in-depth debate on the issue of final disposal sites. His remarks were interpreted as suggesting a revision of the original energy program.

The LDP's energy policy parliamentary league on Jan. 23 proposed reviewing the program, which states that nuclear power is an important basic source of electricity. Its coalition partner New Komeito has also taken issue with the program, which calls for steadily promoting the nuclear fuel cycle. If an anti-nuclear candidate wins in the Feb. 9 election, the Abe government will be pressured from those inside the ruling camp to revise the basic energy program. (By Miho Suzuki, Tokyo Political News Department)

Nuclear power "very much a local issue"

January 25, 2014

Nuke issue could restore power to the regions

http://www.japantimes.co.jp/news/2014/01/25/national/nuke-issue-could-restore-power-to-the-regions/#.UuUD7bTjJ1s

Restarting in the summer?: Tepco's Kashiwazaki-Kariwa nuclear plant is seen from a beach in Kashiwazaki city, Niigata Prefecture, in September. | BLOOMBERG

by Philip Brasor

The Regional Governance Law allows local governments to submit *ikensho*, or "letters of opinion," to the central government on matters that concern them. These opinions should represent the will of elected assemblies, and can include proposals for new bills or revisions of existing ones. About 7,000 ikensho are sent to the Diet every year, and according to an article in the Jan. 19 Asahi Shimbun, the central government rarely pays them any mind.

The administrative office of the upper house says that it has received 1,475 ikensho "related to nuclear energy issues" since the Fukushima nuclear plant accident in March 2011. Asahi went through these letters to determine how many demanded an end to support for nuclear energy as a national policy.

Excluding matters pertaining to things like compensation for Fukushima victims and worries about radiation, the paper determined that 455 prefectural and municipal assemblies have asked the government to abandon nuclear power. That's about 30 percent of all the local governments in Japan.

The Asahi mentions these numbers to point out the "lack of insight" inherent in Prime Minister Shinzo Abe's view that the upcoming Tokyo governor's election should not be about nuclear power, since energy policy is determined at the national level. Abe was referring to former PM Morihiro Hosokawa's platform, which is built primarily on anti-nuclear sentiments with the help of another former prime minister, Junichiro Koizumi, who was Abe's mentor in the Liberal Democratic Party.

The Asahi finds the LDP's stance patronizing. After all, the central government, in league with regional power firms, has promoted nuclear energy generation by placing plants in depopulated areas to provide electricity to large metropolises far away, thus setting up mutually dependent relationships between these localities that can only be mediated by centralized entities.

Since the Fukushima meltdown, however, many local governments have grown resentful of the LDP's "leave it to us" policy. The government recently announced that this summer Tokyo Electric Power Co. will restart two reactors at the Kashiwazaki-Kariwa nuclear power facility in Niigata, the world's largest in terms of potential output. The prefecture's governor, Hirohiko Izumida, told reporters that he doesn't trust Tepco's plan, calling it "very strange," since shareholders and lending institutions don't bear any risk. He asked who will take responsibility if an accident happens, implying that residents and utility users will pay for any problems, just as they are now doing with regard to the Fukushima accident. Theoretically, Tepco can ignore him, since it needs the OK of Kashiwazaki, not Niigata Prefecture, and the city relies on the plant for its economic wellbeing.

But that sort of financial dependence is not assured either. A year after the March 11 earthquake, NHK aired a documentary, still viewable via its On Demand service, about the financial relationship between remote nuclear power plants and their big-city customers. NHK found that on average, 35 percent of the budgets of municipalities that host nuclear plants comes from direct government subsidies and "donations" from regional power companies.

It is thought that these cities, towns and villages can't survive without nuclear plants, but NHK showed that many can't survive *with* them either. Government subsidies used to come with a condition stating that the money be used for "promotional" public works — museums and the like — so that residents would know where the money was coming from and what it was for. Maintenance of these white elephants is very expensive, so since the mid-1990s, subsidies have come with fewer strings attached, but because the tax base deteriorates as plants get older and subsidies are only given when plants are built, it hasn't made that much difference.

Power-company donations have never come with strings. A group made up of various nuclear-power interests regularly gives money to Aomori Prefecture to "promote business." All local governments in the prefecture, which hosts the Rokkasho nuclear fuel reprocessing plant, receive these funds.

The leader of the organization openly told NHK that Rokkasho is an important project and if anti-nuclear forces in the prefecture succeeded in having it shut down, even temporarily, "all our efforts will be for nothing." As one insider said, the power companies established the fund to prevent an anti-nuclear candidate from winning the governorship, which is why they have to give money to all local governments, even those that have no nuclear facilities. Apparently, this scheme works, since there is no vocal opposition to nuclear power generation within local assemblies, though Rokkasho has had so many problems over the years there's a possibility it will never be operational.

So regardless of what the LDP says, nuclear power is very much a local issue, and if regional governments ever decided they prefer to determine their own energy needs, the central government will lose a great deal of control over their affairs. Izumida is popular among his constituents, so even if gaining permission to reopen the Kashiwazaki-Kariwa plant is a courtesy that Tepco can ignore, doing so would intensify public resentment. According to Tokyo Shimbun, the LDP fears that if Hosokawa successfully taps this same sentiment among Tokyoites and wins the election, "the anti-nuclear movement could actually spread to local areas that host plants." Before his ignominious exit in December, former Gov. Naoki Inose was already advocating energy independence for Tokyo.

Such a precedent would not only undermine the LDP's energy policy; it would call into question the whole centralized structure of Japanese administration, a matter now coming to a head with regard to the proposed U.S. air base in Nago, Okinawa. If cities such as Tokyo and Osaka assume responsibility for their energy situations, then the local governments hosting the plants that now provide them with electricity will lose a good part of their income. Maybe they will go bankrupt or maybe they'll figure out a way to survive, but either way they'll do it on their own.

Are nukes an appropriate election issue?

January 25, 2014

Young voters split over nuclear power's emergence as election issue: survey

http://mainichi.jp/english/english/newsselect/news/20140125p2a00m0na009000c.html

Japan's nuclear power policy has emerged as a major issue in the Tokyo gubernatorial race, which officially kicked off on Jan. 23, but Tokyoites have mixed opinions over whether the issue should dominate campaigns.

Candidates are split when it comes to their stance on nuclear power, with their election promises ranging from an "immediate zero-nuclear" policy to reducing dependence on nuclear power in the long term, and maintaining nuclear energy.

On Jan. 23 the Mainichi Shimbun launched a poll targeting 15 students and workers, mostly in their 20s, who are eligible to vote in the capital's Feb. 9 election. The pollees -- including one 19-year-old who will have come of age by voting day -- will be surveyed a total of four times between Jan. 23 and Feb. 9 over their impressions of the various campaigns, their criteria for singling out a candidate to vote for, and which candidate they actually voted for. None of the pollees has any particular party affiliation, and at the start of the survey, none of them had decided who to vote for.

When asked whether nuclear power was appropriate as a campaign issue in the Tokyo election, the respondents' answers were largely divided, though the small sample results cannot be interpreted as representing the general trend among young people. Out of the three response alternatives, four said nuclear energy is appropriate as a campaign issue, while seven answered in the negative, with the remaining four saying they didn't know.

In the meantime, the survey results also showed that nuclear power is not a black-and-white issue for them, with one respondent saying it is suitable as a campaign issue, but demanding that candidates also debate Tokyoites' livelihood. Some other respondents who either answered that nuclear energy is not apt as an election issue or that they didn't know whether it is suitable nevertheless insisted that the issue is something Tokyoites should think about.

Regarding the prospect of breaking away from nuclear power, the respondents offered various views. One said it was right to do so but added, "An immediate zero-nuclear policy is infeasible." Another commented, "I'm scared of nuclear accidents, but discontinuing nuclear power would result in power shortages, causing trouble for Tokyo residents."

Prosperity in the capital had indeed been supported by power supply from nuclear plants in Fukushima, Niigata and other prefectures up until the Great East Japan Earthquake in March 2011. The ongoing campaigns, in which nuclear power is being contested as a major issue, may provide Tokyo voters with a chance to weigh the quality of prosperity. Members of the younger generation living in the capital are now racking their brains over who should be entrusted with the capital's future.

The Mainichi Shimbun will keep track of the 15 pollees, asking them further questions on Feb. 2, 7 and 9 to track their selection of a candidate.

The following are the respondents' answers to the Jan. 23 survey. The choices of (A) to (C) next to their names stand for: (A) Nuclear power is suitable as a campaign issue, (B) Nuclear power isn't suitable as a campaign issue, (C) I'm not sure.

Male university student, 21 (B): The energy issue is important but it's not everything. The cause of the Fukushima nuclear disaster was attributable to Tokyo Electric Power Co., and nuclear power generation itself is not to blame. (Voted for Naoki Inose in the previous Tokyo election)

Female university student, 19 (C): I'm scared of nuclear accidents, but discontinuing nuclear power would result in power shortages, causing trouble for Tokyo residents. I can't figure out what is best. (Not eligible to vote in the previous Tokyo election)

Female university student, 20 (A): It is natural for Tokyoites -- consumers of large amounts of energy -- to have their will reflected in national politics through the Tokyo election. (Not eligible to vote in the previous Tokyo election)

Male university student, 22 (B): There are many other challenges for the metropolitan administration, including restoring fiscal health, tax reductions to attract companies, and urban development with a global outlook. (Voted for Naoki Inose in the previous Tokyo election)

Female university student, 22 (C): I don't understand the link between Tokyo and nuclear power. I believe there are various other issues to be debated. (Abstained in the previous Tokyo election)

Male confectioner, 27 (B): I have a baby and I'm worried that my child will end up on the waiting list for enrollment at nursery school. I want a new governor to take measures to improve the child-rearing environment. (Voted for Shigefumi Matsuzawa in the previous Tokyo election)

Female university student, 22 (C): Nuclear power is an issue to be considered by Tokyoites who use electricity generated by nuclear power stations, but for me, the priority of the issue is low. (Voted for Kenji Utsunomiya in the previous Tokyo election)

Female company employee, 29 (B): Nuclear power is an issue to be dealt with by the central government and local governments hosting nuclear power plants. Now that Tokyo is to host the 2020 Olympic Games, Tokyo should be transformed into an international metropolis that has economic strength. (Voted for Naoki Inose in the previous Tokyo election)

Male company employee, 25 (B): It is important to utter opinions about nuclear power, but the Tokyo governor should do other work considering the legal status and mandate of the position. (Abstained in the previous Tokyo election)
Male graduate student, 28 (A): The Tokyo governor's remarks about nuclear power will have an impact on the entire country. The results of the upcoming Tokyo election will represent the public will in the wake of the nuclear disaster. (Abstained in the last Tokyo election)

Female employee of an organization, 27 (C): All major candidates are calling for a breakaway from nuclear power, and they fail to distinguish themselves. After the Fukushima nuclear disaster, no Tokyoites would view nuclear power favorably. (Voted for Kenji Utsunomiya in the previous Tokyo election)

Male university student, 21 (B): It's not convincing for the Tokyo governor to talk about nuclear power. I have a disabled younger sister, and I'm hoping for the enhancement of welfare services. (Abstained in the last Tokyo election)
Female banker, 23 (A): I don't feel uncomfortable about (candidates vying for) the leadership of Japan's capital arguing over the pros and cons of nuclear power and making it a campaign issue. (Voted for Naoki Inose in the previous Tokyo election)

Male university student, 24 (B): Nuclear power is not an issue to be decided by Tokyoites. Breaking away from nuclear power is right, but the "immediate zero-nuclear" advocated by former Prime Minister Junichiro Koizumi is infeasible. (Voted for Naoki Inose in the previous Tokyo election)

Female university student, 22 (A): It is important to debate the pros and cons of nuclear power, but candidates should also debate Tokyoites' livelihood, such as the declining birthrate and aging society. (Voted for Naoki Inose in the previous Tokyo election)

Governors on nukes

January 28, 2014

Governors address Tokyo nuke debate

http://www.japantimes.co.jp/news/2014/01/28/national/governors-address-tokyo-nuke-debate/#.UufleLTjJ1s

Kyodo

As Tokyo prepares for its Feb. 9 gubernatorial election, governors of prefectures with nuclear power plants are split over whether they believe the nation's reliance on atomic energy should be a campaign issue.

Some welcome the debate while others argue that candidates and voters should pay more attention to other problems.

"It is very meaningful that the issue (of the future of nuclear power in Japan) is debated in Tokyo, a huge energy-consuming place," Fukushima Gov. Yuhei Sato said last Wednesday, a day before the Tokyo campaign officially started.

"I expect people in Tokyo to make decisions through thinking about the situation in Fukushima," said Sato, governor of the prefecture that hosts the devastated Fukushima No. 1 and where nearly 140,000 people are still living in temporary housing as evacuees from radioactive fallout.

There are no nuclear power plants in Tokyo, but the capital consumes almost 10 percent of all electricity in Japan.

Shizuoka Gov. Heita Kawakatsu, who oversees the Hamaoka nuclear plant, recently said that "it is natural that candidates in Tokyo propose ending nuclear power generation to avoid a dangerous accident."

Nuclear energy "can be discussed as long as people in Tokyo have interest in it," Saga Gov. Yasushi Furukawa said last Thursday. "But if I were a Tokyo resident, I would be seeking a clear answer about how to address the issues of an aging society."

Saga hosts the Genkai plant.

Miyagi Gov. Yoshihiro Murai expects the Tokyo election, whatever its outcome, will have only a limited impact on future nuclear policy.

"There will be some impact if the governor of the big energy-consuming place calls for a nuclear-free Japan," Murai said. "But nuclear power generation won't be stopped immediately, as it is a national policy."

Miyagi, one of the three hardest-hit prefectures in the March 2011 disasters, hosts the Onagawa nuclear plant.

The administration of Prime Minister Shinzo Abe wants to restart nuclear reactors if they comply with the government's safety standards, and export Japanese nuclear technology to other countries.

“It can be one of the main issues — whether to end the use of nuclear power — but it is questionable to make it the only issue,” Ishikawa Gov. Masanori Tanimoto said Friday.

The governor of the prefecture with the Shika nuclear plant also said, “I want candidates to come up with prescriptions (for other sources of electricity) if nuclear reactors are scrapped.”

Fukushima evacuees and Tokyo election

Fukushima evacuees living in Tokyo have mixed feelings over gubernatorial race

http://mainichi.jp/english/english/newsselect/news/20140128p2a00m0na006000c.html

Evacuees from Fukushima Prefecture who currently live in the Japanese capital have mixed feelings about the Feb. 9 Tokyo gubernatorial election in which candidates are locking horns over whether to abandon nuclear power.

Many people from Fukushima who evacuated to Tokyo in the wake of the outbreak of the nuclear crisis at the Fukushima No. 1 Nuclear Power Plant have switched their addresses to Tokyo, meaning that they have the right to vote in the race to pick a successor to Naoki Inose, who resigned as Tokyo governor last month over a money scandal.

When the election battle among candidates moved into high gear on Jan. 24, Hiroko Suzuki, 33, who had evacuated from the Fukushima Prefecture city of Iwaki to the Toyama apartment complex in Tokyo's Shinjuku Ward with her two sons, received a ticket for a ballot from the Shinjuku Ward Election Administration Commission. In the summer of 2011, she returned to Iwaki with her children and lived there for eight months. She paid out of her own pocket to measure her eldest son's radiation exposure and found out that he had higher radiation exposure than other children. She then started to feel uneasy. She told herself, "I don't want to have any regrets later."

In March 2012, she returned to Tokyo again, leaving her 38-year-old husband, who had a job in Fukushima Prefecture. Her two sons frequently go to hospital for asthma and other ailments. She changed her resident registration to Shinjuku Ward because she had to apply every month to a municipal government in the area where she is registered as a resident for exemptions from medical bills. Her family can get together only on weekends. She feels pity for her sons who cry a lot when they see their father going back to work. She constantly feels uneasy about her uncertain future.

Since the outbreak of the Fukushima nuclear crisis, she has voted for candidates calling for a breakaway from nuclear power. On the absurdity the nuclear accident imposed on her family, she said, "That is the result of the fact that society depended too much on nuclear power." She added, "I wonder if politicians who accept nuclear power have ever imagined their important people living near a nuclear power station." Although many of the candidates running in the Tokyo gubernatorial election are calling for the elimination of nuclear power, she fears that they could change their stance after winning the race. While being unable to fully trust her favorite candidate, she said, "Still, I want to bet on breaking with nuclear power generation."

Yoko Yamasaki, 66, who also evacuated to the Toyama apartment complex from Iwaki, has different views. "The nuclear issue is important, but I want them to turn the economy around and ensure pensioners can live at ease," she said.

Yamasaki's 72-year-old husband cannot work because he has an artificial bone in his leg. Therefore, she works part-time to make about 100,000 yen a month. In addition to her monthly income, her family has small amounts of pension benefits. She had to spend extra money earlier this month as she was hospitalized for an operation.

Yamasaki has no place to go back to because her house was completely destroyed by the March 11, 2011 earthquake

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Her family will be allowed to live in the apartment, which has been provided as a temporary evacuation facility, only until March 2015. Therefore, she is preparing to pay rent thereafter. "We pay 10,000 yen for electricity a month even today and electricity charges could further rise if nuclear power is eliminated. I want to vote for a candidate in the Tokyo gubernatorial election who calls for a policy to improve the pension and welfare systems."

Most of a total of about 8,000 disaster victims living in Tokyo are evacuees from Fukushima Prefecture, but it is unclear how many of them have switched their residential registrations to Tokyo and become eligible voters for the Tokyo gubernatorial election. According to a survey conducted by the Tokyo Metropolitan Government in February 2013, all or some members of slightly less than 40 percent of the 1,120 households that responded to the poll changed their addresses to Tokyo.

Build new reactors?

January 31, 2014

Electric power industry steps up push for new nuclear reactors

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201401310204

By SAWAAKI HIKITA/ Staff Writer

Conveniently ignoring the nuclear disaster in Japan nearly three years ago, the electric power industry has been brazenly lobbying members of the ruling party to construct new nuclear reactors.

The Federation of Electric Power Companies of Japan seems to be relying on the fact that the Abe administration is generally sympathetic to its call to continue using nuclear energy.

As yet, Prime Minister Shinzo Abe says no decision has been made on whether to construct new reactors. Doing so would be difficult in light of strong local opposition to nuclear reactors following the meltdowns at the Fukushima No. 1 nuclear power plant in March 2011.

The lobbying was apparently intended to influence the basic energy plan that the Abe Cabinet is planning to adopt.
In January, the LDP polled its lawmakers to determine what measures to include in the basic energy plan.

The FEPC promptly distributed a document to lawmakers which states the need to clarify that nuclear energy is an important energy source in the basic policy related to the supply and demand of electricity.

The document, a copy of which was obtained by The Asahi Shimbun, says, "In order to secure a certain degree of nuclear power generation (there is a need to) clarify the necessity of constructing new reactors or replacing existing ones."

With regard to restarting idle nuclear reactors, the document calls for "an efficient and prompt resumption of operations for nuclear energy that has been confirmed to be safe."

In December 2013, the industry ministry released a draft of the basic energy plan that said nuclear energy was an "important basic power source."

The Abe Cabinet initially sought to approve the basic plan in January, but delayed doing so in the face of objections by some LDP members who said it contravened the party's campaign pledge for the December 2012 Lower House election. At that time, the party said it would "seek to establish a socioeconomic structure that does not have to depend on nuclear energy."

Between Jan. 6 and Jan. 20, the LDP's Policy Research Council canvassed the views of party lawmakers on four points of basic policy regarding the supply and demand of energy.

The documents distributed by the FEPC most likely were intended to secure the backing of LDP lawmakers in promoting nuclear energy.

According to several LDP lawmakers and party sources, FEPC officials visited LDP lawmakers prior to Jan. 20, and distributed documents that contained what the federation considered model responses for the party survey.

It is still unclear how many lawmakers actually received the documents. But it would come as no surprise if the FEPC approached not only the 140 or so lawmakers who belong to a league in favor of nuclear energy, but also those whose fundamental stance is of gradually reducing dependence on nuclear energy while consenting to the resumption of nuclear reactor operations in the near future.
The FEPC released a statement that said, "While the industry has many opportunities to explain its opinions over a wide range of energy policies, we would like to refrain from responding to specific details about individual content."

Nukes on Tweeter

January 30, 2014
Nuclear power most often tweeted issue in Tokyo governor race: poll
http://mainichi.jp/english/english/newsselect/news/20140130p2a00m0na013000c.html

A joint study on Internet-based campaigning, which focuses on the social media site Twitter conducted by the Mainichi Shimbun and Ritsumeikan University in the lead-up to the Feb. 9 Tokyo gubernatorial election, has revealed that the top theme tweeted with respect to all four major candidates is the energy issue, including nuclear power.
The study, led on the Ritsumeikan University side by Special Guest Associate Professor Ryosuke Nishida, revealed that nuclear power -- which was also widely tweeted about during last year's House of Councillors election -- continues to be an issue of deep concern among the public.
Utilizing analysis-based software known as "Garnet" from G-Search corporation, the number of individual messages sent out by Twitter users were tallied during the week-long period from Jan. 20 to 26.
The highest number of tweets sent out regarding candidate Kenji Utsunomiya, 67 -- a former Japan Federation of Bar Associations president who advocates abandoning nuclear power -- focused on the nuclear power issue, at 43,133. The terms "black" -- presumably Twitter shorthand for the term "black corporations," referring to companies that exploit young workers through harsh working conditions -- and "employment" were also highly tweeted with respect to Utsunomiya, which is likely a reflection of his endorsement by the Japanese Communist Party.
Twitter comments related to former Air Self-Defense Force Chief of Staff Toshio Tamogami, 65, and former Health Minister Yoichi Masuzoe, 65, were both also highly concentrated around the nuclear power issue.

Tweets associated with Tamogami also included wide use of the terms "self-defense" -- which is probably due to his association with the Self-Defense Forces, as well as his support for Japan's exercise of the right to collective self-defense -- and "earthquakes/disaster prevention," given his strong focus upon anti-disaster measures.

Often tweeted with regard to Masuzoe was "social welfare," which is presumably attributable to his history with the Health Ministry and his own experience with caregiving -- as well as an indication that his focus upon social security-related issues within the present election campaign is attracting notice within the Twittersphere.

The hands-down highest number of tweets associated with former Prime Minister Morihiro Hosokawa, 76, who is calling for an immediate end to nuclear power, referred to "nuclear power," at 91,212. Also notably high were tweets including the word "prime minister," which -- in addition to Hosokawa's own former title -- is a likely reference to growing public interest in former Prime Minister Junichiro Koizumi, who has lately been appearing alongside Hosokawa during election campaigning on the streets.

January 30, 2014(Mainichi Japan)

"Irresponsible" LDP members want to end nuclear power

February 1, 2014

Roughly 50 ruling LDP lawmakers call for end to nuclear power

http://mainichi.jp/english/english/newsselect/news/20140201p2g00m0dm048000c.html

TOKYO (Kyodo) -- Roughly 50 lawmakers of the ruling Liberal Democratic Party, or more than 10 percent of the party's members in parliament, have called for an end to nuclear power generation in Japan in the future, a senior party member said Friday.

Just four lawmakers were in favor of building new nuclear power plants in a survey of 407 LDP members in both chambers, with responses obtained from about 320.

Among the lawmakers who responded, more than 80 percent called for making use of renewable energy while maintaining nuclear plants to supply electricity to the country.

Prime Minister Shinzo Abe, who heads the LDP, has criticized those advocating an end to nuclear power generation as "irresponsible," while expressing his readiness to reduce the country's reliance on nuclear power.

The senior party member who revealed the results of the internal survey said those calling for an end to nuclear power have a "larger than expected" presence in the party.

The Federation of Electric Power Companies of Japan, the powerful trade group for the nation's power utilities, had lobbied LDP lawmakers to support new nuclear power plant construction in connection with the survey, sources close to the matter said Friday.

In a leaflet distributed to LDP lawmakers, the federation provided model answers to questions in the survey, the sources said, evidence of lobbying by the industry to maintain nuclear power generation in Japan.

The poll was conducted before the LDP begins discussing a new national energy plan to be set by the government.

Currently there are no nuclear reactors online in Japan, in large part because of the Fukushima Daiichi plant accident triggered by a powerful earthquake and tsunami in March 2011.

In the leaflet, the federation says Japan should build new nuclear plants to maintain and develop the highest level of safety standards and technologies, the sources said.

It also calls for early decisions to restart existing nuclear reactors, warning that importing fossil fuels to make up for the absence of nuclear power generation will cause a national wealth outflow.

Nukes not the only issue

February 3, 2014

Coalition shuns nuclear issue in Tokyo election; Masuzoe still in front

http://ajw.asahi.com/article/behind_news/politics/AJ201402030074

THE ASAHI SHIMBUN

The ruling coalition is going all out to defeat former Prime Minister Morihiro Hosokawa in the Feb. 9 Tokyo gubernatorial election and stifle his flamboyant supporter's calls for Japan to abolish nuclear energy.

The strategy appears to be working, according to an Asahi Shimbun poll.

"The Liberal Democratic Party and New Komeito are throwing all their weight behind him," Prime Minister Shinzo Abe said in Tokyo's Ginza district Feb. 2 while canvassing support for Yoichi Masuzoe, 65.

New Komeito leader Natsuo Yamaguchi chimed in, standing side by side with Abe and Masuzoe on the campaign vehicle.

"The metropolitan government and the national government will join hands to make Tokyo No. 1 in the world," he said.

Abe and Yamaguchi hit the streets for Masuzoe, a former welfare minister, for the first time since campaigning started Jan. 23 to ensure his victory over Hosokawa, 76, and other rivals.

Hosokawa is focusing on a zero-nuclear platform, and is backed by former Prime Minister Junichiro Koizumi, another staunch opponent to the Abe administration's pro-nuclear policy.

"We expect the election to prove that whether to phase out nuclear energy will not become a point of contention anymore," a senior LDP official said.

A senior coalition official said the government feels that Masuzoe must prevail at any cost because the election outcome will be tantamount to a midterm report card for the Abe administration.

A victory by Hosokawa could deal a serious blow to the administration's policy to restart idled reactors once they are declared safe by nuclear regulators.

Government and coalition officials have downplayed the nuclear energy debate, emphasizing it is not the only issue in the election.

Masuzoe, Abe and Yamaguchi all skirted the nuclear energy issue Feb. 2.

"Tokyo is facing a number of challenges," Yamaguchi said. "A single-issue election will make Tokyo residents unhappy."
Ministers of the Abe Cabinet, as well as LDP Secretary-General Shigeru Ishiba, began campaigning for Masuzoe in late January after opinion polls indicated he was in the lead.

An Asahi Shimbun survey conducted Feb. 1-2 showed that Masuzoe has maintained the momentum shown in the previous survey Jan. 25-26.

Masuzoe, who is broadly backed by LDP and New Komeito supporters, has gained support from 40 percent of unaffiliated voters, according to the survey.

Hosokawa has secured backing from some supporters of the opposition Democratic Party of Japan, but support among unaffiliated voters remains at 20 percent.

Government officials hope that a landslide victory by Masuzoe will silence the increasingly vociferous Koizumi, whom one senior official described as an "eyesore."

"If Hosokawa loses, Koizumi will not be able to come out in front anymore," a senior government official said.
On Feb. 2, 30 minutes after Abe left, Hosokawa and Koizumi addressed thousands of voters in Ginza.

Hosokawa compared the Tokyo election to an attempt to change the direction of Japanese civilization.

"We will have Japan develop without nuclear plants," Koizumi said.

Although Hosokawa is drawing large crowds for his speeches, a senior official in his camp is worried about his chances in the election.

"People come to see and hear Koizumi," the official said. "Support for zero nuclear plants has not necessarily become widespread."

Media opinion polls have shown that the economy and welfare are greater concerns among Tokyo voters.
Hosokawa has recently spoken more about issues other than nuclear energy, such as measures to deal with Japan's declining birthrate and the aging of society.

Candidate Kenji Utsunomiya, 67, former president of the Japan Federation of Bar Associations, is also calling for a move away from nuclear energy.

A senior official of his camp said the anti-nuclear vote has been split between Utsunomiya and Hosokawa. Utsunomiya garnered 960,000 votes in the 2012 Tokyo gubernatorial election. But the official said it appears that he will be unable to gain as many votes if support fails to widen.

February 2, 2014

Tokyo election goes nuclear

http://www.japantimes.co.jp/news/2014/02/02/national/tokyo-election-goes-nuclear/#.Uu9LXrTrV1s

by Masaaki Kameda
Staff Writer

Whether the powers that be liked it or not, nuclear power took center stage in a debate involving four major candidates for the Tokyo gubernatorial election that was streamed live on the Internet Saturday. Three of the candidates came out firmly against atomic power.

Prime Minister Shinzo Abe's administration has done its best to keep the issue out of voters' minds ahead of Sunday's race, framing it as a national, rather than local, concern.

Packed with Abe allies, public broadcaster NHK appears to be downplaying the matter. A noted economics professor resigned last week as a commentator after being told not to discuss the nuclear issue until after the election on Sunday "to ensure fairness."

But the debate, hosted by seven online firms including Dwango Co., Ustream Asia Inc. and Yahoo Japan Corp., has shown that nuclear power is very much an issue outside the mainstream.

"We have to break away from the system that depends on nuclear energy in the long run, considering the dismal state (caused by the Fukushima crisis)," former health minister Yoichi Masuzoe, 65, said during the 90-minute debate, which, according to the organizers, was seen by some 170,000 people.

Previously noncommittal on the issue, Masuzoe said new energy sources, including shale gas and renewables, could be developed to reduce Japan's dependence on atomic power.

Former Prime Minister Morihiro Hosokawa, running on an anti-nuclear platform, stressed that the issue is relevant to Tokyo residents.

"The principal duty of the Tokyo governor is to protect the lives of its citizens. . . . The nuclear issue would directly affect the people's lives," Hosokawa, 76, said.

If elected, Hosokawa said the metropolitan government would ask Tokyo Electric Power Co. to start using more renewable energy sources to replace nuclear power.

The Tokyo Metropolitan Government is the fourth-largest shareholder in the utility, with a stake of 1.20 percent.

Another opponent is Kenji Utsunomiya, former chairman of the Japan Federation of Bar Associations.

"Nuclear power generation is not suitable in Japan, which has been hit by many earthquakes and tsunami," the 67-year-old said. "We should not restart the idled reactors."

Utsunomiya warned of the possibility of huge expenditures being needed to compensate nuclear accident victims and the high cost of decommissioning any reactors involved in a nuclear power plant accident.
Taking the opposite view, Toshio Tamogami, a former chief of the Air Self-Defense Force, said that nuclear power has been made sufficiently safe and was vital to Japan from an economic perspective.

The higher electricity rates stemming from the cost of importing fuel for the traditional power plants being used to offset the absence of atomic power is weighting heavily on small and midsize firms, the 65-year-old Tamagami said.

"I think many of those firms would go bankrupt" if the reactors are kept offline, Tamogami argued. "We could provide enough energy with the use of nuclear power plants and it could contribute to growth of the nation's gross domestic product."

Another issue the candidates debated was the proposal to legalize casinos. Some lawmakers want to build casino resorts in time for the 2020 Olympics and Paralympics.

Hosokawa and Utsunomiya are firmly against the idea, citing the detrimental influence they would have on young people and the threat of gambling addiction.

Tamogami, on the other hand, said casinos would attract wealthy tourists from around the world. Masuzoe hedged, saying only that the matter needs further study and debate.

Turning to the 2020 Olympics and Paralympics, Masuzoe said he would like the Olympics and Paralympics to be the best and most hospitable ever and urged all citizens to cooperate.

"I'd like participating countries to hold training camps in the Tama area (west of the 23 wards). . . . I also urge citizens to learn English so that all can be a guide (to visiting athletes and guests)," he said.

Tamogami said by holding a "lavish" Olympics he would like to hear foreign athletes and guests say they want to return to Tokyo.

"Japan has been suffering from deflation, and spending on public works projects could contribute to the economic recovery. I'd like to hold the best-ever Olympics in history by investing heavily (in key facilities)," he said.

Hosokawa said he would like to hold a "sustainable" Olympics, indicating plans to review the extravagant facilities being planned, and bring about a successful Olympics that makes use of renewable energy instead of nuclear power.

Hosokawa also said he would like to share the benefits from the Olympics and Paralympics with the people of Tohoku.

Lawyer Utsunomiya said he sees the need to make the Olympics simple and environmentally friendly without spending large amounts of money and by refurbishing existing facilities.

Utsunomiya also pointed to the need to make the city easier for the disabled to live in to have a successful Paralympics. Efforts should be made to make the city more barrier-free, he said.

Nukes on Twitter

February 5, 2014

Nuclear power' cited the most in Tokyo governor election tweets

http://www.japantimes.co.jp/news/2014/02/05/national/nuclear-power-cited-the-most-in-tokyo-governor-election-tweets/#.UvJksLTrV1s

Kyodo

"Nuclear power" far eclipsed other phrases such as "the Olympics" and "welfare and aging issues" in Twitter messages about Sunday's Tokyo gubernatorial poll, a research firm's data show. The finding is in sharp contrast to a conventional phone poll that indicated "the economy" is the top focus.

Hotlink Inc., an analyzer of big data, checked a total of 319,000 messages between Jan. 23 and Feb. 2 that contain both "Tokyo governor" and references to election issues. Posts from those living outside Tokyo were not excluded, the company said.

In the period, "nuclear power" topped the list with around 214,000 tweets. "The Olympics" came in second with roughly 39,000 posts. "Welfare, aging issues" followed with some 29,000 messages.

A telephone poll conducted by Kyodo News on 1,040 randomly selected Tokyo voters on Feb. 1 and 2 found the top issue was "the economy and employment," followed by "the low birthrate, aging and welfare" and then "nuclear power, energy issues."

A daily breakdown indicates that the most tweets related to the election, around 50,000, were sent on Jan. 23, when campaigning for the Feb. 9 election kicked off. That day, there were roughly 29,000 posts containing "nuclear power."

Nukes & gubernatorial elections

February 6, 2014

Nuclear issue looms over prefectural gubernatorial elections

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201402060067

THE ASAHI SHIMBUN

Nuclear energy looks set to dominate gubernatorial elections outside Tokyo as local government consent is key to bringing nuclear plants back online or building new ones.

The issue has already been raised by candidates in the Feb. 9 race for a new governor of Tokyo.

In Yamaguchi Prefecture, which Prime Minister Shinzo Abe represents in the Diet, there is controversy over a proposal to construct a new nuclear plant in Kaminoseki.

The official campaign for the Yamaguchi gubernatorial race began Feb. 6, with voting scheduled for Feb. 23.

A vacancy in the post emerged when Shigetaro Yamamoto resigned in January for health reasons.

When the Democratic Party of Japan was still in control of the central government, Yamamoto declared he would not approve an application to extend a land reclamation license for the proposed nuclear plant site. However, after the Abe administration took over power, Yamamoto shifted position and said last March that he would hold off on a decision for a year.

In the gubernatorial election two years ago, Tsutomu Takamura, a former DPJ Lower House member, lost out to Yamamoto. Takamura is running this time on a platform that opposes the nuclear plant construction plan.

The Japanese Communist Party candidate, Naoko Fujii, is also calling for an immediate end to nuclear power.

Takamura said, "Even the people of Tokyo have begun to raise doubts about whether they should be satisfied with nuclear energy policy in which (the central government) forces dangers and burdens on isolated rural areas."
On Feb. 1, Takeo Kawamura, who heads the Liberal Democratic Party's Election Strategy Committee, called for support for Tsugumasa Muraoka, who is being backed by both the LDP and New Komeito.

"While attention was focused on the Tokyo gubernatorial election because two former prime ministers have campaigned together, interest will also focus on the Yamaguchi gubernatorial election since it is Abe's home prefecture," said Kawamura, who also represents a district in the prefecture. "We must produce a suitable result."

He touched upon the fact that Morihiro Hosokawa, a former prime minister, is running in the Tokyo election while calling for an immediate end to nuclear power generation. Hosokawa is backed by Junichiro Koizumi, who was prime minister from 2001 to 2006 and remains hugely popular.

Muraoka, seeking to avoid having the nuclear issue come down to the local level, said, "The central government should think about energy policy because it involves the entire nation."

The Abe administration is moving to gain approval to resume operations at nuclear plants before summer when electricity demand peaks.

Later this year, gubernatorial elections will be held in Ishikawa and Ehime prefectures, which both host nuclear power plants.

As local government support is vital to restarting nuclear reactors, those elections could have a major effect on whether operations can resume.

Campaigning for the Ishikawa election will officially begin Feb. 27. The incumbent, Masanori Tanimoto, will be seeking a record-tying sixth term. The prefectural chapters of the LDP, New Komeito and the DPJ have all pledged support for Tanimoto. Even the prefectural chapter of the Social Democratic Party, which has voiced its opposition to nuclear energy in Ishikawa, has come out in support of Tanimoto.

A decision on resuming operations at the prefecture's Shika plant, operated by Hokuriku Electric Power Co., is awaiting the results of a study about whether a fault lies directly under a nuclear reactor.

Tanimoto has taken the position of leaving all political decisions on plant operation resumption to the central government.

He said the central government policy of resuming operations at nuclear plants where safety has been confirmed was "a realistic approach."

Two candidates expected to run against Tanimoto are planning to come out squarely against nuclear energy.

One prospective candidate is Yuichiro Kawa, an Ishikawa prefectural assembly member who bolted from the DPJ after the prefectural chapter decided to back Tanimoto. Kawa plans to argue for a switch in energy policy away from nuclear power to natural energy sources.

"Nuclear energy policy is not only a matter for the central government, but is also a local matter," Kawa said.
The JCP candidate, Yoshinobu Kimura, is also expected to call for an immediate end to nuclear power generation.
Employees of electric power companies will follow the results of the elections closely.

One worker at Tokyo Electric Power Co. said: "Even if the central government has decided on such a major policy issue, the local governors have authority over the details. The backlash would be huge if we lost."

Nuclear energy will also be a key issue for the Shiga Prefecture gubernatorial election, scheduled for July.
The incumbent, Yukiko Kada, was critical of the 2012 decision to resume operations at the Oi nuclear plant in neighboring Fukui Prefecture.

"There are those who say local governments should not comment on nuclear energy policy, but will the central government protect people's lives and the environment?" she asked. "It was unable to protect Fukushima Prefecture. Voters should decide if nuclear energy policy should become a theme of the election."

Kada has not yet announced whether she will seek a third term.

The Fukushima gubernatorial election will be held in autumn. Governor Yuhei Sato has also not yet said whether he would seek a third term. It also remains unclear if energy policy will become an issue in that campaign. The Fukushima prefectural assembly unanimously passed a resolution after the 2011 nuclear accident calling for all reactors in the prefecture to be decommissioned.

Sato has also come out in favor of that position.

(This article was compiled from reports by Sunao Gushiken, Daiji Higuchi, Tatsuya Gunji and Teruhiko Nose.)

Splitting the anti-nuclear vote

February 6, 2014

Activists fear gubernatorial-race standoff could split anti-nuclear vote

http://www.japantimes.co.jp/news/2014/02/06/national/activists-fear-gubernatorial-race-standoff-could-split-anti-nuclear-vote/#.UvPGdLTrV1s

by Masaaki Kameda
Staff Writer

A group of activists said Thursday that neither of the two major anti-nuclear candidates running for Tokyo governor plans to drop out of the race because both feel it's too late and because they differ too much on policy.

The 19-member group, led by journalist Satoshi Kamata, on Monday asked former Prime Minister Morihiro Hosokawa and Kenji Utsunomiya, former chairman of the Japan Federation of Bar Associations, to make sure they don't throw the election away by splitting the anti-nuclear vote.

"I'd like to express my disappointment to both camps," lawyer Hiroyuki Kawai, who belongs to the activist group, said at a Tokyo news conference. "It's going to be very sad if (an anti-nuclear candidate) loses due to disunity in the campaign."

The group said it is acting out of concern that the combined vote tally of the two anti-nuclear candidates will surpass that of any other single candidate. Recent media surveys show former health minister Yoichi Masuzoe, backed by the ruling Liberal Democratic Party and its junior coalition partner, New Komeito, is leading the race, followed by Hosokawa and Utsunomiya.

While Masuzoe just recently said he will phase out atomic power in the long run if elected, his resolve is considered weaker than that of Hosokawa and Utsunomiya.

Kibo no Machi Tokyo wo Tsukuru Kai (Group to Create Tokyo With Hope), Utsunomiya's campaign group, said it decided not to cooperate with the activists for several reasons.

"It would betray those who already cast their ballots for Utsunomiya in advance voting as well as his supporters and volunteers if he accepted the offer," the group said in a statement.

Hosokawa likewise told the group that, although his policies on nuclear energy and the 2020 Olympics and Paralympics are similar to Utsunomiya's, their priorities differ on other issues.

The group's name is Datsu Genpatsu Tochijisenkouho ni Touitsu wo Yobikakeru Kai, which roughly means "group calling for unification of anti-nuclear candidates running for Tokyo governor."

Anti-nuclear candidates won't merge

February 7, 2013
2 anti-nuclear Tokyo governor aspirants decline to unify candidacies due to differences
http://mainichi.jp/english/english/newsselect/news/20140207p2a00m0na010000c.html

Two Tokyo governor hopefuls who are advocating an immediate end to nuclear power -- Kenji Utsunomiya, 67, and Morihiro Hosokawa, 76 -- have declined to unify their candidacies, a group calling for the merger said.

The group, known as the 'Association calling for the unity of anti-nuclear Tokyo gubernatorial candidates,' has 19 members including journalist Satoshi Kamata, as well as cultural figures, academics, and other assorted affiliates.

Association members said that they approached the campaign offices of both candidates with their request on Feb. 3.

Utsunomiya's campaign representative commented, "The official campaign is under way, and early election voting has already begun," and "There is a lack of consensus on numerous issues not related to nuclear power." Meanwhile, Hosokawa's office responded, "It is possible that the two movements may be able to collaborate at some point in the future," and "There are some differences in policy priorities."

Utsunomiya's campaign office added, "Regardless of the election outcome, both candidates have already agreed to get together and hold frank discussions."

"The decision is extremely unfortunate," commented lawyer Hiroyuki Kawai, who is also a member of the group that called for the merger. "For the anti-nuclear movement, this was a once-in-a-lifetime opportunity."

Hosokawa's campaign insufficiently prepared but still a "warning" for Japanese society

February 9, 2014

POINT OF VIEW/ Satoshi Kamata: Anti-nuclear position was not the loser in Tokyo gubernatorial poll

http://ajw.asahi.com/article/behind_news/politics/AJ201402090032

SPECIAL TO THE ASAHI SHIMBUN

Former health minister Yoichi Masuzoe emerged victorious in the Tokyo gubernatorial election held on Feb. 9. He was backed by the ruling coalition of the Liberal Democratic Party and New Komeito.

Going down to defeat was former Prime Minister Morihiro Hosokawa, who made an immediate end to nuclear energy his biggest campaign issue in a bid to slow moves by the LDP government intent on promoting nuclear energy.
Hosokawa was never able to overcome the late start of his campaign bid.

Campaigning alongside Hosokawa was Junichiro Koizumi, another former prime minister. Koizumi called for rebuilding Japan through a zero-nuclear energy policy.

The two former prime ministers showed they were still hugely popular as crowds in excess of 1,000 inevitably formed everywhere they appeared.

If those crowds had translated directly into votes, Hosokawa should have overwhelmed Masuzoe, who was criticized for his personality failings.

However, Hosokawa was unable to break down the organizational votes held by the LDP and New Komeito, which have a conservative base that stretches deep into Tokyo.

The Tokyo gubernatorial election was essentially a three-way race with the LDP and New Komeito backing Masuzoe, the Social Democratic Party and Japanese Communist Party endorsing Kenji Utsunomiya, a former president of the Japan Federation of Bar Associations, and Hosokawa running with the backing of Democratic Party of Japan and two other opposition parties.

Labor unions support DPJ in elections, but unions in companies related to the nuclear energy industry, such as Tokyo Electric Power Co., the operator of the crippled Fukushima No. 1 nuclear power plant, as well as manufacturers of electrical equipment, did not support Hosokawa because those unions, and their companies, all favor a resumption of operations at nuclear power plants.

The Tokyo gubernatorial election was an important one that could have put a stop to the important policies being pushed by the rightward-leaning Abe administration, such as promoting nuclear energy, implementing the state secrets protection law and changing the government's constitutional interpretation to allow for the exercise of the right of collective self-defense.

The election came in the wake of recent polls in which candidates pushed by the LDP were defeated in other important local elections. One was the Nago mayoral election, in which the incumbent who was opposed to relocating U.S. Marine Corps Air Station Futenma to his city won. The other was the mayoral election in Minami-Soma, Fukushima Prefecture, where residents have been forced to evacuate due to the Fukushima nuclear accident.

While arguing for the economic advantages of ending nuclear power generation, Hosokawa and Koizumi also called for changing the current political flow. That was nothing less than criticism from the conservative sector of the political world toward the rightward tilt of the administration.

The only reason Prime Minister Shinzo Abe backed Masuzoe, who had previously been expelled from the LDP, was because there was no other candidate who seemed capable of winning.

The important campaign pledges made by Masuzoe were to make Tokyo the best city in the world and to hold the best Olympics in history when the capital plays host in 2020. It is a fact that such invigorating planks were met with great expectations among major companies that depend on the nuclear energy sector and that are hoping for a construction boom ahead of the Summer Olympics. Those planks, which guarantee short-term benefits rather than what might occur in the future, were also met favorably by small companies and the young who have suffered in the past from economic slowdown and unemployment.

HOSOKAWA CAMP UNPREPARED

When the gubernatorial campaign began, I visited Hosokawa's campaign office. What I found was not encouraging.

There were no campaign workers or fliers. The microphone for the campaign car was too small. The chain of command was unclear. Those volunteers who did show up soon ended up going home because there was nothing for them to do.

It was said that the major direction of those in charge of the campaign was not to depend on a "surface strategy," in which plodding campaign events would be held, but to gain an instant victory through an "air attack strategy."

It was only after those in charge of the campaign were dismissed en masse that the campaign structure was rebuilt and the campaign office appeared to function normally. However, by then, a week had already passed.

In other words, it was more a defeat caused by insufficient preparations by the Hosokawa camp rather than a victory for Masuzoe.

Moreover, two former prime ministers made the important confession in front of the public, "We were ignorant for having allowed nuclear power generation. It was a mistake."

However, the SDP and JCP, which backed Utsunomiya, would not accept those statements and only criticized the policies implemented when Koizumi was prime minister. That led both candidates to fall before Masuzoe. Their inability to cooperate represents the underdeveloped state of Japanese politics today.

Still, with the movement toward resumption of operations at nuclear plants heating up, I believe the Hosokawa campaign made a huge contribution by continuing to speak up about the dangers of nuclear energy.

If another nuclear accident should occur in Japan, there would be no more talk about the economy or the Tokyo Summer Olympics

The slogan of "**Let's bring the Olympics to a Japan with no nuclear plants" is still an effective warning for society.**

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Born in 1938 in Aomori Prefecture, Satoshi Kamata is a writer who is known for going to the scene of issues that interest him in order to describe what is happening from an up-close perspective. His books have covered labor and social issues, such as pollution. He has been critical of the dangers of nuclear power generation since the early 1970s.

No hurry?

Suga: no time limit for finalizing new energy plan

http://www3.nhk.or.jp/nhkworld/english/news/20140210_24.html

Japan's top government spokesman says a time limit should not be set in finalizing the country's new basic energy plan. He said thorough discussions on the matter should be held.

Chief Cabinet Secretary Yoshihide Suga was speaking to reporters on Monday.

Suga said the government is working on a new plan based on its policy to maximize renewable energy and minimize dependency on nuclear power.

He said the ruling parties are asking for a thorough debate on energy policy. He added the government wants to coordinate opinions with them in reaching a conclusion.

Suga also referred to the difficulty of finding final disposal sites for radioactive waste from nuclear power plants.

He said it is an extremely important issue. He added that Prime Minister Shinzo Abe does not want to put off the decision on the sites and leave the problem to future generations.

Suga said the government will decide the locations from a scientific standpoint.

The Abe cabinet initially aimed to decide on a new energy plan outlining the country's medium to long term energy policy by the end of January.
Feb. 10, 2014 - Updated 07:18 UTC

Energy future: what challenges for Japan?

February 11, 2014

Editorial: Gov't must ask public if they're prepared to pay extra to kill nuclear power

http://mainichi.jp/english/english/perspectives/news/20140211p2a00m0na003000c.html

The Cabinet of Prime Minister Shinzo Abe is set to approve a basic plan on energy, which outlines Japan's mid- and long-term energy policy, as early as the end of this month.

The government intends to only partially revise the wording of a phrase that attaches importance to atomic power in the original draft before approving it at a Cabinet meeting. The move follows the victory of former Health, Labor and Welfare Minister Yoichi Masuzoe over anti-nuclear candidates in the Feb. 9 Tokyo gubernatorial election, in which the pros and cons of ending Japan's reliance on atomic power was a key point of contention.

However, it is essential for the government to show the people a road map toward ending Japan's dependence on nuclear power, while clarifying the extra costs that each and every member of the general public will need to shoulder. Mere fine tuning of the policy as a stopgap measure is far from making a convincing case to the public.

The original draft that an advisory council to the Economy, Trade and Industry Ministry worked out at the end of last year is based on the assumption that Japan will continue to rely on nuclear power, representing a departure from the "zero nuclear" policy adopted by the previous administration led by the Democratic Party of Japan (DPJ).

The Cabinet had previously intended to adopt the basic energy plan by the end of January. However, it postponed a decision not only because the Abe government gave consideration to the Tokyo gubernatorial election, but because some members within the ruling coalition raised questions about the draft's description of nuclear power as "an important base power source that serves as the foundation" for the nation's energy supply.

Regarding the ratio of atomic power to total electricity consumed in Japan, the original draft states, "The scale of nuclear power necessary should be sufficiently ascertained and that amount should be secured." The government intends to water down this phrase in the final draft.

Prime Minister Abe told the ongoing Diet session, "We can't easily say, 'We'll stop nuclear power.'" Economy, Trade and Industry Minister Toshimitsu Motegi also told the Diet that the government will not change its position that nuclear power is a foundational power source. In other words, the government has no intention of changing its basic direction of maintaining nuclear power even though it plans to

partially change the wording of the original draft, which could be viewed as a cosmetic change aimed merely at dodging criticism from anti-atomic power forces.

Some government officials say that the outcome of the Tokyo gubernatorial race demonstrates that the public supports the plan to restart idled nuclear reactors. However, they should keep in mind that Masuzoe, who won the election, has declared that he is in favor of decreasing Japan's reliance on atomic power. Moreover, the government's policy of maintaining nuclear power for the foreseeable future runs counter to a campaign pledge that the Liberal Democratic Party (LDP) made in the 2012 House of Representatives election to establish a socioeconomic structure that does not need to rely on atomic energy.

The myth of nuclear reactors' perfect safety has collapsed following the March 2011 outbreak of the Fukushima nuclear crisis. Such being the case, the government should pursue a society that does not rely on atomic power, just as the LDP pledged to the public before its December 2012 landslide election victory. The government should also clearly declare that it will abandon the nuclear fuel cycle project, in which spent nuclear fuel is reprocessed and reused in nuclear plants, since the project runs counter to the LDP's campaign pledge.

There is no denying that the whole of society would be required to shoulder extra financial burdens if Japan is to eliminate atomic power. If all nuclear power stations were to be promptly shut down while natural gas and other fuel prices remain high, electricity charges would rise, possibly dealing a serious blow to the economy. Generating more power at thermal power stations could contribute to global warming. Japan's excessive reliance on imported fossil fuel is also risky in terms of energy security.

The government should clarify these challenges and try to find the best ways to minimize the effect that phasing out nuclear power will have on the economy, the environment and security. The government should also ask the public if they are prepared to shoulder the remaining costs of decreasing the country's dependence on nuclear power. The basic plan on energy is essential for these efforts.

February 11, 2014(Mainichi Japan)

A whiteout

February 10, 2014
Nuclear energy issue snowed under in Tokyo gubernatorial poll
http://mainichi.jp/english/english/perspectives/news/20140210p2a00m0na020000c.html

Abandoning nuclear energy did not, in the end, become the lightning rod issue of the Tokyo gubernatorial race. A serious debate over power consumption, which would have shown a commendable self-awareness of Tokyo's electricity-hogging ways, never really got off the ground. Tokyo's nuclear-powered prosperity, built on contradiction and fear, continues unaltered.

How, in the end, was atomic energy discussed during the campaign? One candidate in a televised debate I saw had this to say: "There is not one radiology expert in the whole world saying that nobody can live in that area (around the Fukushima No. 1 nuclear plant)." And, "The government forced residents to evacuate even without a scientific reason, casting those people's lives into chaos."
In response, an anti-nuclear power candidate referenced the number of people killed in the 1986 Chernobyl disaster. The candidates' points failed to mesh, and the atomic energy discussion ended there.

How are we to see this missed connection? If the pro-nuclear power candidate was saying that people could still live around the wrecked reactors, that's an irrational argument. But perhaps that's not what he was trying to get across. Maybe he wanted to say that compared to international standards, the Japanese government's radiation dose limits are too strict. Even if that was his intent, it still clashes with what some experts believe about cancer stemming from indirect radiation exposure.

Meanwhile, the number of dead at Chernobyl includes people killed by direct exposure to radiation, and bringing this up simply complicated the discussion.

Granted, we can allow the candidates a little room for slipups since the debate was live. Still, however, I suspect that there were a lot of viewers out there wondering what on earth the two men were talking about.

Watching the candidates talking past each other, I recalled an NHK documentary called "Fukushima: Hamadori genpatsu to ikita machi," or, "A Fukushima town that lived with a nuclear plant," aired on Jan. 4 this year. The program was part of an oral history series about the hopes and goals of the Japanese people since the end of World War II. The documentary centered on the difficult story of former Futaba Mayor Tadao Iwamoto, who was at first against atomic energy but ended up embracing the nuclear plant in his town.

Iwamoto had been a sitting Socialist Party member of the Fukushima Prefectural Assembly, as well as the chairman of the Futaba regional anti-nuclear power league. In 1985, when the incumbent mayor of Futaba was brought down in a corruption scandal, Iwamoto -- an energetic and a refreshingly new presence on the ballot -- ran to take his place. He was elected, and went on to serve five terms in the post -- finally quitting in 2005.

In July 2011, Iwamoto passed away quietly in a hospital in the city of Fukushima, where he'd been evacuated after the triple meltdown at the Fukushima No. 1 plant forced the abandonment of his town. The Mainichi Shimbun published a long retrospective on his career in its Aug. 25 morning edition.

If I consider Iwamoto's position, I have to admit that it's very human indeed to think, "I don't like nuclear power, but I dislike poverty and inconvenience even more." Fight against atomic energy, or embrace it? That was the dilemma Iwamoto had to face head-on -- and it's also the question that the people of Tokyo, of Japan, and even the entire human species must answer.

The people of Futaba staked their livelihoods on their answer to that question. The people of power-hungry Tokyo felt no such urgency, and atomic power had never been more than one of many topics for discussion.

In 2003, as Iwamoto neared retirement, the mayor had this to say to an interviewer: "Nuclear energy holds so much possibility, but at the same time, it's an enormous gamble. I'd like to see that gamble continue to be proven right."

Futaba gained much prosperity from that gamble, and then on March 11, 2011, it lost everything. So went the fate of that town and its former mayor. While I cannot say that all of humanity faces the same destiny, there is also no proof that we are completely disconnected from it, either.

Starting on the day before the Tokyo gubernatorial vote and continuing into the wee hours of election day, Tokyo was blanketed in the third-heaviest snowfall to hit the city since the end of World War II. Tokyo was covered in white; a whiteout.

Last autumn, a novel about a central government bureaucrat caught up in the turmoil of Japan's energy policy became a best-seller. It was titled, "Genpatsu Whiteout," or "Nuclear energy whiteout." I think it's right to say that debate over atomic power in Tokyo, despite its unquenchable thirst for energy, has been whited-out just as thoroughly as the city's streets in a snowstorm's embrace. (By Takao Yamada, Expert Senior Writer)

February 10, 2014(Mainichi Japan)

Is it just people in Fukushima who hoped the election was about nukes?

February 10, 2014

People hosting nuclear plants voice hope, caution over new Tokyo gov.
http://mainichi.jp/english/english/newsselect/news/20140210p2g00m0dm038000c.html

TOKYO (Kyodo) -- Residents of Japanese towns and cities that host nuclear power plants expressed both hope and wariness over the victory of former health minister Yoichi Masuzoe in the Tokyo gubernatorial race on Sunday.

Some said they expect Masuzoe, 65, to exercise leadership as the new governor of Japan's capital on energy policy, while urging him not to ignore the number of antinuclear votes cast in the closely watched election.

"I wanted a candidate promising to bring the number of nuclear power plants to zero to win," said Kazutoshi Mabuchi, a 68-year-old evacuee from Okuma, Fukushima Prefecture.

"Is it just people in Fukushima who hoped the election was about nuclear power?" Mabuchi said, adding that memories of the nuclear crisis "are fading away like this."

Masuzoe, who received support from the ruling Liberal Democratic Party and the junior coalition New Komeito party, is aiming for less dependence on nuclear power in the long run, differing from other candidates endorsed by opposition parties who sought an immediate end.

"It is a mere political performance to discuss whether or not Japan should keep nuclear power plants, but not their safety," said Hiromi Maeda, a 59-year-old member of a cooperative union that promotes the use of both nuclear and green energy in Kashiwazaki, Niigawa Prefecture.

Tokyo Electric Power Co., the operator of the Fukushima Daiichi nuclear power plant crippled by the March 2011 earthquake and tsunami, approved a plan in January that includes the restart of the Kashiwazaki-Kariwa plant.

Kazuyuki Takemoto, 64, who is opposed to the plant in Kashiwazaki, said the new Tokyo governor should not forget about the local municipalities that supply electricity.

"It's irresponsible for Tokyo to prosper through the sacrifice of other municipalities," Takemoto said.
Other residents said they agree with the idea of zero nuclear power, but also pointed to the fact that their jobs and the local economy depend heavily on hosting nuclear power plants.

Yasuo Miyoshi, 71, who lives in Ikata, Ehime Prefecture, where Shikoku Electric Power Co. is aiming to restart the Ikata plant, expects Masuzoe to guide Japan's energy policy.

"Tokyo should take the lead and show the path...because it will affect the country as a whole," Miyoshi said.

Not decided yet?

Source : DW

http://www.dw.de/tokyo-election-not-a-clear-vote-for-nuclear-energy/a-17422110

Tokyo election not a clear vote for nuclear energy

The governor's election in Tokyo led to a defeat for the opponents of nuclear energy. But in the wake of the Fukushima disaster, the debate about the course of the country's energy policy hasn't been decided yet.

When former health minister Yoichi Masuzoe was elected governor of Tokyo by a large margin on Sunday, February 9, Japan's conservative premier Shinzo Abe clearly heaved a sigh of relief. "Now we can prepare for wonderful 2020 Olympic Games hand in hand," he said.

But Abe's true source of relief was probably the defeat of candidate Morihiro Hosokawa. The former prime minister had attempted to make the race for governor into a referendum on nuclear power. He was backed by popular politician Junichiro Koizumi, another former premier who was in power from 2001 to 2006.

But their strategy didn't pay off. True, surveys have shown that the majority of the Japanese population favor a gradual phasing out of nuclear energy. Still, energy policy isn't very high up on the list of Japanese priorities. Tokyo's voters ranked the importance of jobs, the economy, an ageing population and social welfare far higher than energy policy. In any case, the 65-year-old Masuzoe received more votes than the two anti-nuclear candidates - Hosokawa and Kenji Utsunomiya, a human rights lawyer - combined.

A step by step reduction

Yoichi Masuzoe was the clear winner in the gubernatorial election in Tokyo

With his promise to gradually reduce Tokyo's dependence on nuclear power, Masuzoe took the wind out of his rivals' sails. The former health minister explained that he intends to increase the amount of power generated in Tokyo from renewable energy from currently six percent.

According to a survey conducted by public broadcaster NHK, a narrow majority of voters supports this new empahsis. 76-year-old Hosokawa has admitted defeat after the election but has pointed out that he feels there is a gap between the result and the enthusiasm of the people that he sensed during his campaign.

Nuclear opponent Koizumi doesn't want to give up yet either. "The result is regrettable but I will continue my struggle to reach a state of zero nuclear energy in the future," explained Koizumi, who changed his mind on nuclear power after Fukushima.

He justified his own pro-nuclear stance during his time as prime minister by claiming that the utility companies had lied to him about the security of the power plants.

Nuclear debate flares up anew

But anti-nuclear campaigners hardly see the election result as a vote in favor of nuclear power. Voter turnout was at low 46 percent, as the country faced the heaviest snowfall in 45 years.

Journalist Satoshi Kamata pointed to Hosokawa and Koizumi's "badly organized election campaigns" to explain the result. He claims that Abe's ruling Liberal Democratic Party (LDP) and its partner New Komeito ran a "veritable campaign machine." In the liberal newspaper Asahi, Kamata explained that the Hosokawa campaign had made a big contribution to rekindling the debate about the dangers of nuclear power.

Still, the result is likely to encourage the Abe-led government to restart the country's 48 nuclear reactors which have been mothballed ever since the devastating earthquake and ensuing tsunamin in March 2011. The new energy bill, which Abe had postponed until after the Tokyo gubernatorial elections, will probably declare nuclear energy a fundamental energy source.

The liberalization of the energy market set for this spring could free the Japanese government from determining the amount of energy it will source from nuclear reactors. Until the Fukushima disaster, nuclear energy was the source for 30 percent of Japan's electricity. According to information provided by

Trade and Industry Minister Toshimitsu Motegi, the government is also considering to allow three unfinished nuclear construction projects to be completed.

Obstacles block a restart

But in practice, there are still several obstacles to restarting Japanese nuclear power plants. The security checks on 16 reactors which the utility companies requested last summer have taken longer than expected. The new supervisory board for nuclear energy only has 90 employees for the task. And they are treating the checks as if the nuclear power plants needed a second operating license - meaning that they are being extremely thorough in their work.

Alongside the government, local authorities and politicians will still have to approve a restart. It could thus be several months until the plants are actually up and running again.

The next battle over nuclear power is likely to take place in just two weeks - on February 23 - in Abe's home province Yamaguchi. Unlike in the capital Tokyo, where nuclear energy was just one of the issues up for discussion, people in Yamaguchi will be deciding on only one question: whether or not to approve a new nuclear power plant in Kaminoseki. There are also elections taking place in the prefectures Ishikawa and Ehime, each of which boasts a nuclear power plant.

What is more, this autumn the population of Fukushima is set to elect a new governor. The current governor Yuhei Sato is demanding that all nuclear reactors in the prefecture be dismantled, including the four that are still intact at the Fukushima Daini plant, located just a dozen kilometers south of the damaged reactors in Daiichi.

LDP: Nukes but not forever

February 13, 2014
LDP group: Nuclear power use must be transitional
http://www3.nhk.or.jp/nhkworld/english/news/20140213_02.html

A group from Japan's ruling Liberal Democratic Party has proposed that the government stipulate the role of nuclear power as 'transitional' in the country's new energy policy.

The LDP-led coalition government has commissioned a panel to draft a new master plan for the country's mid- to long-term energy policy.

The panel is compiling a draft that would define nuclear energy as an 'important basic energy source' for the country. The government intends to draw up a policy that would include resumption of some nuclear reactors.

Taro Kono and other lawmakers within the ruling LDP are advocators of a nuclear-free society in the future.

On Wednesday, they met Chief Cabinet Secretary Yoshihide Suga and handed over their proposal. It says the government's new master plan should be consistent with the party line that aims to establish an economic and social structure independent of nuclear power.

The proposal also requests the new policy include a roadmap to lessen the country's dependency on nuclear power, the building of no new reactors and ending reprocessing of spent nuclear fuel.

Suga said the government will closely discuss the issue with the ruling party in working out on the new energy policy.
Feb. 12, 2014 - Updated 20:33 UTC

Proactive pacifism: Japan must take the initiative

February 19, 2014
EDITORIAL: Japan must take lead in moves to eliminate nuclear weapons
http://ajw.asahi.com/article/views/editorial/AJ201402190023

With 146 countries participating, the two-day Second Conference on the Humanitarian Impact of Nuclear Weapons in Nuevo Vallarta, Mexico, wound up Feb. 14 with a call for a "legally binding instrument" with which to keep nuclear weapons under control.

In 1967, the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean was signed in Mexico. The chair of the Mexico conference declared in his closing summary: "It is time to take action. The 70th anniversary of the Hiroshima and Nagasaki attacks is the appropriate milestone to achieve our goal."

At the conference, testimonies by Japanese "hibakusha" survivors of the Hiroshima and Nagasaki atomic bombings attracted attention. We welcome the fact that the repeated appeals of these people over the past decades are finally beginning to resonate with the international community.

There are still an estimated 17,000 nuclear warheads in the world today. Many non-nuclear nations, disturbed by the elusiveness of their goal of a nuclear-free world, are now intensifying their efforts to stress the inhumanity of nuclear weapons and ban their use or possession through treaties.

In 2008, the perceived inhumanity of cluster bombs resulted in the adoption of the Convention on Cluster Munitions to prohibit the use, transfer and stockpile of such weapons. Eliminating blatantly inhumane weapons has become a global trend, but the United States, Russia and three other nations that are allowed to possess nuclear weapons under the Nuclear Nonproliferation Treaty still consider them vital to security and are against a treaty banning them. In fact, those five countries did not participate in the Mexico conference.

The position of the Japanese government is complex. Last October, Japan finally supported a United Nations statement denouncing nuclear weapons as inhumane. But at the same time, Japan also endorsed another joint statement that was more cautious about a treaty to ban nuclear weapons. Japan knows the horrors of nuclear warfare better than any other country, but it cannot easily change its security policy that relies on the U.S. nuclear umbrella. This conflict prevents the Japanese government from taking a clear-cut position.

In January, Foreign Minister Fumio Kishida, who is from Hiroshima, explained the government's nuclear disarmament and nonproliferation strategy in Nagasaki. Positioning the strategy as an embodiment of the Abe administration's notion of "proactive pacifism," Kishida said Japan is committed to "reduction of the number of nuclear weapons, reduction of the role of nuclear weapons, and reduction of the incentive for possession of nuclear weapons."

This is an honorable commitment, but how does the administration intend to pursue it in East Asia, which is one of the most tense regions in the world?

With China staying the course of military expansion and North Korea carrying out nuclear tests, the Japanese government is of the view that U.S. nuclear weapons still play a vital role in the region.
But Abe's ambitious security policy, such as bolstering Japan's missile defense capabilities, is putting China and North Korea on their guard and may well enhance, rather than diminish, the role of nuclear weapons.

Also, the continued slide in Japan's relations with South Korea is casting shadows on six-party talks for the denuclearization of the Korean Peninsula.

In the absence of diplomatic efforts to foster relationships of trust with neighboring countries, any nuclear disarmament strategy is nothing more than pie in the sky. And without a security framework that does not rely on nuclear weapons, it would be impossible to lower the need for those weapons.

The Obama administration has been following a policy similar to the "three reduction" proposal Kishida explained in Nagasaki. Japan should work together with the United States, the provider of the nuclear umbrella, to come up with specific plans of action.

If nuclear disarmament stands for "proactive pacifism," Japan must take the initiative.

--The Asahi Shimbun, Feb. 18

Former power company president on green technologies

February 21, 2014

Hibakusha: Ex-power company president ponders energy options in post-Fukushima Japan

http://mainichi.jp/english/english/features/news/20140221p2a00m0na002000c.html

"I thought I had to complete this project for future generations after the 2011 earthquake and tsunami," former Chugoku Electric Power Co. President Shigeo Shirakura recently told me about a research paper he'd been working on. This was the first time I'd seen Shirakura in three and a half years.

The paper is about green technologies, including "clean" coal power generation with denitrification and desulfurization -- something the 78-year-old engineer has been involved in for nearly half a century.

"We need energy, but the Great East Japan Earthquake stopped nuclear power generation. Renewable energy is problematic regarding its quantity and quality. All we have left, therefore, is coal."

What drove Shirakura to finish his paper at the age of 76, even after an operation for valvular heart disease, were his pride as a power company engineer and his childhood memories of World War II.

Shirakura was a fourth-grade student at an elementary school in Kaita, Hiroshima Prefecture, when the atomic bomb hit on the morning of Aug. 6, 1945. He was doing his homework with the windows open and saw three U.S. Air Force bombers flying in the blue sky. Just as he thought, "B-29s are here," the young Shirakura was hit with a great flash.

He immediately hid under a table as the blast wave shattered the glass in the windows and tore up tatami mats.

That afternoon, A-bomb victims began pouring into Shirakura's hometown, more than 10 kilometers away from the hypocenter. Among them were schoolgirls who had been mobilized to work in Hiroshima's factories. Their faces were severely burned and they barely had any clothes on. Shirakura's father, who owned a clothing store, cut up cloth he had in stock into large pieces and quickly fashioned them into rough garments so that girls had something to wear. Shirakura remembers helping his father make them.

On the next day, Shirakura went with his mother and elder brother to the Hakushima area of Hiroshima to look for relatives. The city had been reduced to ash.

"We called the bomb 'pikadon' then -- referring onomatopoeically to the flash ('pika') and the blast ('don') of the atomic bomb. I was simply scared. So, I was really relieved when the war ended. It made me realize how wonderful it is to have lights in towns," Shirakura recalled.

Shirakura had been exposed to radiation as he entered the Hakushima district, about two kilometers from the hypocenter. Because of this, he applied for atomic-bomb disease certification three years ago. His application was rejected, however, as the testimonies of Shirakura and his witnesses did not match.

"I didn't apply for certification because I wanted compensation. I did it because I wanted proof that I was there."
Still, he can't help but wonder about the effects of the bomb as his brother died of cancer. He also thinks about the radiation whenever he gets sick.

Being affected by the atomic bombing and radiation, Shirakura understands how Fukushima residents near the crippled Fukushima No. 1 nuclear plant must feel. At the same time, he is aware that most Japanese people never really questioned the country's energy policy before the meltdowns.

"Each of us Japanese people needs to think about the future of the country's energy policy rather than pushing for a 'no nuclear power' policy just because the Fukushima plant accident happened." (By Hidetoo Okazaki, Kyoto Bureau)
February 21, 2014(Mainichi Japan)

Nukes still "important"

February 25, 2014

In latest draft energy policy, government calls nuclear power 'important'

Kyodo

http://www.japantimes.co.jp/news/2014/02/25/national/in-latest-draft-energy-policy-government-calls-nuclear-power-important/#.UwxbyoXrV1s

The government Tuesday unveiled a draft energy policy that characterizes atomic power as an important electricity source, although the draft waters down some wording seen in an earlier version as signaling a strong pro-nuclear tone.

In the draft, the government said nuclear energy is an "important base-load power source" that usually supplies electricity continuously through the day, while vowing to push for the restart of reactors that have satisfied new safety requirements introduced after the 2011 Fukushima No. 1 nuclear power plant disaster.

The government initially planned to secure Cabinet approval of the so-called Basic Energy Plan in January, having already unveiled a draft document a month earlier. But it apparently decided to proceed more slowly after seeing how the content stirred controversy among some ruling party lawmakers who found the tone of the plan to be too strongly pro-nuclear.

The original draft said nuclear power is "important" and also serves as a "foundation" for the stability of Japan's energy supply.

But in the latest draft, the word foundation was removed.

As for Japan's long-standing spent nuclear fuel recycling policy, the revised document said the government will promote it, but added that there should be "flexibility" in the medium to long term.

Meanwhile, the government added emphasis to the section on renewable energy, saying that efforts to accelerate the introduction of such sources will continue "beyond" the period of about three years starting from 2013.

The government is legally required to review the Basic Energy Plan at least every three years by taking into consideration changes in the energy situation.

The previous plan compiled in 2010 aimed to boost the nation's reliance on nuclear power to some 50 percent of its total electricity in 2030 from around 30 percent before the Fukushima disaster.

In 2012 the previous government, led by the Democratic Party of Japan, now the main opposition party, decided on what it called an “energy strategy” aiming to phase out nuclear power by the end of the 2030s, but it did not go so far as to revise the Basic Energy Plan that was expected to stipulate detailed measures to realize the strategy.

All of the 48 commercial reactors in Japan are now offline amid heightened safety concerns after the nuclear crisis, with thermal power generation making up for the shortfall.

Renewable energy accounted for less than 2 percent of the total electricity generated in fiscal 2012 when excluding hydropower.

First energy plan since Fukushima crisis says nuclear power important energy source
http://ajw.asahi.com/article/behind_news/politics/AJ201402250057

THE ASSOCIATED PRESS

Japan unveiled its first draft energy policy since the Fukushima meltdowns three years ago, saying nuclear power remains an important source of electricity for the country.

The draft presented Feb. 25 to the Cabinet for approval expected in March, said Japan's nuclear energy dependency will be reduced as much as possible, but that reactors meeting new safety standards set after the 2011 nuclear crisis should be restarted.

Japan has 48 commercial reactors, but all are offline until and unless they pass the new safety requirements.

The draft of the Basic Energy Plan said that a mix of nuclear, renewables and fossil fuel will be the most reliable and stable source of electricity to meet Japan's energy needs. It did not specify the exact mix, citing uncertain factors such as the number of reactor restarts and the pace of renewable energy development.

The government had planned to release the draft in January but a recommendation submitted by an expert panel was judged to be too pro-nuclear. The draft unveiled on Feb. 25 added slightly more emphasis on renewable energy.

Economy, Trade and Industry Minister Toshimitsu Motegi, in charge of compiling the plan, told reporters that "in principle, the direction has not changed."

He called for additional efforts to accelerate the development of renewable energy over the next few years.

The draft says Japan will continue its nuclear fuel recycling policy for now despite uncertainty at key facilities for the program, but added there is a need for "flexibility" for possible changes to the policy down the road.

Japan has tons of spent fuel and a stockpile of extracted plutonium, causing international concerns about nuclear proliferation.

Officials have said the most realistic way to consume and reduce the plutonium is to restart the reactors to burn it.

The previous energy plan compiled in 2010 called for a boost in nuclear power to about half of Japan's electricity needs by 2030 from about one-third before the Fukushima disaster.

Japan's govt. drafts basic energy plan
http://www3.nhk.or.jp/nhkworld/english/news/20140225_21.html

Japan's government has drafted a new basic energy plan that defines nuclear power as an important "base-load" energy source.

The draft was adopted at Tuesday's meeting of relevant cabinet ministers. How to define nuclear power has been a focal issue since the 2011 accident at the Fukushima Daiichi plant.

An initial draft issued last year defined nuclear power as an important, fundamental base energy source. The description drew criticism from members of governing parties for giving nuclear energy too high a status.

"Base-load energy" refers to a power source that can continuously supply electricity day and night in a stable manner.
Government officials say the phrase is a description of capability, and is not an indication of the power

source's importance in the energy market.

The draft says the government will restart nuclear plants whose safety has been established by the highest standards in the world as designated by the Nuclear Regulation Authority.

It says the nation's policy of recycling spent nuclear fuel should be tackled with strategic flexibility, according to how much nuclear power plants are used in the future.

The government will present the energy plan to the governing parties, and later have it approved by all members of the cabinet.
Feb. 25, 2014 - Updated 03:45 UTC

Hand it over

February 26, 2014
Japan to hand over plutonium to US
http://www3.nhk.or.jp/nhkworld/english/news/20140226_38.html

Japan is preparing to hand over to the United States its stockpile of research-purpose plutonium. It was purchased decades ago from the US and other countries.

Chief Cabinet Secretary Yoshihide Suga said on Wednesday that since the 9-11 attacks in 2001, the US has aggressively tackled reducing nuclear material that could be targeted by terrorists for their use.

He said Japan has been actively cooperating with this effort, hoping to contribute to international nuclear security.

Japan purchased the plutonium in the late 1960s through the mid-70s for research use at Tokai Village, about 100 kilometers north of Tokyo.
Feb. 26, 2014 - Updated 13:16 UTC

Mixed reactions to energy plan

February 26, 2014

Ex-PM Kan criticizes govt. energy plan

http://www3.nhk.or.jp/nhkworld/english/news/20140226_32.html

Former Prime Minister Naoto Kan has criticized the draft of a general energy plan submitted by the Liberal Democrat-led government. He says it aims for increased use of nuclear power.

Speaking at a Lower House subcommittee meeting on Wednesday, Kan said in places the document calls for minimizing reliance on nuclear power. But when read as a whole, it aims for the exact opposite.

Industry minister Toshimitsu Motegi refuted the claim, describing the draft as balanced and practical.

Kan also said support for nuclear fuel recycling in the draft shows the government learned nothing from the accident at Fukushima Daiichi nuclear plant.

Motegi said there are no grounds for criticism, as the government is playing a bigger role in nuclear fuel recycling.

After the meeting, Kan told reporters that his Democratic Party-led administration shifted its nuclear energy policy after he felt remorse for never doubting the safety of nuclear plants until the Fukushima accident.

He accused the administration of Prime Minister Shinzo Abe of trying to turn back the clock on nuclear energy policy to pre-March 2011.
Feb. 26, 2014 - Updated 10:03 UTC

Mixed reactions on govt. energy plan
ttp://www3.nhk.or.jp/nhkworld/english/news/20140226_26.html

The Japanese government's draft of a general energy plan is drawing mixed reactions within the ruling bloc.

The Liberal Democratic and New Komeito parties, which make up the ruling coalition, met separately on Wednesday to discus the draft that had been adopted the previous day.

It defines nuclear power as an important "base-load energy source," which can steadily supply power around the clock. It also calls for restarting nuclear plants that meet safety standards, while minimizing reliance on nuclear power.

Members of the Liberal Democratic Party expressed support for the draft, saying that nuclear power is needed for business activities.

Others said even if there were no longer nuclear plants in Japan, the technology need to decommission reactors would be necessary as long as there are plants in other countries.

Other members said the plan should make clear that Japan aims for zero reliance on nuclear power in the future, and will eventually stop recycling nuclear fuel.

In a separate meeting, members of New Komeito took issue with the designation of nuclear power as a

base-load energy source.

Some supported the decision, claiming it does not mean increased reliance on nuclear power. But others pointed out the term is unfamiliar and might not be understood by the general public.

The ruling parties plan to sum up views on the draft by the end of March. Feb. 26, 2014 - Updated 08:58 UTC

Good news?

February 21, 2014

In light of Fukushima disaster, Vietnam delays construction of 1st nuclear power plant

http://ajw.asahi.com/article/forum/politics_and_economy/southeast_asia/AJ201402210041

Michiko Yoshii

Professor at the Center for International Education and Research of Mie University
Michiko Yoshii is a professor at the Center for International Education and Research of Mie University. She did her postgraduate work at Paris VII University and the University of Tokyo and earned her Ph.D. Her areas of expertise are Vietnamese anti-war songs, the plight of street children and civil society.

Concern over the 2011 nuclear disaster in Japan has caused Vietnam to delay construction of its first nuclear power plant.

The project was initially scheduled to start this year, but the work may now be postponed until 2020.
The decision was announced by Prime Minister Nguyen Tan Dung on Jan. 15.
According to the Vietnamese newspaper Tuoi Tre one day afterward, Dung also said, "Building nuclear power plants will be done with the highest safety and efficiency, and the project will not go ahead unless standards are met."
The remarks pertain to the Ninh Thuan No. 1 nuclear power plant, which was ordered from a Russian state corporation. I truly hope the groundbreaking will be delayed, in line with his words.

OBJECTIONS FROM COMMUNIST PARTY MEMBERS

Many objections were raised in Vietnam after the plan for building the country's first nuclear power plants was finalized.

Typically, political and social issues draw critical comment from Vietnamese living abroad, in the United States for example. But on the issue of nuclear power plants, the outcry has a strong domestic base. Those who oppose the policy are former National Assembly members, university professors and high-ranking Communist Party officials.

In June 2011, three months after disaster unfolded at the Fukushima No. 1 nuclear power plant, Pham Duy Hien, the former head of the governmental Dalat Nuclear Research Institute, where the only nuclear reactor operating in Vietnam is located, argued for a 10-year delay in construction work, citing safety issues and a lack of personnel.

Even within the government, Minister of Science and Technology Nguyen Quan said repeatedly in 2012 that "personnel training will not keep up" with planned construction.

When I visited Ho Chi Minh City in southern Vietnam last September, people sought me out to give lectures. They said, "We want you to tell us about Fukushima."

I hadn't lived in Fukushima, but I suppose they wanted to hear about Japan from a Japanese person who can speak directly to them in their own language. I met many artists and people affiliated with Vietnamese universities and the mass media, and I got the impression that a good number of them are skeptical about the quest for nuclear power.

I was also asked to write an article for the weekend edition of a national Vietnamese newspaper about changes in Japanese lifestyle in the aftermath of the Fukushima accident.

Vietnam's media is subject to strict censorship. Until then, it was the norm for the media to report about the Fukushima accident as something that had happened in the past and was now fully sorted out. I wrote about voluntary evacuees as well as short trips for recreation taken by Fukushima children to places where there was no fear of contamination. These articles seemed to be quite a novelty in Vietnam.

I took a group of students from Japan on a visit to Ninh Thuan Province, the site of the planned nuclear power plant, where we toured a village inhabited by the ethnic Cham people. When we visited the home of Inrasara, a Cham intellectual and poet of considerable world fame, we were all at a loss for words when we heard: "They're going to build a Russian nuclear power plant on the coast five kilometers from here. When it's finished, I'll be able to see it from my home." On the proposed site stands a small shrine where the Cham "god of the tsunami" is enshrined. We heard that the size of the shrine's grounds were reduced as part of preparations to build the nuclear power plant. He told us, "We struggle to put on our annual festival."

Ninh Thuan Province is the Cham heartland, where the Kingdom of Champa (192-1832) used to exist. Until 1975, it was recognized by the former government of South Vietnam as an autonomous area. Building intrusive facilities like a nuclear power plant in such a place is akin to U.S. military bases in Japan, is it not? When I heard about Dung's announcement with regard to nuclear power plants, I imagined the looks on the faces of the Cham minority.

MY SECOND HOME

I'm Japanese, so sometimes people who come hear my lectures applaud my stance, speaking as a Japanese, of opposing exports of nuclear technology from Japan. But they question whether I should be voicing objections to another country's construction of nuclear power plants. They view it as interference in their domestic affairs.

But the Chernobyl and Fukushima disasters show that when an accident occurs, the effects cross national borders. As global citizens, we should speak out on issues of global concern.

My husband is Vietnamese. Our two children spent most of their early childhood in Ho Chi Minh City. Our family of four just only began living in Japan a few years ago. My children, who have Vietnamese citizenship, might live in Vietnam in the future. My husband and I have decided to spend our old age there.

I do not have Vietnamese citizenship, so although their leader is not my prime minister, I wholeheartedly welcome the statement that "we will not execute the plan when we cannot guarantee the highest safety" from Dung, the prime minister of my second home.

TEPCO to expand abroad

February 26, 2014

INTERVIEW: Incoming chairman says TEPCO should expand overseas, streamline

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201402260072

THE ASAHI SHIMBUN

Tokyo Electric Power Co.'s incoming chairman, Fumio Sudo, said the utility should look to the business models of Japan's internationally competitive industries, such as the auto and steelmaking sectors, and break away from the virtual regional monopoly it has long enjoyed.

Sudo told The Asahi Shimbun on Feb. 25 that the operator of the crippled Fukushima nuclear plant should increase its earnings by investing overseas and return those profits to the public instead of focusing on the shrinking domestic market.

He also said the utility should streamline its operations before considering additional rate hikes.

Sudo, who is an adviser to steelmaker JFE Holdings Inc. and has served as an outside TEPCO board member since June 2012, will become chairman in April, three years after the Great East Japan Earthquake and tsunami triggered the crisis at the utility's Fukushima No. 1 nuclear power plant.

He played a leading part toward the end of last year in compiling TEPCO's new rehabilitation plan, which promises to cut costs by 4.8 trillion yen ($47 billion) in 10 years and assumes that operations at the Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture will resume this summer.

Excerpts of the interview follow:
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Question: What do you think is the biggest challenge facing TEPCO?

Sudo: The company lacks a sense of global competition. Its virtual regional monopoly and general-cost method (in which costs are allowed to be added on to electricity charges) are behind its problems.

TEPCO has been sensitive only to competition among electric power companies in Japan. Demand in the domestic market will shrink as the number of newborns declines and the use of "smart meters" (energy-saving electricity usage indicators) spreads. We have to invest overseas and return those profits to Japanese citizens.

Another problem is that our ability to purchase fuel (such as natural gas at lower prices) has fallen short compared to South Korean power utilities. The prices TEPCO has been buying fuel at have averaged more than 10 percent higher than those paid by South Korean power producers. We plan to form a comprehensive tie-up with other companies in the area of fuel procurement. I hope that plan will be realized by the end of this fiscal year.

Q: The problem of accumulating radioactive water at the Fukushima plant has yet to be resolved. What is your take on that?

A: I sincerely apologize for that. We have been gradually amassing experience and knowledge (about the problem at the plant site). If we switched personnel (every time a new problem occurred) in order to make them take responsibility, (the quality and knowledge of workers) would become endlessly low. As management, we just have to endure now.

Q: Niigata Governor Hirohiko Izumida has taken a cautious approach to the planned restart of the Kashiwazaki-Kariwa nuclear plant, a key step in TEPCO's rehabilitation plan. What do you think?

A: Nuclear power generation involves the "separation of powers" doctrine. We are a player, and the state, which makes the rules, exists above us. The judge is the Nuclear Regulation Authority. We have to train to prepare for the time we are given an opportunity to play. I hope to win the understanding of the local community by advancing safety measures wherever possible.

Q: Will you raise electricity rates again if you fail to resume operations of idled reactors?

A: First, we will reduce expenses in the thermal power division. If we have to increase electricity rates, we would go out of our way to spare every cost to our customers, even in increments of a single yen. And when we can lower the rates, we will decrease them as much as possible.

We should never contemplate rate increases until we make every effort possible until there are no other choices. It is common sense in the auto and steel industries.

(This article is based on an interview by Mari Fujisaki and Takashi Ebuchi.)

Not a "basic plan" really

February 27, 2014

EDITORIAL: New energy plan falls short on ways to reduce nuclear power

http://ajw.asahi.com/article/views/editorial/AJ201402270034

The Abe administration recently decided on the draft of a new basic energy plan, but the proposal still contains no specific measures to deliver on the government's promise to reduce the nation's reliance on nuclear energy.
This is not something that can qualify as a "basic plan."

The administration says it cannot offer figures for the estimated share of nuclear power in the nation's overall energy supply because of uncertainty concerning safety assessments of reactors by the Nuclear Regulation Authority.
Asahi Shimbun editorials have argued that Japan should move toward a future without nuclear power.

But the energy policy of the government of Prime Minister Shinzo Abe calls for the continued production of electricity with atomic energy. Since the administration has promised to reduce nuclear power generation, it should, at the very least, make it clear how it will achieve that goal even if it cannot provide specific figures.

But all the government's draft says with regard to this issue is that it will seek to restart idle reactors while respecting the NRA's safety assessments.

The catastrophic accident at the Fukushima No. 1 nuclear power plant has resulted in tighter nuclear safety regulations.
That means fewer reactors can be brought back online compared with before the nuclear disaster.

If the government chooses to do nothing more to reduce the number of active reactors, it will only be preserving the status quo.

The draft also says the government will continue pursuing the controversial program to establish a system for reprocessing all spent nuclear fuel from reactors. The Abe administration is failing to confront the reality of the program, which has come to a standstill.

There are other important questions that remain unanswered.

For instance, what will the government do to ensure that aging nuclear plants are smoothly closed? How will the emergency response plans of local governments close to a nuclear power plant be used in deciding on whether to approve a plant restart? Municipalities located within a 30-kilometer radius of a nuclear plant are required to work out such plans.

Should the government order the shutdown of a nuclear plant if there is no prospect for finding a site for storing spent nuclear fuel rods from the plant?

The government's nuclear power policy also has great implications for its efforts to revitalize the power market.
Electric utilities are unwilling to upgrade their aging thermal power plants with poor energy efficiency because they are expecting many offline reactors to be reactivated.

Unless the government announces plausible plans to promote a shift away from nuclear energy toward other energy sources, there can be no significant progress in the development of alternative power sources. Nor will there be any significant cut in the costs of purchasing fossil fuels from other countries.

A return to nuclear power will discourage new power suppliers, like companies selling electricity produced with renewable energy sources, from making new investments. That's because existing nuclear power plants are at an advantage over such new players in terms of short-term cost competitiveness.

If the government shows no strong commitment to reducing nuclear power generation, there will be few businesses willing to take risks to enter the power market or spend money to develop new technologies.

Nuclear power generation cannot be economically viable without government subsidies.

Since its new energy supply plan should reflect the lessons learned from the Fukushima nuclear disaster, the government should first take steps to reform its traditional energy policy, which has been heavily dependent on nuclear energy.

Unless the government embarks on an overhaul of its energy policy, the power market reform it is trying to promote is likely to fall through.

The government says its draft of the new energy plan will be discussed by working teams of both the ruling Liberal Democratic Party and its junior coalition partner New Komeito.

Policymakers in the ruling camp should not forget that their discussions on the plan will be closely monitored by the public.
--The Asahi Shimbun, Feb. 27

Hadn't LDP promised the public the end of nuclear dependency?

February 26, 2014

Editorial: Maintaining nuclear energy dependency a violation of LDP election promise

http://mainichi.jp/english/english/perspectives/news/20140226p2a00m0na015000c.html

With only partial edits to wording deemed too emphatic on the importance of atomic energy, the just-released draft of the government's basic energy plan shows the government's intention to continue using nuclear power.

Our worst nightmare has come true. The draft is in violation of the Liberal Democratic Party of Japan (LDP) campaign pledge in the December 2012 general election to establish an economic and social structure that does not depend on nuclear energy. We urge that the government's course be corrected in line with its election manifesto through ruling coalition talks that are set to take place ahead of a Cabinet ruling on the plan.

We are not speaking out against the goal put forth by the energy plan draft of reducing Japan's dependence on nuclear power as much as possible. The problem is, rather, that the plan not only fails to provide a road map toward the realization of that goal, but presupposes the continued use of atomic energy.

The plan explicitly states that the government will promote the reactivation of nuclear reactors that are found to meet the safety standards set by the Nuclear Regulation Authority. It also states that the government will determine the extent to which it will use nuclear reactors based on considerations such as cost reduction. This suggests that the government does not expect to bring the use of nuclear energy to an end.

Maintaining our dependency on nuclear power will require the new construction and reconstruction of reactors. However, the energy policy set down by the Democratic Party of Japan (DPJ) administration, which called for the abolition of nuclear power following the outbreak of the Fukushima nuclear disaster, had banned such building as a general rule. The latest energy plan does not incorporate that rule, however, and opens the way for new construction.

The government had put off finalizing the draft out of concern for its impact on the Tokyo gubernatorial race, and to objections from within the ruling LDP and its coalition partner New Komeito that the draft compiled by a Ministry of Economy, Trade and Industry panel was excessively nuclear energy-oriented. As

a result, the wording used in a previous draft describing nuclear power as "a fundamental and important base energy source" was changed in the latest draft to "an important base-load energy source."

So what changed? Industry Minister Toshimitsu Motegi told a press conference, "My understanding is that our basic direction has not changed." Apparently, the wording was put through some fine-tuning merely to fend off criticism from anti-nuclear blocs. This makes the government's claim to work toward reducing the country's dependence on nuclear power as much as possible suspect.

Realizing a society that is not dependent on nuclear energy, which the LDP promised the public, requires further development and implementation of renewable energy and efficient thermal generation technologies. However, such efforts bring with them high societal costs, such as rising electricity prices. The government must be firm in its convictions if it is to truly create a society that does not depend on atomic power -- instead of making efforts to do so "as much as possible."

The Basic Energy Plan, which will dictate the nation's mid- to long-term energy policy, must clearly state the goal of abolishing nuclear power, and the government must lay out a plan to arrive at that goal. The plan is to be adopted by the Cabinet by March 31 -- the end of the current fiscal year -- following talks between the ruling LDP and New Komeito. We urge responsible deliberations by the involved parties, who have the future of the Japanese public in their hands.

Nukes or no nukes?

March 6, 2014

THREE YEARS AFTER: Experts debate on whether Japan needs nuclear energy
http://ajw.asahi.com/article/0311disaster/analysis/AJ201403060060

THE ASAHI SHIMBUN

Once largely taken for granted, Japan’s electricity supply has remained a hotly disputed issue on a number of fronts since the Fukushima nuclear disaster started in March 2011.

Proponents of nuclear energy say the environment, consumers and the nation’s economy will all suffer without the restart of nuclear reactors.

Opponents say the disaster at the Fukushima No. 1 nuclear power plant caused by the Great East Japan Earthquake and tsunami on March 11, 2011, proves that nuclear energy is just too dangerous to use. They also say Japan has already proved it can get along fine without nuclear energy.

All 48 of the nation's commercial nuclear power reactors have since been taken offline for safety inspections. The Fukushima disaster also underscored the problems related to the cozy community of bureaucrats, industry executives and academics who have together pushed for an increased use of nuclear power.

Since the disaster, Japan has often had to rely on shoestring operations and unorthodox methods to ensure enough electricity to cover peak demand in summer and winter.

Although major blackouts have been averted, the tighter supply means Japan now depends more on thermal power generation. The utilities' need to buy more fossil fuel for these plants has driven up electricity rates.

The burning of fossil fuel also ratcheted up the utilities' carbon dioxide emissions from 300 million tons in fiscal 2010 to 400 million tons in fiscal 2012, an increase commensurate to total CO2 absorption by Japan's forests.

One positive effect of the disaster has been major progress in energy-saving efforts in the nation.
The peak nationwide power demand in the summer of 2013, when temperatures soared to record highs, was down 9.7 percent, or 17 gigawatts, from 2010. The decrease was equivalent to the output of 15 new nuclear reactors.

A feed-in tariff system was introduced in July 2012 to oblige power utilities to buy electricity generated from renewable energy sources at fixed rates. By November 2013, suppliers with a total output of 6.45 gigawatts had entered operations under the feed-in tariff system.

Debate is now focused on restarting idled nuclear reactors. The administration of Prime Minister Shinzo Abe plans to have the reactors reactivated once their safety has been approved by the Nuclear Regulation Authority.

The power industry initially cited supply shortage as a primary reason for seeking restarts of their nuclear reactors. After that rationale gradually became less persuasive, the industry placed more emphasis on the negative impact of higher electricity rates on Japan's economy.

The Asahi Shimbun interviewed two experts for their views on the future of Japan's power industry and energy policy.

They are Kazuhiro Ueta, a professor of environmental economics at Kyoto University, and Tsutomu Toichi, an adviser with the Institute of Energy Economics, Japan.

Excerpts from the interview follow:
* * *

UETA: SET CLEAR COURSE TO END NUCLEAR ENERGY USE

You cannot discuss the future of power supply without addressing our overall socioeconomic setup. Power utilities have held excessive generator facilities so they can cover peak demand that comes only several days in midsummer.

But we should question whether we should go on with our socioeconomic setup, whereby we operate plants at full capacity and have our workers work long hours even amid scorching heat.

Europe's vacation system is well-conceived in that sense. Urban residents go to rural villages if they have three weeks off in midsummer. That helps provincial economies, cuts energy use and enriches workers' lives.

The three years following the 3/11 disaster was a preparatory period for Japan to move toward that kind of mature society. Not only did energy-saving efforts take root in society, but few people now complain about dimmer illumination in public places.

Awareness worthy of a mature society, which says electric power is not without its limits and should therefore be shared, is taking root.

Nuclear reactors should not be brought back online. Not only do questions linger about safety in a broad sense, such as insufficient emergency evacuation plans, but no pathway is yet in sight for deciding what to do with radioactive waste.

Exposure to radiation among nuclear plant workers represents another conundrum, which is not likely to be solved any time soon.

Increased reliance on thermal power has raised electricity rates, but power rates account for only a modest part of expenditures in general manufacturing industries. Any hollowing out of industry should be attributed to other reasons.

Nuclear power plants involve exorbitant "external costs," such as unrest and conflict in local communities, which remain invisible in the financial statements of power utilities. We should set a clear course for pulling the plug on atomic energy and foster a climate for encouraging growth of new industries, including those related to renewable energy sources.

TOICHI: IDLED REACTORS DO MORE HARM THAN GOOD

Retrospectively speaking, no major blackout has occurred, but the situation is not sustainable because power utilities continue to take emergency responses irrespective of cost calculations. We should have some of our nuclear reactors back online after rigorous inspections of their safety.

Electricity rates have risen 20 percent since the 3/11 disaster, but even that figure rests on the premise that nuclear reactors will be restarted. Rates will rise further if reactors remain idled. That could hollow out the economy further and slash available jobs

.

Power utilities have not passed on all of their increased costs to electricity rates. They have been eating into their past savings, but that effort is nearing its limit. A symbolic case is that of Chubu Electric Power Co., which was obliged to request rate hikes despite its low dependence on nuclear power. Financial difficulties could compromise fuel procurement and therefore power supply.

The ballooning carbon dioxide emissions represent another major problem. The United States and China are moving to reduce coal-fired thermal power generation, but Japan is moving in the other direction. While the risk of another nuclear accident is not zero, keeping our nuclear reactors idled involves much larger disadvantages.

Nuclear restarts will help spread renewable energy sources. Consumers are footing the bills for spreading renewables in the form of added electricity rates. Nuclear restarts will curb rate hikes, thereby facilitating the allocation of resources to renewable energy.

Radioactive waste presents no reason to end nuclear power generation now. Waste is already there, and it is up to the political circles to decide on a final disposal site.

How much nuclear power we should keep generating on a longer term will depend on the quantity and costs of renewable energy, the extent of energy-saving efforts and the course of reforms in power markets. We only have to think about it while on the run.

One way of seeing the situation

March 10, 2014
Emerging economies rely on nuclear power
http://www3.nhk.or.jp/nhkworld/english/news/20140310_25.html

Tuesday marks 3 years since the Fukushima Daiichi nuclear power plant accident began.

Despite the accident, many emerging economies are building nuclear plants to meet growing demand for electricity.

The International Atomic Energy Agency says 435 operable reactors exist in 31 countries and region.

The United States has 100 of them. France follows with 58 and Japan 48. All reactors in Japan have gone offline after the Fukushima accident.

Other countries with a large number of reactors include Russia with 33 and South Korea 23. China and India each has 21.

The British-based World Nuclear Association says 70 reactors are under construction worldwide. Of them, 28 are in China.

The association also says 28 countries plan to build 173 reactors by 2030.

China again comes on top with 58, followed by Russia with 31 and India 18.

The Fukushima accident has raised public concerns about nuclear safety. Germany, Switzerland and other European countries have begun taking steps to reduce reliance on nuclear power.
Mar. 10, 2014 - Updated 06:52 UTC

What happened to DPJ's "no-nuclear" bill?

March 10, 2014

THREE YEARS AFTER: DPJ's 'no-nuclear' bill obliterated after regime change
http://ajw.asahi.com/article/0311disaster/fukushima/AJ201403100070

By SHINICHI SEKINE/ Staff Writer

The Democratic Party of Japan administration had devised a specific plan to wean Japan off nuclear energy, but legislation to put that strategy in motion died when the party lost power in 2012.

DPJ lawmaker Satoshi Arai said the bill was designed to reduce Japan's dependence on nuclear power in light of the triple meltdown at the Fukushima No. 1 nuclear plant triggered by the Great East Japan Earthquake and tsunami on March 11, 2011.

Prime Minister Yoshihiko Noda's administration planned to submit the bill to a Diet session in 2013.

The outline of the bill, compiled by DPJ lawmakers and government bureaucrats, called for laying a domestic network of natural gas pipelines to accelerate a shift to thermal power generation and raising power transmission capacities to promote electricity generated from wind and other renewable sources, according to sources.

According to a copy of the outline obtained by The Asahi Shimbun, electric power facilities, natural gas pipelines and oil storage terminals, which were defined as "key energy facilities," would be developed in preparation for a disaster.

In the basic energy plan adopted in 2010, the DPJ had set a goal of increasing the share of renewable energy to 21 percent of the nation's electricity generation in 2030.

A group of DPJ lawmakers, including Arai, Banri Kaieda and Akihiro Ohata, and senior officials from the industry, finance and other ministries met about 10 times between spring and autumn 2012 to study necessary measures.

The outline said the government would approve a basic plan with development goals at a Cabinet meeting and provide financial assistance to projects submitted by businesses and authorized by the prime minister.

The industry ministry planned to formulate a basic policy for building natural gas pipelines, including routes, in fiscal 2012 and asked for related outlays in the fiscal 2013 budget.

But everything changed after the DPJ suffered a crushing defeat to the Liberal Democratic Party in the Lower House election in December 2012.

Japan's 48 nuclear reactors all remain offline for safety checks. The LDP plans to have them reactivated once the Nuclear Regulation Agency confirms their compliance with the new safety standards introduced after the Fukushima nuclear crisis.

In contrast to the DPJ's definition of "key energy facilities," the administration of Prime Minister Shinzo Abe defined nuclear energy as an "important base-load electricity source" in its draft basic energy plan approved in February.

The industry ministry's plan for the pipeline basic policy was shelved and the budget request was dropped after Abe took power.

"There are no signs to promote construction of pipelines under a government initiative," an industry ministry official said.

Under the DPJ's strategy, a ministry study group in 2012 proposed government assistance to Hokkaido Electric Power Co.'s plan to raise power transmission capacities from Hokkaido to the Honshu main island. The study group was disbanded in June 2013.

A ministry official said nothing has been decided on whether the government needs to provide assistance or not.

The Abe administration's draft basic energy plan, the first to be compiled after the Fukushima nuclear disaster, also dropped the DPJ administration's numerical goal of increasing the use of renewable energy for the nation's electricity needs.

Impossible for some reactors to meet new standards

March 12, 2014

THREE YEARS AFTER: Majority of Japan's nuclear reactors face bleak future

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201403120057

THE ASAHI SHIMBUN

Due to stricter government safety regulations, 30 of Japan's idled 48 nuclear reactors have no immediate prospects of restarting operations, at least in the near future, according to an Asahi Shimbun survey of utilities.

Thirteen of those, mainly due to their age, are having particular difficulty in complying with the new standards, according to the survey, and are likely to be decommissioned.

The government tightened safety regulations for the nation’s nuclear power plants in the wake of the accident at the Fukushima No. 1 nuclear power plant, triggered by the 2011 Great East Japan Earthquake and tsunami.

The new restrictions ban electric power companies from locating reactor facilities directly on top of active fault lines. The state also revised the Law on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors to limit, in principle, the operational life of reactors to 40 years.

“No matter how much money and time we spend, it would be impossible (for some reactors to clear certain hurdles),” said an official with an electric power company, referring to the two requirements.

The two restrictions are the main obstacles the utilities face in their efforts to restart idle reactors.

The 13 likely to be decommissioned are the Tokai No. 2 plant in Ibaraki Prefecture; the three reactors at the Mihama plant in Fukui Prefecture; the two reactors each at the Oi, Takahama and Tsuruga plants, all in Fukui Prefecture; the No. 1 reactor at the Shimane plant; the No. 1 reactor at the Ikata plant in Ehime Prefecture; and the No. 1 reactor of the Genkai plant in Saga Prefecture.

Of these reactors, the Tsuruga plant’s No. 1 reactor and the Mihama plant’s No. 1 and No. 2 reactors have exceeded the 40-year limit.

The Shimane plant's No. 1 reactor will mark its 40th anniversary of operation at the end of this month, while the Takahama plant's No. 1 reactor will pass the four decade mark in November.

Furthermore, an investigation by the Nuclear Regulation Authority has concluded that there is an active fault line beneath the Tsuruga plant's No. 2 reactor building. A slip of an active fault directly under a reactor is highly likely to lead to its destruction.

The NRA is also studying the geological structure of the ground beneath the Shika nuclear plant in Ishikawa Prefecture, the Higashidori plant in Aomori Prefecture and the Mihama plant.

The new government standards also require nuclear plant operators to bolster fire prevention measures.

It is also unclear whether the four reactors at the Fukushima No. 2 plant, located 12 kilometers south of the crippled No. 1 plant, will be allowed to resume operations.

Fukushima Prefecture and local municipalities that are home to the Fukushima No. 2 plant have demanded all the reactors there be decommissioned. That makes it difficult for the plant's operator, Tokyo Electric Power Co., to bring those reactors back online.

Utilities operating the remaining reactors among the 30 have said they have yet to decide when they can apply for safety screenings to restart their reactors. They say it would take much time to complete work needed to meet the new safety requirements demanded by the government.

The companies also said they will place priority on bringing back online those reactors that can more easily be brought up to standard.

To date, the NRA has received applications to restart 17 reactors at 10 nuclear plants. Ten of those reactors--the No. 3 reactor at the Tomari plant in Hokkaido, the Oi plant's No. 3 and No. 4 reactors, Takahama's No. 3 and No. 4 reactors, Ikata's No. 3 reactor, the Genkai plant's No. 3 and No. 4 reactors and the No. 1 and No. 2 reactors at the Sendai plant in Kagoshima Prefecture--are currently undergoing screening as originally scheduled.

But the NRA's inspection process is behind schedule for the remaining seven reactors: the Tomari No. 1 and No. 2 reactors; the No. 2 reactor of the Onagawa plant in Miyagi Prefecture; the No. 6 and No. 7

reactors at the Kashiwazaki-Kariwa plant in Niigata Prefecture; the No. 4 reactor at the Hamaoka plant in Shizuoka Prefecture; and the Shimane plant's No. 2 reactor.

Although the operator of the Hamaoka plant plans to apply for safety checks to resume operations at the facility's No. 3 reactor by the end of fiscal 2014, the problem is that the facility sits in a location along the Nankai Trough southwest of Tokyo, where it has long been predicted a major earthquake will occur.

Then Prime Minister Naoto Kan ordered the operator of that plant to suspend all its reactors in May 2011 as the Fukushima nuclear crisis was unfurling.

But in the process of suspending operations there, a steam condenser for the No. 5 reactor was damaged, resulting in an influx of large amounts of seawater. Rust has also been found in a pressure vessel at the plant as well.

(Ryuta Koike and Toshio Kawada contributed to this article.)

Ibuki on nukes

March 18, 2014
Lower house speaker clarifies his nuclear phaseout stance

http://mainichi.jp/english/english/perspectives/news/20140318p2a00m0na015000c.html

Remarks made by the speaker of the House of Representatives on Japan's phaseout from nuclear power overtook the political world last week. According to some media reports, Bunmei Ibuki was criticizing the Abe administration. But was he really?

I posed the question to Ibuki directly and got a wry response.

"It's not the case. People would realize this if they actually did their homework," he said.
So I did my homework, and this is what I found out:
1. Ibuki is not arguing for the immediate abolition of nuclear power, and is not opposed to the reactivation of nuclear reactors.

2. However, based on his view that nuclear energy represents the arrogance of humankind in believing it can control nature, going against the Japanese tradition of coexisting with nature, he firmly believes that nuclear power must ultimately be phased out.

3. Based on his philosophy of living humbly amid abundance, Ibuki believes a shift must be made from a lifestyle of wasteful electricity use -- including late-night television, excessive lighting and air conditioning, and 24-hour convenience stores.

On March 11, 2014, at a ceremony commemorating the third-year anniversary of the Great East Japan Earthquake and tsunami, Ibuki said, "We must carry out exhaustive deliberations with a view toward future nuclear phaseout."

On his Facebook page the previous day he wrote, "We have changed direction toward the ultimate goal of phasing out nuclear power."

Asked about his Facebook post, Ibuki said, "You'll find the same content in the Liberal Democratic Party (LDP)'s election pledge."

Despite what he says, however, this is not so clear cut.

Indeed, the LDP's election pledge for the December 2012 general election offers to "aspire to an economic and social structure that does not have to rely on nuclear power." But such phrasing is missing from the party's platform in the July 2013 House of Councillors election.

However, as a native of Kyoto, where Shinto and Buddhist traditions are deeply rooted, and a member of a frugal merchant family, Ibuki's views toward nature and civilization are unwavering.
It's the kind of thinking befitting a man who, out of his passion for cooking simple dishes using seasonal ingredients, published a book of essays and recipes called "Ibuki-tei: Shiki no shokutaku" (Ibuki restaurant: Our dining table throughout the four seasons) in 2008.

So why would Ibuki approve of the reactivation of nuclear reactors, when it would seem to clash with his views toward nature?

"Otherwise we run the risk of foreign financial institutions gaining control of Japan's sovereignty," explained Ibuki, who in the past served as the chief of the Finance Ministry's treasury division.

According to Ibuki, Japan's trade deficit is rising partly because of increased imports of fossil fuels to replace the energy that would have been produced by the halted nuclear reactors. Japan will become

impoverished if this situation is drawn out. If corporations and households begin to dig into their savings, Japanese banks will become incapable of buying up government bonds. Such a state of affairs would open up opportunities for foreign financial institutions to buy Japanese government bonds, and depending on how that plays out, interest rates could shoot up, possibly leading to Japan's financial and economic collapse.

Asked if it's not possible to institute reforms toward a more energy-saving form of economy and society before such a collapse takes place, Ibuki said, "I think we should, and that's what I've been saying, but it's also true that such change will not be easy. We have no choice but to overcome our obstacles using a combination of various measures."

As one of the reasons for putting out a book on home cooking, Ibuki wrote, "I wanted people to realize the error of the notion created by television dramas that all politicians need to hang out at expensive Japanese restaurants."

"Ibuki-tei" begins with recipes for spring cabbage: pickled, sauteed with butter, and two types of pasta. Ibuki's instructions are written in a refined and witty style, and he's filled with gratitude for nature's blessings, which could instantly be reduced to nothing if contaminated with radiation.
At the very least, the sensibility and values held by Ibuki -- who waxes poetic about homemade meals made from the heart over luxurious meals in restaurants -- do not follow a "nuclear-dependence" train of thought. (By Takao Yamada, Expert Senior Writer)

March 18, 2014(Mainichi Japan)

Japan traditional façade of "wa" cracking

March 22, 2014
Energy debate challenges facade of *wa*

by Stephen Hesse
http://www.japantimes.co.jp/life/2014/03/22/environment/energy-debate-challenges-facade-of-wa/#.Uy3ce4XrXIU

Torn between his nationalistic instinct to resurrect what he seems to regard as Japan's great bygone days of empire-building and the mundane demands of caring for the pressing needs of his nation, a remarkably caring soul might almost feel sorry for Prime Minister Shinzo Abe during his first months in office. Almost.

However, after months of bluster and bragging, of tired claims that “Japan is back” and “Abenomics” will set the nation on its feet, the head of the ruling Liberal Democratic Party remains unable to get his priorities right.

If he hopes to create a sustainable economy, gain the global respect he so desperately craves, and give Japan’s residents a sense of optimism about the future, he needs to put aside his ill-conceived notions of grandeur and focus on a practical, long-term domestic vision.

To meet the majority’s demands for safe, secure energy, that vision must include a comprehensive blueprint for transitioning from nuclear power to clean, safe and localized energy generation.

Three years have passed since the Great East Japan Earthquake on March 11, 2011, and the following tsunami and nuclear catastrophe that shattered the Tohoku region, and more than 265,000 citizens of the world’s third-largest economy remain displaced and largely living in subsistence-level accommodation.

These refugees and their communities deserve immediate attention. Restarting nuclear reactors won’t help them, but jumpstarting their local economies with alternative-energy projects can — including solar, wind, water and geothermal opportunities.

The three reactor meltdowns at the Fukushima No. 1 nuclear power plant operated by Tokyo Electric Power Co. (Tepco) have turned parts of that prefecture into lethal no-go zones and are contaminating surface and groundwater with radioactivity that has now long been pouring into the Pacific. These ongoing calamities, too, need immediate attention.

The answer is not to simply switch the nation’s energy dependence to other aging reactors in other communities, but to quickly and safely decommission all Japan’s reactors that are disasters waiting to happen. The sooner this happens the better, as it will give Japan an opportunity to showcase new technologies and strategies that can be sold worldwide as other nations struggle to shut down and clean up antiquated reactors.

Rather than traveling the world to hawk Japanese nuclear reactors — a tainted brand at best — Abe needs to listen to the 70 percent of Japanese who polls show are hoping for a nuclear-free future.

Their hopes, and Abe's dreams of greatness, can dovetail in the development of alternative-energy technologies paired with reactor decommissioning strategies that must, by necessity, be perfected in Japan.

Today, a lack of political will is all that stands in the way of Japan becoming the world's leading incubator for safe and clean energy generation — a role that would spur the economy and ensure long-term national and energy security.

Of course, nuclear power will remain with us worldwide for years to come, and reasonable arguments can be made for its continued use as we phase-in safer forms of energy generation: one being the critical need to reduce carbon-dioxide emissions that come from burning fossil fuels such as coal and oil and are driving climate change.

Japan, however, is the last nation on Earth that should harbor hubristic dreams of extending the life of aging reactors and postponing the decommissioning process.

The 3/11 Tohoku quake and tsunami were not unique. Beneath Japan, massive tectonic plates grind against each other unrelentingly, rattling and jolting the entire land mass with continual tremors. For most of us here, it's a no-brainer to adopt a new energy paradigm. But this is not about brains — it's about politics.

Entrenched special interests, the so-called "nuclear village" comprising politicians, bureaucrats, media profiteers and executives of the nation's utilities, have much to lose, politically and financially, if energy is advanced and decentralized.
So, you might ask, is there any cause for optimism in Japan?

Well, that depends on what makes you optimistic. From my perspective, one bright spot is that groups both inside and outside Japan have begun chipping away at its traditional facade of *wa* — a cultural sense of harmony that tends to inhibit protest and reform.

In the March 11 edition of The Japan Times, David McNeill reported on a $1 billion class-action lawsuit filed against Tepco by 80 U.S. Navy personnel.

The sailors were part of Operation Tomodachi (Friend), a massive relief effort undertaken by the U.S. military following the earthquake and tsunami in 2011. McNeill explained that most of the plaintiffs were serving on the giant (nuclear-powered) USS Ronald Reagan aircraft carrier in the Pacific, downwind of the

Fukushima No. 1 plant, and are now suffering illnesses that include leukemia, testicular cancer, brain cancer and brain tumors.

"The suit claims Tepco was negligent about safety and lied to the sailors and the public about radiation levels at the Fukushima No. 1 plant at the same time as Japan was asking for help for the victims of the earthquake and tsunami," wrote McNeill.

Lawyers for the sailors have said that "the utility knew the plaintiffs were going to be exposed to unsafe levels of radiation because it was aware that the plant had experienced a triple meltdown, and chose to keep it secret," McNeill reported.

Proving with sufficient likelihood to win a civil suit that radiation from the Fukushima meltdowns caused the sailors' illnesses will be a difficult legal hurdle, but simply filing the lawsuit — in a U.S. court in San Diego, California, on Feb. 6 — will keep Tepco and the Japanese government in the headlines and on the defensive regarding nuclear power.

From inside, too, Japan's traditional non-litigious veneer is cracking. Last week it was reported that a class-action lawsuit has been filed in Japan against General Electric Co., Toshiba Corp. and Hitachi Ltd.

A statement released by the plaintiffs' Japanese lawyers claims that the three companies "failed to implement safety improvements to the 4-decade-old boiling-water reactors at the Fukushima No. 1 power plant," according an AFP-Jiji report in The Japan Times on March 14.

The lawsuit represents more than 4,000 individuals from Japan and 32 other nations, and seeks a symbolic ¥100 for each claimant.

While neither lawsuit is likely to bring down the walls of the nuclear village, both raise embarrassing questions for Abe, his Liberal Democratic Party and Japan's utilities. And both are also likely to spawn more legal claims.

For those who prefer less confrontational, more pragmatic approaches, however, other initiatives are also already under way. Last week, Japan's national Kyodo news service reported that a coalition of 38 green-power advocacy groups are cooperating to create an association that will focus on information-sharing in order to hasten the nation's independence from nuclear power.

"We want to create a concrete step to realize calls to break away from nuclear energy by generating electricity in communities," Tetsunari Iida, one of the organizers of the plan, told Kyodo. Iida is executive director of the Institute for Sustainable Energy Policies.

Contrary to Abe's present mind-set, a truly strong Japan going forward will require much less jingoism and considerably more support for this nation's local communities to pursue safe, clean and adaptable energy solutions.

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What's wrong with this picture?

March 31, 2014

Not fooling around: An anti-nuclear protester marches toward the Diet as part of a demonstration in Tokyo on Dec. 22. | AP

Issues| THE FOREIGN ELEMENT

Is the joke still on Fukushima this April Fools'?

http://www.japantimes.co.jp/community/2014/03/31/issues/is-the-joke-still-on-fukushima-this-april-fools/#.UzmKBlfi91s

What's wrong with this picture?

Japan's new Basic Energy Plan sees nuclear power as an important base load energy source. But whatever "base load" means politically, the public is lulled — fooled — into a sense that, despite Fukushima, nuclear will remain a logistically viable long-term option.

Yet the realities of Japan's nuclear power industry show keeping nuclear are likely to be far more problematic — and expensive — than the pro-nuclear lobby wants to admit. Here are the most obvious hurdles.

First, as of 2013, of the remaining 48 reactors, three were more than 40 years and 13 were over 30 years old. The reactors were supposed to be decommissioned after 40 years but can now apply for a maximum two-decade extension.

Want to keep those reactors, with their increased risk of technical problems and thus lower efficiency rates, running until they're 60? Even if they meet new safety standards, local governments hosting the reactors are sure to demand funding for pork-barrel projects in exchange for agreeing to any extension. Guess whose tax money will be used to ensure a continued flow of "cheap" nuclear power. Hint: look in the mirror.

Even if restarted reactors run at pre-3/11 levels, estimates are their spent fuel pools will be overflowing like public toilets sooner rather than later. A Tokyo Shimbun calculation shows 33 reactors could see their pools full within six years.

Government figures estimate the pools will be full within three to 16 years, with most filled to the brim within eight years.

What happens then? Tokyo is now pushing local governments to build interim storage facilities for the fuel before it's sent to Rokkasho, Aomori Prefecture, for reprocessing. But despite promises of even more tax money for their coffers, no local government wants to host such a facility.

Finally, Japan's population, about 127 million, will shrink to 107 million by 2040 while the working population, i.e. the large volume of electricity users, will decline by 30 percent. Furthermore, 21 percent of all Japanese will be 75 years or older, also by 2040. Who is going to need how much electricity?

So, the "nuclear will be an important base load" argument assumes: 1. Older plants can be run until they are 60 years without major problems and at a lower cost than other sources; 2. Within the next, say, 16 years, new storage facilities for spent fuel will be built somewhere; and 3. By 2040, a country with 16 percent less people than in 2010 and one-fifth the population over 75 will not use less energy than today.

What's wrong with this picture?

Eric Johnston is a staff writer for The Japan Times.

China's worries about Japan's plutonium

March 23, 2014
Source : Bloomberg
http://www.bloomberg.com/news/2014-03-23/japan-s-plutonium-potential-stokes-china-tensions-on-a-bomb-risk.html

Japan's Plutonium Plans Stoke
China Tensions on A-Bomb Risk

By Jonathan Tirone and Jacob Adelman Mar 24, 2014
http://tinyurl.com/n27hfry

Japan is planning to start a $21 billion nuclear reprocessing plant, stoking concern in China that the facility's output could be diverted for use in an atomic bomb.
The issue will be one of the flashpoints at the Nuclear Security Summit starting today in The Hague, Netherlands, that Japan Prime Minister Shinzo Abe and China's President Xi Jinping are due to attend. It's adding to bitterness marked by territorial disputes and left over issues from World War II between Asia's two largest economies.
"Japan has stockpiled large volumes of sensitive nuclear materials, including not only plutonium but also uranium, and that's far exceeding its normal needs," Chinese Foreign Ministry spokesman Qin Gang told reporters on March 11.
The Rokkasho Reprocessing Plant in northern Japan will begin separating plutonium from spent nuclear fuel in the third quarter, Japan Nuclear Fuel Ltd. spokesman Yoshi Sasaki said March 7. The plant has missed previous start up dates because of equipment failures.

"The Chinese have said they saw Japan plutonium as a weapons option and I think that many people in Japan do too," said Frank von Hippel, a former White House national security adviser now at Princeton University, who has consulted with Chinese and Japanese nuclear officials. This reflects the tension between the two countries, he said.

Reprocessing Program

Japan was prepared to discuss its reprocessing program at The Hague summit, a Foreign Ministry official who asked not to be identified citing agency policy said at a March 20 press briefing. The country planned to reiterate its policy of not producing more plutonium than it can use, the official said.

Rokkasho is designed to separate as much as 8 tons of plutonium per year for reactor fuel. If diverted, that's enough material to make hundreds of nuclear bombs like the one dropped over Nagasaki in 1945.

While the International Atomic Energy Agency monitors Rokkasho, the facility's throughput is so large, inspectors cannot guarantee that "significant quantities" of material don't go unaccounted for. About eight kilograms (18 pounds) of plutonium are needed for a single bomb.

Neighboring Countries

"Nuclear facilities are very complicated things," IAEA Director General Yukiya Amano said March 3. "It happens from time to time there exists material unaccounted for."

Keeping nuclear material from slipping outside official control, where it may be sold for weapons or passed on to terrorists, is the focus of The Hague meeting.

The IAEA's Amano, a career Japanese diplomat who has headed the Vienna-based agency since 2009, added that inspectors "have drawn the conclusion that all nuclear material in Japan stays in peaceful purposes" and that there's no "reason to be concerned that this will be diverted for military purposes."

China, in discussion with Areva SA (AREVA) to build a plant similar to Rokkasho since 2008, has raised public concern over Japanese atomic fuel stockpiles, set to grow even as the majority of the country's reactors sit idle following the Fukushima nuclear disaster.

Japan agreed to return "hundreds of kilograms" of highly-enriched uranium and plutonium to the U.S., according to a White House statement today. Abe is due to meet with U.S. President Barack Obama at the security summit.

Japan, South Korea

China's own nuclear weapons program, which began in 1955, is thought to have left the country with as many as 75 nuclear-capable intercontinental ballistic missiles, according to U.S. Department of Defense estimates cited by the Washington-based Nuclear Threat Initiative.

The U.S. has sought to dissuade Japan and South Korea from abandoning their nuclear-weapon bans by protecting the countries under its nuclear umbrella.

"We are working with Japan and the Republic of Korea in order to make sure they don't feel so threatened that they move towards nuclearization in self-help," U.S. Secretary of State John Kerry said at a March 13 Senate subcommittee hearing.

The country's decision to reprocess nuclear fuel to extract plutonium may have other knock-on effects.

Asia Chills

South Korea is also looking at doing the same and may be encouraged to proceed, while international negotiators are trying to prevent the build-up of nuclear weapons material in Iran, according to Steve Fetter, the former assistant director in the White House's science and technology policy office.

Japan's ties with China are at their frostiest since diplomatic relations were established in 1972.

Coastguard ships from both countries have been tailing one another through waters around disputed East China Sea islands. The tension rose a notch when China declared an air defense identification zone over much of the East China Sea covering the islands.

Matters got worse in December when Abe visited Tokyo's Yasakuni shrine seen by China and South Korea as a symbol of past military aggression.

"While Japan has no stated plan to use its nuclear fuel for a weapons program, it's ability to do so is causing mistrust among its neighbors," Fetter said. "When you combine those things with disputes over island territories, I think it's easy for people in China to connect that this is another indication that Japan has other motives."

'No Point'

Former Foreign Minister Yoriko Kawaguchi, now a professor at the Meiji Institute for Global Affairs in Tokyo says Japan's membership in the Non-Proliferation Treaty, its protection under the U.S. nuclear umbrella and public antipathy to nuclear arms mean making a bomb is out of the question.

"What would be the point of Japan breaking the treaty and being subject to sanctions by the international community, just like North Korea?" she said in an interview. "There would be no point."

More than 9 tons of separated plutonium are stockpiled in Japan, according to IAEA declarations. Another 35 tons are stored outside the country. Facilities in France and the U.K., two of the five officially recognized nuclear-weapons states, currently reprocess Japanese spent fuel.

"Implementation and functioning of safeguards is for the most part a matter of trust in the impartiality of the IAEA and the competence and diligence of its inspectors," said David Cliff, a researcher at the London-based Verification Research, Training and Information Center.

'Never Before'

The IAEA, which spends more safeguarding Japan's nuclear material than in any other country, worked for more than a decade on a system ensuring Rokkasho's material wouldn't be diverted.

"IAEA had never before been challenged with designing a credible safeguards approach for a large commercial scale reprocessing facility," said a 2009 Department of Energy report, co-authored by Shirley Johnson, the former IAEA official who helped design monitoring at Rokkasho. "It was always recognized that the available verification measurements would have inadequate sensitivity and reliability to statistically detect the diversion of a significant quantity."

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Japan must try a bit harder

March 25, 2014

EDITORIAL: Japan needs to do more to reduce its stockpile of nuclear materials

http://ajw.asahi.com/article/views/editorial/AJ201403250036

How should the world respond to the potential security threat of nuclear attacks by terrorist groups?

The Nuclear Security Summit that got under way March 24 in The Hague is wrestling with how to reduce the number of locations across the globe that store nuclear materials capable of being used to make atomic and hydrogen bombs. At the outset of the two-day summit, Japan announced its intention to turn over a large cache of its highly enriched uranium and plutonium to the United States. The stockpile is kept at a research facility run by the Japan Atomic Energy Agency in Tokai, Ibaraki Prefecture.

Japan had claimed that the nuclear materials, including weapons-grade uranium and plutonium, are needed for research on nuclear reactors. Japan needs to be at the forefront of efforts to raise international awareness of the urgent need to deal with the threat of nuclear terrorism. Thus, the Japanese government needs to do more to curtail its stockpile of nuclear materials.

During the Cold War era, both the United States and the Soviet Union provided nuclear materials to their respective allies and satellite states in an apparent move symbolizing the solidarity of their blocs. Many of these materials remain spread across numerable sites around the world.

The Obama administration has been working hard to collect nuclear materials since it announced an ambitious agenda to seek “a world without nuclear weapons” in 2009. More than 10 countries and regions, including Ukraine, Mexico and Taiwan, have done away with their weapons-grade nuclear materials.

There has not been a significant reduction in the nuclear arsenals of major nuclear powers, however. But the removal of surplus fissile materials at least represents noticeable, if not dramatic, progress.

As the only country to have been attacked with atomic bombs, Japan should lead the international efforts to lessen the nuclear risks. But there are still many problems.

In 2012, the Nuclear Threat Initiative (NTI), an international nongovernmental organization, assessed the risks of nuclear terrorism for 32 countries possessing 1 kilogram or more of weapons-grade nuclear materials. Japan was ranked 23rd in the NTI Nuclear Materials Security Index, the lowest score among the seven leading industrial countries.

Japan’s standing in the index rose to 13th among 25 countries this year thanks to the creation of the Nuclear Regulation Authority, an independent nuclear safety watchdog, and the measures to prevent nuclear terrorism taken under the new, tougher safety standards for nuclear facilities. But Japan’s score for “quantities of nuclear materials” was zero--meaning there is no progress toward a major reduction--as it was in 2012.

That's because Japan has stored more than 40 tons of plutonium for many years without offering a clear plan to use the material. Plutonium is extracted from spent nuclear fuel from Japanese nuclear power plants. The process is done at overseas facilities and the material is sent back to Japan in the form of mixed-oxide fuel. The transportation of the MOX fuel is deemed to be fraught with serious risks.

Under its agreement with the United States, Japan has been allowed to reprocess spent nuclear fuel for extracting plutonium as an exceptional case. But the disaster that unfolded at the Fukushima No. 1 nuclear power plant in March 2011 has effectively eliminated the possibility of burning MOX fuel at reactors as a way to reduce the amount of plutonium.

Given this situation, Japan would be viewed with a very critical eye by the international community if it starts full-scale operations of its reprocessing plant and increases its stockpile of plutonium further.

The fact that Japan is stuck with a massive surplus of fissile material while Iran and other countries with new nuclear programs are not allowed to do so inevitably undermines the international efforts to prevent nuclear proliferation.

Japan should pull the plug on its program to reprocess spent nuclear fuel. It should propose realistic measures to reduce its stockpiles, such as the disposal of plutonium in responsible and trustworthy countries.

--The Asahi Shimbun, March 25

Who is in favour of Abe's nuclear pact?

April 2, 2014

Lower House committee approves nuclear deal
http://www3.nhk.or.jp/nhkworld/english/news/20140402_27.html

A committee of Japan's Lower House has approved bills on civil nuclear energy cooperation agreements with Turkey and the United Arab Emirates. The bills would allow Japanese companies to export nuclear power-related technology to the 2 countries.

The foreign affairs committee debated the bills on Wednesday. Foreign Minister Fumio Kishida said Japan experienced the tragic accident at the Fukushima Daiichi nuclear power plant. He added that it has the

responsibility to contribute its knowledge and experience to the safe use of nuclear power for peaceful purposes.

Later, the bills were approved by a majority from the ruling Liberal Democratic Party and New Komeito and the largest opposition Democratic Party.

The Japan Restoration, Unity, Japanese Communist and People's Life parties voted against the bills.

But some members of the Democratic Party oppose the bills, as they run counter to the party's policy of working to abolish nuclear power.

Japan Restoration Party co-leader Shintaro Ishihara spoke against his party's opposition to the legislation.

The bills were carried over from the previous Diet session. The government wants to pass them in the current session. They are to be put to a vote at a plenary session of the Lower House on Friday.
Apr. 2, 2014 - Updated 09:11 UTC

April 1, 2014

Democratic Party to support nuclear pact

http://www3.nhk.or.jp/nhkworld/english/news/20140401_42.html

Japan's largest opposition Democratic Party has decided to support the government's proposals on civil nuclear cooperation agreements with Turkey and the United Arab Emirates.

The Lower House foreign affairs committee will vote on the draft proposals on Wednesday, allowing the transfer of nuclear power generation technology to the 2 countries.

The Democratic Party held a meeting of what it calls the next cabinet on Tuesday.

Some participants were against the proposals, since they run counter to the party's policy of working to abolish nuclear power by the 2030s.

But the meeting agreed that Japan's nuclear technology can help improve safety at nuclear power plants in other countries.

The participants also said the party should consider the fact that it was the Democratic Party that promoted the negotiations with Turkey when it was in power.

Policy Research Committee Chairman Mitsuru Sakurai said that not all party members are satisfied with the decision, but that it is the result of discussions up until now.
Apr. 1, 2014 - Updated 12:32 UTC

Nothing more than compromise and bargaining

April 1, 2014
The meaning of the 'return of nuclear materials'
http://mainichi.jp/english/english/perspectives/news/20140401p2a00m0na004000c.html

The Mainichi Shimbun ran an article in its March 25 morning edition headlined, "PM Abe declares Japan set to remove all Tokai nuclear materials, return them to U.S."

Prime Minister Shinzo Abe made the announcement at the Nuclear Security Summit 2014 in The Hague, during which the Ukrainian issue and the Japan-U.S.-South Korea summit talks drew particular attention. According to his statement, Japan is set to remove all nuclear materials from the Ibaraki Prefecture village of Tokai, where many nuclear facilities are concentrated, and transfer all of them to the United States.

It appears that Japan is willing to take the lead in returning radioactive substances, which could be a target of terrorists, to the United States. Japan's decision as a peace-loving country appears as if it has reassured its allies, but this is not the case.

Before reaching the decision, Tokyo and Washington had tough negotiations on the prevention of nuclear proliferation. What Abe announced is a product of compromise between the two countries and a result of their bargaining. Behind the accord is pessimism about the future of the management of nuclear substances that is contrary to an international agreement on the matter.

What did Japan and the United States agree on before Abe's announcement?

A research institute in Tokai will surrender highly enriched uranium and plutonium, which it wants to keep, to the United States. In return, Washington will continue to accept spent nuclear fuel from Japanese research reactors beyond 2019 -- when the United States was supposed to discontinue to do so -- over an indefinite period.

As a result of the bargaining, the United States, which has taken the initiative in reducing and controlling nuclear materials on a global scale, has saved face. Japan, for its part, can continue research on nuclear power by relieving concerns in Osaka, Kanagawa and Ibaraki prefectures, which host nuclear research facilities, that dangerous radioactive waste will keep accumulating within their boundaries.

"Tokai nuclear materials" refer to 0.5 tons of highly enriched uranium and plutonium that has accumulated at Japan Atomic Energy Agency (JAEA) in the village, enough to produce dozens of atomic bombs.

About 200 tons of plutonium have so far been generated at Japanese nuclear plants -- 45 tons of reprocessed plutonium, including that being stored in Britain and France, and 152 tons contained in spent nuclear fuel that has not been reprocessed yet -- enough to make 40,000 atomic bombs.

However, it is highly pure nuclear substances at research facilities that terrorists are likely to target because they could easily transform such substances into weapons. Therefore, nuclear materials in Tokai are subject to reductions and strict controls.

Former U.S. President Dwight D. Eisenhower was the first person to advocate the peaceful use of nuclear energy.

"Atoms for Peace," he said in a speech at the United Nations in 1953. Since then, the United States has provided a large amount of uranium and plutonium for fuel and research purposes to its allies, including Japan. As a result, nuclear materials have ended up spreading throughout the world.

Since 2004, the United States has joined hands with Russia in recovering nuclear materials that have spread throughout the world.

Thanks to their efforts, the number of countries possessing certain amounts of highly enriched uranium and plutonium has been decreasing, but illegal transactions in nuclear substances, theft and losses have occurred frequently. As such, the world is more chaotic in terms of the management of radioactive substances.

At the Nuclear Security Summit's general meeting, Pakistani Prime Minister Muhammad Nawaz Sharif sat next to U.S. President Barack Obama.

Pakistan is not a party to the Nuclear Non-proliferation Treaty (NPT), and possesses nuclear arms. What makes matters worse is that terrorist attacks are rampant throughout its territory. Such being the case, the country is far from being able to return nuclear materials to the United States through negotiations.

The United States also has its own problems. It cannot work in harmony with Russia in managing nuclear substances. Washington needs to control nuclear materials constantly arriving in its territory while keeping an eye on the peaceful use of atomic power as well as nuclear weapons.

The transfer of uranium and plutonium in Tokai to the U.S. is nothing but a temporary political arrangement between the two governments. It will not reduce the total volume of nuclear substances on the globe.

While being fully aware of this, Japan is continuing to accelerate nuclear proliferation by promoting exports of nuclear power plants. Human beings are increasing the amount of nuclear materials by postponing a fundamental resolution on such contradictions to the future. (By Takao Yamada, Expert Senior Writer)

April 01, 2014(Mainichi Japan)

Gordon Edwards on weapons-grade plutonium (and Japan)

Weapons-Grade Nuclear Explosive Materials

The good news is that weapons-grade nuclear materials in many countries are being rounded up and confined to a smaller number of high-security locations in order to at least begin to reduce the risk of criminal organizations or terrorist groups getting their hands on the nuclear explosive materials needed to make a powerful atomic bomb.

The nuclear explosive materials in question are (1) Highly Enriched Uranium or HEU, and (2) Plutonium or Pu. These are the only two types of materials that can be used to make an atomic bomb at the present time. The Hiroshima bomb used Highly Enriched Uranium as a nuclear explosive, whereas the Nagasaki bomb used plutonium.

For the would-be bomb-maker, the main advantage of HEU is that it is much easier to make an atomic bomb with it, using a "gun-type" mechanism, compared with plutonium, which requires a more elaborate "implosion-type" mechanism. The gun-type device is so simple and direct that testing is unnecessary -- it is guaranteed to produce a very powerful atomic explosion. The implosion-type device is considerably trickier but not beyond the abilities of a well-equipped terrorist organization.

But bomb-makers find plutonium has many advantages too. (1) Plutonium is a more powerful explosive, so less plutonium than HEU is needed to destroy a city. (2) Plutonium is extracted chemically from irradiated nuclear fuel all at once, unlike HEU which has to be produced by a long slow energy-intensive process of gradual enrichment. (3) Plutonium is used as an explosive "trigger" to set off even more powerful "H-bombs" -- using the nuclear fission to ignite a nuclear fusion reaction.

When nuclear weapons are dismantled, the plutonium "triggers" are removed. Without plutonium these warheads are useless; no nuclear explosion is possible. But the "excess" weapons-grade plutonium has to be carefully guarded forever because we do not know at the present time how to destroy plutonium or eliminate it once it has been created.

Other Nuclear Explosive Materials

The bad news is that weapons-usable nuclear materials are NOT being rounded up and NOT being prohibited internationally. Weapons-grade materials are not the same as weapons-usable materials. Weapons-usable nuclear materials continue to be produced, and will become increasingly accessible to criminal organizations as time goes on.

Plutonium poses the greatest danger in this regard, because ANY form of reactor-produced plutonium can be used to make a powerful, highly effective and completely reliable nuclear weapon. One doesn't need to have "weapons-grade" plutonium for this purpose; any plutonium will do. See http://ccnr.org/plute_sandia.html *.*

"Weapons-grade" plutonium refers to the highest quality of plutonium, in which the predominant isotope is plutonium-239 (Pu-239) with relatively little of the other isotopes of plutonium, especially plutonium-240. On the other hand "reactor-grade" plutonium has up to 40 percent plutonium-240 along with the more abundant plutonium-239. Given the choice, any bomb-maker would prefer to use weapons-grade plutonium because it is easier to handle and more predictable in outcome (the force of the blast). However reactor-grade plutonium can be used to make an effective, highly reliable weapon at any level of technical sophistication. See http://ccnr.org/Findings_plute.html *.*

Because the nuclear industry wants to be able to use plutonium to replace -- or at least to supplement -- uranium as a fuel for nuclear reactors, their public relations machinery has created a myth that has deceived many decision-makers, even in very high places, as well as most of the people who work in the nuclear industry. The myth maintains that reactor-grade plutonium is "unsuitable" for nuclear weapons use. Without plutonium as a fuel, any massive expansion of nuclear power is impossible.

But this particular myth -- that reactor-grade plutonium is unsuitable for bombs -- is not at all true. It would be more correct to say that reactor-grade plutonium is somewhat less convenient than weapons-grade plutonium for nuclear weapons use, but so what? As Sandia Labs declared in one of their major publications, "For nuclear weapons use, ALL plutonium is GOOD plutonium."
See http://ccnr.org/plute_sandia.html *.*

From the point of view of non-proliferation, plutonium poses much greater difficulties in the very long term than HEU does, because HEU can be "denatured" -- made absolutely unusable for nuclear weapons -- whereas plutonium cannot.

It is impossible to make a bomb with unenriched uranium, because there just isn't enough uranium-235 to make an explosion possible. In the case of uranium, the most abundant naturally occurring isotope, uranium-238, is NOT a nuclear explosive material at all, so it can be used as a "denaturing" agent to dilute uranium-235 down to harmless proportions.

There is no counterpart in the case of plutonium.
ANY kind of plutonium -- even pure plutonium-240 -- can be used as a powerful nuclear explosive. In fact plutonium-240 is a more powerful nuclear explosive than uranium-235 -- and the same is true for all other plutonium isotopes. See
''Explosive Properties of Reactor-Grade Plutonium'' by Carson Mark, excerpted with a hot-link in

http://ccnr.org/Findings_plute.html .

Brave New World

As Pierre Elliott Trudeau told the United Nations General Assembly's Special Session on Disarmament in 1978, if we want to have a world without nuclear weapons, then we have to begin by "suffocating" the nuclear arms race by "choking off the vital oxygen on which it feeds". He was referring to the production of nuclear explosive materials -- enriched uranium and plutonium. As long as we continue to produce these materials it will be impossible to eliminate nuclear weapons.

On the other hand, if we stop the production of these nuclear explosive materials worldwide, then we have a chance to dismantle existing arsenals of nuclear weapons and achieve a nuclear-weapons-free world. That means that uranium enrichment plants everywhere (not just in Iran!) and plutonium reprocessing plants everywhere (not just in North Korea!) will have to be internationally outlawed. Then weapons-usable uranium can be down-graded to levels that cannot be used for bombs, and that cannot be upgraded without building a uranium enrichment facility first. Also, existing stockpiles of "separated plutonium" can be re-mixed with the fiercely radioactive liquid wastes contained all the fission products and other nuclear waste materials from the irradiated nuclear fuel, so that the plutonium is no longer accessible without a chemical reprocessing operation.

Such security measures, while not perfect, requiring constant vigilance, would at least create a situation of sufficient stability to allow for the gradual elimination of all nuclear weapons in the world, if that is determined by world leaders to be the sanest objective for the continued survival of the human race.

Reality Bites

But that's not what is happening. Look at Japan for example. While self-congratulatory articles are being written about the significant quantities of highly enriched uranium and plutonium that are being shipped back to the USA from Japan, there is slight mention of the fact that the Japanese Government plans to give the go-ahead this year for the start-up of their $21 billion reprocessing plant, which will begin ***extracting weapons-usable plutonium from irradiated nuclear fuel on a mass-production basis.***

So the security measures associated with weapons-grade materials run the risk of being merely window-dressing, camouflaging and in no way putting the brakes on industry plans to mass-produce nuclear-weapons-usable materials, thereby making a nuclear weapons free world politically impossible.

This kind of decision cannot be regarded as a commercial or economic decision like any other -- it could very well seal the Fate of the Earth. (Jonathan Schell, the author of the profoundly thought-provoking book The Fate of the Earth, passed away in New York City on Tuesday, March 25, 2014.)

It is up to the peoples of the Earth to see the enormity of what is going on and to speak up now and act so as to keep alive the hope for a sustainable future for our great great grandchildren. A non-nuclear-weapons-future should not be foreclosed by the expediency requirements of the commercial nuclear power industry.

Gordon Edwards.

See PDF version http://ccnr.org/Plute_Perplex.pdf

Nuclear exports: New "safety myth" at work

April 5, 2014

Lower House votes to export nuclear technology and 'safety myth'

http://ajw.asahi.com/article/behind_news/politics/AJ201404050048

By SHINICHI SEKINE/ Staff Writer

The Lower House's vote to approve pacts that allow for the export of Japanese nuclear technology to Turkey and the United Arab Emirates has some lawmakers concerned.

With the passage of the agreements April 4, which were supported by the ruling Liberal Democratic Party, its junior coalition partner New Komeito and the main opposition Democratic Party of Japan, it is virtually certain the accords will pass the Upper House before the current session ends in June.

But critics say the failure to establish a system that addresses safety concerns related to the export of the nation's nuclear technology is sure to propagate another "safety myth."

During the vote by the Lower House, LDP lawmaker Masatoshi Akimoto, who has called for the abolition of nuclear power generation, and DPJ lawmakers Shoichi Kondo and Yukio Ubukata walked out in protest.

DPJ lawmaker and former Prime Minister Naoto Kan, as well as Japan Restoration Party co-representative Shintaro Ishihara, were absent from the voting. Despite his party's opposition to the nuclear agreements, Ishihara supports promotion of the industry.

The agreements with Turkey and the United Arab Emirates are the first of their kind for the Abe administration, which listed exports of nuclear technology as one of the pillars of the government's economic growth strategy and part of its efforts to maintain Japan's edge in nuclear power generation.

In October 2013, Prime Minister Shinzo Abe visited Turkey to promote Japan's nuclear industry. As a result, a consortium of Japanese companies succeeded in winning an order to construct a nuclear power plant in the country.

So when Turkish Prime Minister Recep Tayyip Erdogan visited Japan in January, Abe assured him that he would seek early passage of a bilateral nuclear pact with Turkey, saying, "We will put top priority on the issue in the ordinary Diet session (of this year)."

As a result of that pledge, the Abe administration terminated deliberations April 2 by a committee on the issue after just five hours. Though some ruling party lawmakers expressed concern over the hasty manner in which the process was done, the administration still put the nuclear pacts with Turkey and the UAE up for a vote in the plenary session of the Lower House on April 4.

When nuclear power technology is exported, the government is obliged to seek guarantees that it will not be diverted to make weapons. Still, it remains unclear how the safety issue is going to be addressed.

In a meeting of the Lower House Committee on Foreign Affairs held April 2, New Komeito lawmaker Mitsunari Okamoto criticized the government, saying, "There is no organization in Japan that shoulders responsibility (for checking the safety of exported nuclear power infrastructure)."

Before the March 2011 disaster at the Fukushima No. 1 nuclear power plant, the Nuclear and Industrial Safety Agency (NISA), which is affiliated with the Ministry of Economy, Trade and Industry, was in charge of handling safety checks on exported technology.

After the accident, however, NISA was split off from the economy ministry, which had been promoting nuclear power generation, and renamed the Secretariat of the Nuclear Regulation Authority.

The secretariat does not conduct safety inspections or investigations in connection to exported nuclear infrastructure. The economy ministry also has no safety inspection systems in place, either. As a result, no organizations are overseeing safety checks.

In the foreign affairs committee meeting, Foreign Minister Fumio Kishida acknowledged the fact, and said, "As the government, we are going to establish a (new) safety examination system."

Like Japan, Turkey is one of the most earthquake-prone countries in the world. However, Diet deliberations revealed that, in Turkey, the authorities there that regulate the nuclear industry and those that promote it are not completely separate entities. The situation there is like Japan before the Fukushima nuclear accident.

The Abe administration is trying to restart idled nuclear reactors in Japan under what it says are the "strictest safety standards in the world." At the same time, it is ignoring serious safety concerns in its haste to export the nation's nuclear power infrastructure and technology.

Akira Kasai, a lawmaker of the Japanese Communist Party, said that the government is exporting "a new safety myth."

Japan's bilateral nuclear pacts

April 4, 2014
Japan lower house OKs nuclear pacts with Turkey, UAE
http://mainichi.jp/english/english/newsselect/news/20140404p2g00m0dm061000c.html

TOKYO (Kyodo) -- Japan's House of Representatives on Friday passed two nuclear pacts with Turkey and the United Arab Emirates that would pave the way for Japan to export nuclear power infrastructure to the two countries.

The agreements, both concluded last year, would come into force by early May under the Constitution, which stipulates that lower house decisions on state budgets and bilateral treaties prevail in the Diet.

Members of the governing Liberal Democratic party, its junior coalition partner, the Buddhist-backed New Komeito party, and the main opposition Democratic Party of Japan voted for the pacts.

The approval came at a time when anti-nuclear power sentiment still persists among the public as the nuclear disaster at the Fukushima Daiichi power plant has yet to be resolved.

Those nuclear pacts set a legal framework for the peaceful use and transfer of atomic-power technologies and equipment.

Prime Minister Shinzo Abe signed the pacts when he visited the two countries in May 2013.
The Japanese government sought parliamentary approval of the pact during the extraordinary Diet session last fall. But the Diet failed to come to a decision at that time and carried the deliberations to the current 150-day regular session which started Jan. 24.

The opposition DPJ has decided to vote for the treaties as it promoted the export of nuclear power infrastructure when it was in power between August 2009 and December 2012.

As for Turkey, Mitsubishi Heavy Industries Ltd. is a member of a consortium of business corporations which has won an order to build an atomic power plant in the country.

The United Arab Emirates started to construct a nuclear power plant in 2012 and is currently planning to build more reactors, government officials said.

Japan concluded bilateral nuclear accords with 11 countries, including Australia, China, France, Russia and the United States -- and the European Atomic Energy Community, and is currently promoting talks with India and Brazil to conclude similar treaties.

April 04, 2014(Mainichi Japan)

See also:

Lower House committee approves nuclear deal
http://www3.nhk.or.jp/nhkworld/english/news/20140402_27.html

and

Lower House votes to export nuclear technology and 'safety myth'

http://ajw.asahi.com/article/behind_news/politics/AJ201404050048

Please visit Hiroshima and Nagasaki

April 8, 2014
Foreign minister pushing leaders of nuclear powers to visit Hiroshima, Nagasaki
http://ajw.asahi.com/article/behind_news/politics/AJ201404080049

THE ASAHI SHIMBUN
Foreign Minister Fumio Kishida is pressing world leaders to visit Hiroshima and Nagasaki so they can get a better understanding of the devastation wrought by atomic bombs.

"It is important for political leaders to see the reality of what happens when atomic bombs are unleashed," Kishida said in an interview with The Asahi Shimbun at the ministry in Tokyo on April 7.

He made the remark in the context of a foreign ministers' meeting of the Non-Proliferation and Disarmament Initiative (NPDI) to be held in Hiroshima from April 11 by 12 non-nuclear countries.

Kishida, who is scheduled to chair the meeting, added that the NPDI plans to incorporate the request into a joint declaration to be issued at the meeting. It will be the first time for the group to issue such a message.

In the 68 years since the atomic bombs were dropped, no leaders of nuclear powers have ever visited Hiroshima or Nagasaki. This is something the NPDI hopes to change.

It will be the first time for Japan to host the NPDI foreign ministers' meeting.

As for holding the gathering in Hiroshima, Kishida, who is from the city, said, "It is very important in a sense that the meeting will heighten the international momentum toward the establishment of a nuclear-free world."

He added: "Nuclear disarmament must be discussed not only by the United States and Russia but also by all of the nuclear powers from various perspectives. We (the NPDI) want to make the real conditions of the disarmament more transparent and issue a message in the field of nuclear nonproliferation as well."

With regard to the review conference of the Treaty on the Non-Proliferation of Nuclear Weapons, known as NPT, which is scheduled to be held in New York in spring 2015, Kishida said that the NPDI plans to get more involved.

"We want to discuss ways to show the inhumanity of nuclear weapons to all generations and all countries (at the NPDI foreign ministers' meeting)," Kishida said.

Of the 12 countries of the NPDI, seven are protected by the U.S. "nuclear umbrella." Of them, six countries, except for Japan, have not yet agreed to the "joint statement on the inhuman nature and non-use of nuclear weapons," which was proposed in the United Nations in October 2013.

"We (Japan) want to become a catalyst to solidify countries of various standpoints and unite their opinions," Kishida said.

The 12 countries of NPDI are Japan, Australia, Germany, the Netherlands, Poland, Canada, Mexico, Chile, Nigeria, Turkey, the Philippines and the United Arab Emirates. They held their first foreign ministers' meeting in New York in September 2010.

The group has worked out documents that request NPT member countries to steadily implement action programs toward nuclear disarmament, and has submitted them to the preparation committee of the NPT review conference.

(This article was written by Gen Okamoto and Hajimu Takeda.)

Concerns about nuclear proliferation

April 10, 2014

Editorial: Nuclear pacts with Turkey, UAE bring concerns about nuclear proliferation
http://mainichi.jp/english/english/perspectives/news/20140410p2a00m0na006000c.html

Nuclear pacts that Japan has signed with Turkey and the United Arab Emirates (UAE), which will be approved during the current Diet session, cannot completely dispel concerns about nuclear proliferation.

The House of Representatives approved the accords last week, and the House of Councillors is also set to endorse them since the ruling coalition controls the upper house.

The pacts, which will allow Japan to provide nuclear plant-related equipment and technology to Turkey and the UAE on condition that the recipient countries use the materials strictly for peaceful purposes, are a prerequisite for Japan to export atomic power stations to these countries.

The government of Prime Minister Shinzo Abe is enthusiastic about exporting nuclear plants as part of its growth strategy. However, Japan, which experienced a serious nuclear accident in 2011, should be prudent in promoting such exports.

The ruling Liberal Democratic Party (LDP), its coalition partner New Komeito and the largest opposition Democratic Party of Japan (DPJ) voted in favor of the pacts in the lower chamber. Other opposition parties -- the Japan Restoration Party (JRP), Your Party, the Unity Party, the Japanese Communist Party, People's Life Party and the Social Democratic Party opposed the agreements.

Even some members of political parties that voted for the pacts abstained from voting, highlighting a lack of national consensus on exports of nuclear plants.

Despite a lack of public support, Prime Minister Abe promoted sales of nuclear plants during the Nuclear Security Summit 2014 held in the Netherlands in March.

The construction of a nuclear reactor costs hundreds of billions of yen. The government estimates that Japanese firms will build up to 370 reactors all over the world by 2030 because officials believe that the exports of nuclear plants can be one of the pillars of the Japanese economy. However, should a serious accident occur at a nuclear plant that a Japanese company exports, the firm would be responsible for paying a massive amount of compensation, which could adversely affect Japan's economy.

The prime minister emphasizes that Japan can provide the world's safest nuclear power technology to other countries. If so, Japan's exports of atomic power stations could help enhance the safety of such plants in the world, and also contribute to efforts to prevent global warming because nuclear plants emit less carbon dioxide than thermal power plants.

However, such contributions would be possible only if Japan's nuclear power technology is truly the world's safest. The cause of the Fukushima nuclear crisis has not been fully clarified even though three years have passed since its outbreak. Japan must not spread the risks of nuclear crisis throughout the world through its reckless exports dependent on the myth of nuclear plants' infallible safety.

The safety of nuclear plants depends largely on the environment of their locations. In this sense, serious questions remain as to exports to Turkey, which like Japan is a quake-prone country. A magnitude-7.4 temblor that occurred in a northwestern part of Turkey, which includes Istanbul, in 1999 left approximately 17,000 people dead. As such, it will not be an easy task to ensure safety of nuclear plants in the country.

Japan's nuclear accord with Turkey is problematic because it includes a clause that allows Turkey to enrich and reprocess uranium, which could be transformed into nuclear weapons, on condition that Japan agrees to the move in advance. In a Diet session, Foreign Minister Fumio Kishida denied Japan will consent to Turkey's enrichment and reprocessing of such a nuclear substance. However, the clause gives rise to

concerns that the accord could lead to nuclear proliferation. The government should fully explain why Tokyo agreed to incorporate such a clause only in its nuclear pact with Turkey to convince the public.

Even if the upper house is to vote down the pacts, the accords would be enforced in accordance with the Constitution that stipulates that the lower house's decision on a treaty overrides the upper house's vote. Therefore, the lower house's decision last week has effectively opened the way for Japan to export nuclear plants and technology to Turkey and the UAE. Still, Japan should hold in-depth debate on the role that the country should fulfill as a member of the international community in preventing nuclear proliferation rather than making haste to export atomic power stations and technology to these countries.

April 10, 2014(Mainichi Japan)

Mixed message

April 10, 2014
Kishida to urge nuclear-free world in Hiroshima
http://www3.nhk.or.jp/nhkworld/english/news/20140410_27.html

Foreign Minister Fumio Kishida says he will convey a strong message at a meeting of foreign ministers in Hiroshima that Japan is seeking a world free of nuclear weapons.

Foreign ministers from Japan, Australia and 10 other countries that do not possess nuclear weapons will gather for a meeting of the Non-Proliferation and Disarmament Initiative on Saturday.

Japan is hosting the meeting for the first time.

Kishida told the Upper House Foreign Affairs and Defense Committee on Thursday that Japan, as the only country in the world to have suffered atomic bombings, has a moral obligation to lead international opinion in seeking a nuclear-free world.

Kishida said it is the first meeting to be held in an atomic-bombed city and that he wants foreign ministers from other countries to learn the reality of the atomic bombings.

Kishida said he also wants to convey Japan's political message that it seeks to bring about a world without nuclear weapons.

Kishida said he will release a statement likely to be adopted at the end of the meeting which will urge nuclear nations to conduct nuclear disarmament negotiations in a more multilateral and transparent manner.

Kishida said he also wants the statement to include calls for tighter surveillance by the International Atomic Energy Agency and for the denuclearization of North Korea.
Apr. 10, 2014 - Updated 07:12 UTC

And what's left for renewables?

April 9, 2014

Bloomberg

Energy plan fails to set targets for renewables

Bloomberg
http://www.japantimes.co.jp/news/2014/04/09/business/energy-plan-fails-to-set-targets-for-renewables/#.U0Y3L1fi91s

The government of Prime Minister Shinzo Abe's final version of a draft energy report reinforces the role of nuclear power in the country's future, but falls short of setting specific goals for renewable energy use.

The policy describes nuclear power as "an important base-load energy source," according to a 78-page draft obtained by Bloomberg News. The plan, the first update to the nation's energy policy since the 2011 Fukushima No. 1 nuclear plant crisis started, is expected to be approved as early as Friday, Deputy Chief Cabinet Secretary Katsunobu Kato has said.

The plan represents a compromise for coalition partner New Komeito, which had pushed for the inclusion of specific targets for renewable energy. The party pledged during the 2012 election campaign that clean energy would provide 30 percent of the nation's electricity by 2030, or 35 percent if hydropower were included.

The new policy says the country will aim to introduce clean energy at levels that "further" exceed previously announced targets. The ruling parties earlier sought to say renewable energy should "significantly" exceed old targets.

A plan published in 2010 by a previous government led by the Democratic Party of Japan envisioned the country getting about 20 percent of its electricity from clean energy and 53 percent from nuclear power by 2030.

The new policy was approved by Abe's Liberal Democratic Party and New Komeito last week, despite deep divisions over nuclear energy. Sixty-nine percent of respondents to a poll last month published by the Tokyo Shimbun said nuclear power should be phased out.

Officials with the Ministry of Economy, Trade and Industry weren't available for comment.

"We will leave behind the energy strategy drawn up before the earthquake and start from scratch," says the draft policy to be considered by the Cabinet.

To promote inter-ministerial cooperation on clean energy issues, the government will set up a council of ministers, according to the policy.

While the policy describes Japan's intention to reduce nuclear reliance, it also says reactors will be restarted once their safety is confirmed. "We will reduce our dependency on nuclear as much as possible," the final draft says.

New Komeito earlier sought to end reliance on nuclear power, a position shared by the DPJ administration, which was voted out of power in December 2012.

The plan also calls coal an important base-load power source, saying it is economical and supply is stable although it emits large amounts of greenhouse gas. "We will push through further technology development to drastically reduce greenhouse gas emissions by improving power generation efficiency" of coal, the report says.

"The government draft does not at all mention changes that are happening in the world" regarding coal, Teruyuki Ohno, executive director of the Japan Renewable Energy Foundation, wrote on March 20 in a column posted on the group's website, referring to an earlier version of the policy.

He said major international banks such as the World Bank are announcing plans not to support coal projects following a U.S. policy not to give loans for coal-fired plants in developing countries. "The draft instead features plans to export coal technology abroad."

Japan will set its energy mix — targets for various energy types — "soon" taking into account reactor restarts and clean energy installations, the policy says.

Nuclear plants provided more than a quarter of Japan's electricity before the Great East Japan Earthquake and tsunami in March 2011 caused meltdowns at Tokyo Electric Power Co.'s Fukushima plant. The nation's 48 operable commercial reactors have since been idled for maintenance or safety checks. The country has been nuclear-free since September 2013.

Eight regional utilities including, Tokyo Electric Power Co., the operator of the Fukushima plant, have applied for safety checks for some of their reactors.

The Nuclear Regulation Authority said in March that it would expedite safety checks on two of Kyushu Electric Power Co.'s reactors, raising the prospect that some nuclear power generation may be resumed ahead of peak power demand in summer.

The DPJ government set a target of phasing out nuclear energy by the end of the 2030s in a policy set in September 2012, but it was never enacted.

The country currently gets 1.6 percent of its electricity from renewable sources such as wind and solar, with hydropower providing a further 8.4 percent.

Japan's energy future: Not convincing

April 12, 2014

EDITORIAL: New basic energy plan offers no convincing vision for Japan's future

http://ajw.asahi.com/article/views/editorial/AJ201404120044

The government formally decided its new basic energy plan on April 11 with Cabinet approval of the primary energy policy document.

This is the first revision to the government's basic energy plan since the catastrophic accident at the Fukushima No. 1 nuclear power plant in 2011.

The revision was a great opportunity to demonstrate the government's commitment to tackle the challenges created by the disaster. It was a chance to clarify where the problems lay and how it intends to translate changes in the public's attitude toward nuclear power generation into its energy policy.

But even though it includes a large variety of ideas, the new plan can by no means be considered a convincing message about the energy future of Japanese society.

Although the plan calls for lowering Japan's dependence on atomic energy, it simultaneously expresses concerns about the growing imports of fossil fuels due to a nationwide shutdown of nuclear reactors, indicating the government's intention to maintain nuclear power generation into the future.

While quietly changing the purpose of the Monju prototype fast-breeder reactor and promising to promote the program to establish a nuclear fuel recycling system, the document stresses "flexibility in medium- to long-term policy efforts" in an apparent attempt to dodge criticism.

All this waffling is part of the devious game the Abe administration has been playing in regard to its energy policy. Its strategy is designed to avoid touching off a public backlash by hiding or soft-pedaling its real intentions.

Three years have passed since the worst nuclear accident in Japanese history. By now, electric utilities must have realized that they can no longer continue relying on nuclear power.

Obviously, the government's job now is to act swiftly to work out a well-focused and practical strategy for phasing out nuclear power generation in this nation.

The basic energy plan describes nuclear power as "low-carbon and quasi-domestic energy" and a "base-load" power source that should be used for continuous, around-the-clock power generation.

If it really intends to make Japanese society less dependent on atomic energy, the government should promote the development of power sources that can substitute for nuclear power, such as geothermal and hydraulic power generation and high-efficiency coal-burning thermal power stations, instead of seeking to build or expand nuclear power plants.

Nuclear power generation can never be free from the risk of severe, large-scale accidents that entail devastating consequences. It is unacceptable for the government to press for early restarts of idled reactors when sufficient safety measures to prevent serious accidents have yet to be put in place.

To be sure, the problem of rising costs due to increasing imports of fossil fuels should not be taken lightly.

But the government's claim that growing fuel imports are causing Japan to lose 3.6 trillion yen ($35 billion) worth of national wealth every year has raised doubts about the calculation formula among various experts.

Electric power companies have accumulated relevant data for three years. Instead of using a simple macroeconomic estimate, it is vital for the government to obtain accurate data concerning amounts and prices of imported fuels from utilities. Then, it should take steps to deal with the problem based on objective data assessments and factor analyses.

Restarting offline reactors could serve as a strong disincentive for new entries into the power market and investment to develop new power sources.

Unless the government quickly offers a medium- and long-term road map to a future less dependent on nuclear power, there will be no substantial progress in the efforts to re-energize the power market.
The new basic energy plan points out the need to create a system that allows the public to become involved in the entire process of developing and executing the energy policy.

The March 11 disaster has made us painfully aware of how the closed nature of the process in which the nuclear energy policy was developed and implemented contributed to the enormity of the damage.

We clearly need a system for public participation in the policy process to ensure that more than halfhearted efforts are made to provide information to the public and listen to the voices of the people.

The government needs to match its words with action.

--The Asahi Shimbun, April 12

What happened to the idea of a nuclear-free Japan?

April 12, 2014

Abe administration steers away from nuclear-free policy
http://ajw.asahi.com/article/business/AJ201404120049

THE ASAHI SHIMBUN

Turning a blind eye to the Fukushima crisis and public outcry over the safety of atomic power, the Abe administration has decided not to pursue a nuclear-free society.

The new basic energy plan, approved by the Cabinet on April 11, is at odds with the policy of the previous Democratic Party of Japan-led government which was in power when the nuclear disaster unfolded in 2011.

The Abe administration made clear it regards nuclear power as a key electricity source and will restart idled nuclear reactors if their safety is confirmed.

Without offering specific measures to reduce the nation's dependence on atomic energy, the administration said it will forge ahead with the promotion of nuclear power generation.

It was the first time since the nuclear accident triggered by the earthquake and tsunami disaster that a Cabinet has taken upon itself to decide the country’s nuclear power and energy policies.

According to the new basic energy plan, the administration will lower the ratio of nuclear power among all electricity sources as much as possible.

However, it did not specify how much nuclear power generation will be reduced, or by when.
With regard to building new nuclear reactors, the energy plan calls for studies into how much additional nuclear power generation will be necessary.

This diverges from the DPJ-led government policy of not constructing new nuclear reactors.
The Nuclear Regulation Authority is now screening 17 reactors of 10 nuclear power plants to judge whether they meet new safety standards. The screening on the No. 1 and No. 2 reactors at the Sendai nuclear power plant in Kagoshima Prefecture is ahead of those on the other 15 reactors.

In a news conference held April 11, Chief Cabinet Secretary Yoshihide Suga said that if the NRA approves operations of certain reactors, Prime Minister Shinzo Abe will put political considerations aside when making the decision to reactivate them.

This suggests that if the safety of certain reactors is guaranteed by the NRA screenings, the Abe administration will approve their restart unconditionally.

The new basic energy plan also specified that the administration will maintain the Monju prototype fast-breeder reactor in Tsuruga, Fukui Prefecture, and promote a nuclear fuel recycling program. The DPJ-led government was committed to closing Monju.

The plan also states that the administration aims to make the ratio of renewable energies among all the electricity sources higher than the previous target of "about 20 percent in 2030." However, it does not set a fixed target.

GIST OF NEW BASIC ENERGY PLAN

--Nuclear power is an important base load electricity source;
--Nuclear reactors that meet new safety standards will be restarted;
--Dependence on nuclear power will be reduced as much as possible;
--The government will make utmost efforts toward the final disposal of high-level radioactive waste;
--Nuclear fuel recycling program will be promoted;
--Monju will be used as an international research stronghold; and
--Renewable energies will be introduced as quickly as possible during a three-year period from 2013.

New energy policy and nukes ratio

April 11, 2014
Govt. to set ratio for nuclear power
http://www3.nhk.or.jp/nhkworld/english/news/20140411_47.html

Prime Minister Shinzo Abe says his government will set the ratio of nuclear power in Japan's energy mix after considering the situation once the reactors are restarted.

Abe spoke to a plenary session of the Lower House on Friday about the basic energy plan approved by the Cabinet earlier in the day.

He said the government's policy is to develop an energy-saving society and introduce renewable energy sources, while reducing dependence on nuclear power as much as possible.

But Abe said that given Japan's increased dependence on natural gas and other fossil fuels, he can't say that Japan will completely abandon nuclear power.

He added the government does not currently have any plans to build any more nuclear reactors or plants. Abe said the focus will be on diversifying energy resources and on how experts will view the resumption of existing reactors.

Abe said the government will set a target for the optimum mix of energy sources. He said the government will do that after looking into the situation regarding renewable energy and its potential, as well as the status of resumed operations at idled nuclear plants.
Apr. 11, 2014 - Updated 12:21 UTC

April 11, 2014
Japan decides new energy policy that supports use of nuclear power
http://mainichi.jp/english/english/newsselect/news/20140411p2g00m0dm038000c.html

TOKYO (Kyodo) -- The government of Prime Minister Shinzo Abe decided on a national energy policy Friday that supports the use of nuclear power now and in the future, retracting a nuclear phase-out goal introduced by its predecessor after the 2011 Fukushima Daiichi disaster.

The Basic Energy Plan sets the stage for the government to move ahead to restart nuclear reactors, all of which are now offline amid safety concerns, while reaffirming the continuity of the country's spent fuel recycling projects that have not made headway.

The move has been expected since the pro-nuclear Liberal Democratic Party returned to power in December 2012, but the government spent several more months than initially expected before deciding on the plan as draft documents stirred controversy among lawmakers who saw them as too strongly pro-nuclear in tone.

"We have compiled a basic policy on the medium to long-term measures to rebuild a responsible energy policy that supports people's lives and economic activities," Economy, Trade and Industry Minister Toshimitsu Motegi, who was in charge of crafting the plan, told a press conference.

After going through some revisions in the draft, the government decided to define nuclear power as an "important base-load power source" that is cheap in terms of operation costs and can stably generate electricity continuously through the day.

As for the policy direction over the next 20 years or so, the government said it will "proceed with the reactivation of nuclear power plants" that have satisfied what the government calls the world's toughest regulatory standards, and at the same time pledged to "reduce nuclear dependence as much as possible." It also left open the possibility of allowing the construction of new reactors, saying in the plan that the government will "assess the amount of nuclear power that should be secured" to ensure a stable energy supply in a resource-scarce country.

While admitting Japan has faced difficulties to materialize its long-standing nuclear fuel recycling policy, the energy plan highlighted the need to pursue plans to reprocess spent uranium fuel and reuse the extracted plutonium and uranium as reactor fuel.

On the trouble-plagued Monju prototype fast-breeder reactor, which has been developed to play a key role in fuel recycling, the government said the facility should serve as a center for research to reduce the volume of nuclear waste and to improve technologies related to nonproliferation.

Apparently to fend off criticism the government is irresponsible to turn to nuclear power without finding a final disposal site for high-level radioactive waste generated through reprocessing, the plan said the state will play "a proactive" role to resolve the stalled process.

The government did not include specific percentages of the country's future energy mix in the plan, citing the difficulty to foresee at the moment the number of reactors that will be safe enough to restart and the amount of renewable energy available.

But to show its desire to boost renewable energy, the government promised to seek to introduce such energy sources "farther above" the level aimed at in the past, adding a footnote that the previous Basic Energy Plan decided on in 2010 expected renewables to account for about 20 percent of the total electricity demand in 2030.

Motegi said the government will decide the target of the country's future energy composition as quickly as possible, adding that he does not expect the work to take "two or three years."

Japan has had a Basic Energy Plan since 2003. The government is legally required to check the plan at least once every three years and revise it if necessary.

The previous plan aimed to boost the nation's reliance on nuclear power to some 50 percent by 2030. Before the Fukushima disaster, nuclear power supplied about 30 percent of the total electricity supply.

In 2012, the government led by the Democratic Party of Japan decided on what it called an "energy strategy" aiming to phase out nuclear power by the end of the 2030s.

But the landmark decision triggered strong opposition from the business world, and the government at that time did not go so far as to revise the 2010 Basic Energy Plan that was expected to stipulate the details to realize the strategy.

April 11, 2014(Mainichi Japan)

New energy plan not really a "plan"

Editorial: Government's new energy 'plan' off course

http://mainichi.jp/english/english/perspectives/news/20140412p2a00m0na007000c.html

The government has obtained Cabinet approval for its Basic Energy Plan, which sets forth the country's medium- and long-term energy measures.

The plan includes no numerical targets for the ratio of each power source, however -- including nuclear power -- and also fails to present a future vision even after weeks of discussions within the ruling coalition parties. It is very difficult, therefore, to say that this energy policy serves as any sort of guideline.

The public's misgivings about energy -- including the danger of nuclear power plants, rising fuel costs, and fears for power blackouts -- remain strong. In order to dispel such concerns, the government must rush to flesh out the basic energy plan.

The updating of the country's energy plan was prompted by the Fukushima No. 1 Nuclear Power Plant disaster, which was triggered by the March 2011 Great East Japan Earthquake. The plan's renewal had originally been focused on reviewing a previous basic energy plan drawn up in 2010, which had decided that Japan would boost its dependence on nuclear power.

Although the updated energy plan aims to reduce the country's dependence on nuclear power, it ended up showing a positive stance toward reactivating idled nuclear reactors. The policy also presented a plan to maintain a certain level of nuclear power usage in the future, paving the way for the construction of new reactors. Although the country's nuclear fuel cycle projects have effectively hit a snag, the new energy plan upholds the promotion of such projects on the grounds that there are no concrete measures for final disposal of spent nuclear fuel.

In essence, the new energy plan makes a turnaround from the "zero-nuclear power" policy set out by the then Democratic Party of Japan-led government in 2012. The plan also reaffirms the conventional energy plan, which has been dependent on nuclear power. The essence of the new energy plan hasn't changed at all, even after one-month-and-a-half-long discussions held by the ruling coalition parties.

The major focus of the ruling coalition debates was how the new energy plan would treat renewable energy. The New Komeito party, which is the coalition partner of the ruling Liberal Democratic Party, maintained that numerical targets be included in the plan, given its pledge to increase the ratio of renewables to 30 percent in 2030. The government resisted the proposal, however, saying that it's not fair to set numerical targets only for renewable energy.

In the end, both parties reached an agreement to add a footnote including a target from the previous energy plan, which stated that the ratio of renewable energy will be raised to some 20 percent in 2030, and that the country will further aim to introduce more renewables.

Although the plan should present concrete goals and measures, the government failed to present such specifics as it has yet to come up with a picture of the future. If the government keeps glossing over the fact that it is only procrastinating with respect to existing problems, the new energy plan is not worthy of being called a "plan."

During the coalition parties' talks on the beginning part of the energy plan, which states the plan's significance, a sentence expressing remorse over the Fukushima nuclear disaster was once deleted. After some lawmakers made an objection, the sentence was restored almost to its original version.

This incident gives the impression that the "safety myth" about nuclear plants has reemerged within the government and the ruling parties. In fact, however, the safety myth of nuclear power has collapsed -- and they must once again keep this in mind.

We must break away from a dependence on nuclear power as quickly as possible -- a move that will entail social costs.

The government should swiftly flesh out its energy plan while gaining public understanding, and show the path toward a society that does not depend on nuclear power.

Calling for nuclear disarmament

April 12, 2014
12 nations urge nuclear disarmament

The foreign ministers of 12 non-nuclear weapons states have called on nations possessing the weapons to do more to disarm. They also urged world leaders to visit and learn from the 2 atom-bombed cities of Hiroshima and Nagasaki.

The foreign ministers of a coalition known as the Nonproliferation and Disarmament Initiative adopted a joint statement at the end of their 8th meeting in Hiroshima on Saturday. It was their first meeting in the city.

The Hiroshima Declaration calls for a nuclear disarmament conference that would bring together not only the United States and Russia, but all other nuclear weapons states as well.

The statement urges the nuclear powers to clarify the sizes of their nuclear-weapon stockpiles and to reduce the number of such weapons.

The statement condemns North Korea's nuclear program and urges the country to suspend all its nuclear activity immediately.

It also expresses the hope that a resolution to the dispute over Iran's nuclear development can be found through talks between Iran and the 5 permanent UN Security Council members plus Germany.

The ministers suggested that world leaders visit Hiroshima and Nagasaki. They said people of all countries and generations should learn of the inhumanity of nuclear arms toward realizing a world without such weapons.

Japanese Foreign Minister Fumio Kishida held a news conference with the other foreign ministers after the meeting.

He said they all had a chance to see the real picture of the atom-bombed city. He said he believes the Hiroshima Declaration will have universal significance within the international community.

The 12 members of the NPDI are Australia, Canada, Chile, Germany, Japan, Mexico, the Netherlands, Nigeria, the Philippines, Poland, Turkey and the United Arab Emirates.

Apr. 12, 2014 - Updated 12:59 UTC

More promises toward non proliferation

April 12, 2014

Foreign ministers discuss nuclear disarmament in Hiroshima
http://mainichi.jp/english/english/newsselect/news/20140412p2g00m0dm026000c.html

HIROSHIMA (Kyodo) -- Japanese Foreign Minister Fumio Kishida pledged his country's efforts toward nuclear nonproliferation and disarmament Saturday at a meeting of non-nuclear weapon countries in the city of Hiroshima.

At the ministerial meeting, the 12-member Nonproliferation and Disarmament Initiative is expected to call on nuclear powers to scale back their arsenals and for world leaders to visit Hiroshima and Nagasaki, two Japanese cities devastated by U.S. atomic bombings in World War II.

Representatives from the member states visited a memorial monument and a museum at Hiroshima's Peace Memorial Park before entering the eighth meeting of the NPDI, which was launched in 2010 and is being held in Japan for the first time.

"Japan will lead international efforts based on an awareness of the humanitarian consequences of nuclear weapons use and a calm awareness of the diversification of nuclear arms-related risks we are faced with," Kishida, who chairs the talks, said in his opening remarks.

The meeting takes place in the run-up to a session of the preparatory committee for a review of the Nuclear Non-Proliferation Treaty, the cornerstone international treaty on nuclear arms reduction, to be held in New York from April 28

The NPDI has already submitted several working papers to the preparatory committee on topics such as improving transparency in nuclear disarmament and on stalled talks to create a Middle East zone free of weapons of mass destruction.

But doubts linger as to how effective the NPDI will be in bringing about moves to reduce nuclear arsenals, as more than half of the member states, including Japan, are protected by the U.S. and North Atlantic Treaty Organization "nuclear umbrella" deterrent.

Rose Gottemoeller, U.S. undersecretary of state for arms control and international security, is scheduled to attend part of the meeting later as an observer, becoming the first U.S. official to do so at an NPDI meeting.

The NPDI consists of Australia, Canada, Chile, Germany, Japan, Mexico, the Netherlands, Nigeria, the Philippines, Poland, Turkey and the United Arab Emirates.

April 12, 2014(Mainichi Japan)

NHK video: Toward A Nuclear Free World

Aired on April 11, 2014

http://www3.nhk.or.jp/nhkworld/newsline/201404112113.html

NHK video: **Toward A Nuclear Arms Free World**

Steven Leeper: "Japan saves the world"

April 13, 2014
Tokyo 2020 Olympics should be celebration of end to atomic arms, says U.S. activist

http://mainichi.jp/english/english/newsselect/news/20140413p2a00m0na001000c.html

The Tokyo 2020 Olympics should be transformed into a festival celebrating an end to nuclear weapons worldwide, says Steven Leeper, former chair of the Hiroshima Peace Culture Foundation and current Hiroshima Jogakuin University visiting professor.

Leeper, 66, has even released a book on that goal, titled, "2020-nen Tokyo Olympic: Nihon ga sekai o sukuu -- kaku nakusu best scenario" (The Tokyo 2020 Olympics: Japan saves the world -- a best-case scenario for the abolishment of nuclear weapons).

Originally from the United States -- a nuclear superpower -- Leeper told the Mainichi that former U.S. presidents Jimmy Carter, Ronald Reagan and Bill Clinton and current President Barack Obama have all wanted to rid the world of atomic weapons. However, he says, the influence of the nuclear weapons industry on Congress has meant that dream has never been transformed into reality.

Leeper said that Japan, as the only nation to have been subjected to nuclear attack, is the ideal leader in the campaign to rid the world of nuclear arms, likening the country's position to that of victims of drunk driving accidents and their families in the campaign to wipe out drinking and driving.

He also pointed out that nuclear materials don't just take the form of weapons, but also nuclear waste from reactors, adding that the number of people abroad worried about contamination from the Fukushima No. 1 nuclear plant disaster is likely a lot higher than most Japanese suspect.

Leeper furthermore said that countries maintain nuclear reactors at least in part as an insurance policy, in case they find themselves in a confrontation with a nuclear power and want to build a bomb to boost their power. Therefore, he said, the effort to abolish atomic weapons is directly connected to abandoning nuclear power.

April 13, 2014(Mainichi Japan)

No simple way of eliminating nuclear weapons

April 20, 2014

Nuclear disarmament challenge

http://www.japantimes.co.jp/opinion/2014/04/20/editorials/nuclear-disarmament-challenge/#.U1OZ8Vfi91s

The recent conference in Hiroshima of foreign ministers from 12 nonnuclear weapons states highlighted the challenges in eliminating nuclear weapons. The statement adopted by members of the Non-Proliferation and Disarmament Initiative urged world leaders to realize the "catastrophic humanitarian consequences" of nuclear weapons use and to make multinational nuclear disarmament efforts — a veiled reference to the need to involve China.

The notable absence of targets for nuclear weapons cutbacks illustrated the divide between nations that advocate an outright ban on nuclear arms and those — including Japan — that rely on a "nuclear umbrella" for security.

The April 12 gathering of NPDI ministers was the eighth since the group was created in 2010 (at Japan and Australia's initiative) and the first in Japan. The group also includes Canada, Chile, Germany, Mexico, the Netherlands, Nigeria, the Philippines, Poland, Turkey and the United Arab Emirates.

Gathering in one of the two Japanese cities devastated by U.S. atomic bombings in August 1945, the foreign ministers said they "witnessed firsthand the catastrophic humanitarian consequences of an atomic bombing that last even to this present day." They invited the world's political leaders to visit Hiroshima and Nagasaki to also witness the consequences. Attending part of the Hiroshima conference, Rose Gottemoeller, U.S. undersecretary of state for arms control and international security, was the first official from a nuclear weapons power to join the NPDI meeting as an observer.

Five years after U.S. President Barack Obama called for a world free of nuclear weapons during a speech in Prague, the momentum for nuclear disarmament has stalled. The NPDI members called for "deeper reductions" in the U.S. and Russian nuclear arsenals beyond those stipulated in the 2010 New Strategic Arms Reduction Treaty. But the Ukraine crisis clouds prospects for any new initiatives by Washington and Moscow.

In addition to condemning North Korea's nuclear weapons program, the NPDI members said they are "deeply concerned about the reported buildup of nuclear arsenals, against the clear intent of the international community to achieve the goal of a world free of nuclear weapon." This was an apparent

reference to China as the only nuclear power suspected of increasing its nuclear arsenal. The group stressed the importance of multinational talks for eliminating nuclear arms.

Consensus among the NPDI members about specific ways to achieve the goal of eliminating nuclear weapons is elusive. Seven of the 12 members, including NATO member countries, depend on the nuclear deterrence provided by the United States; they call for a gradual phaseout of nuclear arms, while the others favor an outright ban. Their statement called for "a systematic and continued reduction … in a pragmatic and step-by-step approach aiming at their total elimination."

By contrast, the chair's summary at the Conference on the Humanitarian Impact of Nuclear Weapons, held in Mexico in February with delegates from 146 countries and several international organizations, called for a diplomatic process for a "legally binding instrument" to eliminate nuclear weapons.

The message from the Hiroshima conference reflects Japan's dilemma as the only country to suffer a nuclear attack and yet dependent on the U.S. nuclear umbrella for security. This quandary must be overcome if Japan is serious about taking stronger initiatives for the elimination of nuclear weapons.

Fukui Governor meets Motegi

April 18, 2014
Fukui governor meets industry minister
http://www3.nhk.or.jp/nhkworld/english/news/20140418_22.html

The governor of Japan's Fukui prefecture has asked the central government in Tokyo to steadily implement its basic energy plan.

Fukui Governor Issei Nishikawa met industry minister Toshimitsu Motegi on Friday to discuss the energy plan approved by the cabinet earlier this month.

It defines nuclear energy as an important power source, but says Japan should minimize dependence on nuclear power.

Nishikawa was a member of the government's panel that compiled the draft plan.

Nishikawa said the government should clarify exactly what percentage of energy will come from nuclear power.

He then asked the government to come up with a plan to rebuild old nuclear plants as quickly as possible.

Nishikawa said he's concerned that reducing the nation's reliance on nuclear power will force utilities to decommission reactors. He said the government should help to create jobs in prefectures that host these

plants.

Nishikawa said Motegi expressed his understanding for these requests. Nishikawa told reporters after the meeting that the basic energy plan made clear the government's stance on nuclear power generation.

However, the governor said it lacks definite ways to resolve the many problems nuclear power generation presents. He added that the government should tackle these problems as soon as possible.
Apr. 18, 2014 - Updated 05:26 UTC

Morally "deplorable"

April 20, 2014

Exports that defy reason

http://www.japantimes.co.jp/opinion/2014/04/20/editorials/exports-that-defy-reason/#.U1OZOlfi91s

Following an April 4 “yes” vote by the Lower House, the Upper House on Friday approved civilian nuclear accords Japan has signed with Turkey and the United Arab Emirates to enable the export of Japanese equipment and technology for nuclear power generation to them.

The big question, though, is why a country that suffered a disaster at a nuclear power plant (which remains ongoing) three years ago would choose to push the export of nuclear power plants — and especially to countries that are prone to earthquakes, like Turkey. **It is deplorable from moral and other viewpoints that the Abe administration treats the export of nuclear power equipment and technology as a pillar in its economic growth strategy**. Japan concluded similar nuclear accords with Jordan, Vietnam, South Korea and Russia under the previous Democratic Party of Japan-led administration.

At present, the government is negotiating civilian nuclear cooperation with five more countries — India, South Africa, Brazil, Mexico and Saudi Arabia.

The Diet approval came with the support of the Liberal Democratic Party, New Komeito and the DPJ at a time when Japan’s own crisis, caused by the triple meltdowns at Tokyo Electric Power Co.’s Fukushima No. 1 nuclear power plant, shows no signs of resolution. More than 130,000 residents of Fukushima Prefecture are still displaced from their homes due to radioactive contamination of their communities more than three years after the nuclear crisis. Although the DPJ after the March 2011 Fukushima disaster called for ending nuclear power generation in the 2030s, it supported plans for Japan to export nuclear power technology.

As demonstrated in the Fukushima catastrophe, a large-scale accident at a nuclear power plant causes irreparable damage to people's lives and the environment. If such an accident occurs at a plant in another country built with exported Japanese technology, both the Japanese government and the manufacturers of the technology would likely be expected to shoulder some of the responsibility. Even if they offer to pay compensation, they could be criticized for giving priority to business interests over human lives and the environment.

In addition, high-level waste from nuclear power plants must be stored underground for more than 100,000 years before its radioactivity declines to safe levels. The safe storage of such waste for such a long period presents extremely difficult technological problems to which solutions have yet to be established. So this toxic burden would pass on to future generations. Given this reality, it would be irresponsible for Japan to export nuclear power technology and equipment.

Although the nuclear accords in principle are designed to prevent military use of the nuclear materials, equipment and technology, the accord with Turkey is problematic.

A clause in the accord states that Turkey can enrich uranium or reprocess spent nuclear fuel if Japan agrees in writing to a specific instance of enrichment or reprocessing. Enriched uranium and plutonium extracted from spent nuclear fuel can be used to make nuclear weapons. Thus the clause runs counter to global efforts against nuclear proliferation.

The Abe administration's policy could also result in Japanese firms continuing to devote a large amount of resources on nuclear power, possibly discouraging them from investing in the development and expansion of renewable energy sources — the "sunrise" industries where Japan's future prosperity lies. The government must rethink its policy of promoting the export of nuclear power equipment and technology.

Mayors for Peace petition Ban Ki-moon

April 30, 2014
Mayors of A-bombed cities issue appeal to U.N. to ban nuclear arms

http://ajw.asahi.com/article/behind_news/politics/AJ201404300026

THE ASAHI SHIMBUN

NEW YORK--The mayors of Nagasaki and Hiroshima delivered speeches at the United Nations nuclear nonproliferation meeting on April 29 that called on the representatives there to join hands to outlaw nuclear weapons.

During the third session of the Preparatory Committee for the 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, attended by more than 60 countries, Nagasaki Mayor Tomihisa Taue said non-nuclear countries that rely on the nuclear umbrella are the key to reaching the goal of outlawing nuclear arms. He called on those countries, which include Japan, to play a leading role in that effort.

Hiroshima Mayor Kazumi Matsui emphasized that the world needs to develop a sense of community that replaces nuclear weapons as a deterrence, a system he said is based on fear and threats.

On April 28, the two mayors submitted a petition to U.N. Secretary-General Ban Ki-moon with 210,000 signatures requesting the start of negotiations on a treaty that would outlaw nuclear weapons.

"I felt Ban's willingness to deal jointly over the issue," said Taue after the closed-door meeting at the U.N. headquarters. "Ahead of (the review conference) next year, we hope to start productive discussions on the inhumanity of nuclear weapons and the necessity for a nuclear ban treaty."

The signatures for the petition were collected in a drive organized by Mayors for Peace, a group of mayors from about 6,000 cities worldwide.

Their petition denounces nuclear weapons as "extremely inhumane." It also calls for Ban to take leadership in starting the nuclear ban negotiations.

The mayors said that Ban, during the meeting, also touched on nuclear development in North Korea and Iran, saying he hoped matters will take a turn for the better.

In 2008, Ban said he could envision negotiations on formulating a treaty to outlaw nuclear arms.
(This article was written by Kyosuke Yamamoto and Taro Nakazaki.)

About nuclear disarmament

May 3,2014

Nuclear powers report at NPT preparatory committee
http://www3.nhk.or.jp/nhkworld/english/news/20140503_16.html

The United States says it has reduced the stockpile of its nuclear warheads by 85 percent since the end of the Cold War.

Delegates from around the world are meeting in New York ahead of the review conference of the Nuclear Non-Proliferation Treaty next year.

5 nations--the US, Russia, China, Britain, and France--submitted a report on ways they're scrapping nuclear weapons.

US representative Christopher Buck explained on Friday that the latest figure for warheads was 4,804 as of last September. That's a reduction of more than 300 from the number 4 years earlier.

He underlined the US commitment to the NPT and its effort to rid the world of nuclear weapons which is upheld by President Barack Obama.

He said the US is working to reduce the number of nuclear weapons unilaterally, bilaterally, and multilaterally with negotiations.

Chinese representatives emphasized that their country keeps only those nuclear weapons needed for self defense and that it will not use them against non-nuclear countries. But they did not disclose further details.

Some member nations praised the reports. Others said the very slow progress in nuclear disarmament points to the need for a treaty totally banning nuclear weapons.
May 3, 2014 - Updated 04:39 UTC

Franco-Japanese collaboration on ASTRID reactor

May 6, 2014

Japan to Work With France on Future Fast-Breeder Atomic Reactor

http://www.bloomberg.com/news/2014-05-05/japan-to-work-with-france-on-future-fast-breeder-atomic-reactor.html

By Tara Patel and Gregory Viscusi

May 6, 2014 1:47 AM GMT+0200

Japan will join a French research effort to develop a new nuclear reactor that promoters say will use fuel more efficiently and produce less atomic waste.

Japanese Prime Minister Shinzo Abe and French President Francois Hollande agreed to "intensify their civil nuclear research," according to a joint statement yesterday following a meeting between the two leaders in Paris.

As part of Abe's state visit, the Japanese ministries of economy and science and France's atomic research institute Commissariat a l'Energie Atomique et aux Energies Alternatives signed an accord to cooperate on a project for a so-called fourth generation fast-breeder reactor called Astrid. Fast-breeder generators are designed to produce, or "breed," more fuel than they consume for reuse in nuclear fission.

The research deal comes as both countries' nuclear-power industries are at a crossroads. Operators in Japan are still reeling from the 2011 atomic meltdown at Fukushima after which the country shut its reactors because of earthquake damage, maintenance or safety checks.

Japan's Nuclear Regulation Authority said in March that it would expedite safety checks on two of Kyushu Electric Power Co.'s reactors, raising the prospect that some nuclear capacity may be restored ahead of peak power demand in summer.

In France, Hollande has vowed to lower dependence on nuclear power to 50 percent of all electricity produced by around 2025. It currently relies on the 58 reactors operated by Electricite de France SA for about three-quarters of its electricity, a greater proportion that any other country in the world. His plan is scheduled to be clarified in a long-delayed energy law.

Astrid Prototype

In 2011, before Hollande was elected, France earmarked 652 million euros ($905 million) to develop a 600-megawatt Astrid prototype by around 2020 with a plan to deploy a fleet starting in 2040. Astrid stands for Advanced Sodium Technological Reactor for Industrial Demonstration.

The generator is said to be of the fourth generation because it would come after a model being built now in France, Finland and China called the EPR, which is considered third generation. France's CEA research institute is working on the Astrid project with EDF and French reactor developer Areva SA. (AREVA)

Future reactors like Astrid would be able to produce as much as 100 times more power using the same quantity of uranium FUEL, according to documents on the CEA's website. They would also burn long-life radioactive waste.

Even with its nuclear industry hobbled by the aftermath of Fukushima, the Abe government has been actively marketing Japanese nuclear technology around the world. Mitsubishi Heavy Industries Ltd. and Areva signed a $22 billion agreement in May 2013 to build a nuclear power plant in Turkey, the first major order for Japan since the Fukushima disaster in 2011.

EDF last year signed a deal to develop EPRs in the U.K.

France decided to close its Superphenix fast-breeder reactor in 1998 following radioactive leaks. Japan's Monju reactor is idled and has been plagued by challenges including a sodium leak. India has its own fast-breeder reactor program.
To contact the reporter on this story: Tara Patel in Paris at tpatel2@bloomberg.net

06.05.2014_No141 / News in Brief

France And Japan Announce Cooperation On Generation IV Astrid FBR

http://www.nucnet.org/all-the-news/2014/05/06/france-and-japan-announce-cooperation-on-generation-iv-astrid-fbr

Research & Development
6 May (NucNet): France and Japan will cooperate on the development of Generation IV fast breeder reactors (FBR) including the Astrid project, which is under development in France.
Japanese Prime Minister Shinzo Abe and French President Francois Hollande agreed to "intensify their civil nuclear research," according to a joint statement yesterday following a meeting between the two leaders in Paris.

As part of Mr Abe's state visit, the Japanese ministries of economy and science, and France's atomic research institute France's Commissariat à l'Energie Atomique et aux Energies Alternatives (atomic and alternative energy commission; CEA), signed an accord that includes cooperation the Generation IV prototype sodium-cooled fast reactor Astrid (Advanced Sodium Technological Reactor for Industrial Demonstration).

Astrid will be built at CEA's Marcoule nuclear site in France. CEA is leading the Astrid project and will design the reactor core and fuel. Areva will design the nuclear steam supply system, and will be

responsible for I&C (instrumentation and control) and the nuclear auxiliaries.

An agreement to develop Astrid was signed between the French government and the CEA on 9 September 2010. It gave CEA overall responsibility for the project, providing 652 million euro (about 900 million US dollars) for the programme until completion of the design phase.

Fast neutron reactor projects, which are being explored or constructed in India, Russia, China and Japan, would allow a significant increase in the amount of energy obtained from either depleted or natural uranium.

The technology would also enable plutonium to be used and recycled several times, and minor actinides to be recycled.

The cooperation will also give France the opportunity to carry out tests for Astrid at the Monju FBR in Japan. Monju has been offline since August 2010 because of failures in inspection procedures.

Monju initially started in August 1995, but was shut down four months later after about 700 kilogrammes of liquid sodium leaked from the secondary cooling loop.

The two countries also announced that France's Areva and Japan's Atox, a maintenance services company for nuclear facilities in Japan, are forming a 50-50 joint venture called Anadec to provide decommissioning and dismantling services for Japanese nuclear power plants.

The venture will operate as early as this year at the damaged Fukushima-Daiichi nuclear power plant, Areva said.

A Franco-Japan joint venture between Areva and Mitsubishi Heavy Industries intends to sell reactors to "other countries" including Vietnam, another statement said.

Japan and Turkey have already signed an agreement that could lead to the construction of Turkey's second nuclear power station with four Atmea1 reactor units, a design developed by the Areva-MHI joint venture Atmea.
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May 5, 2014

Japan, France join hands on defense equipment, fast-breeder reactors

http://www.japantimes.co.jp/news/2014/05/05/national/politics-diplomacy/japan-france-join-hands-defense-equipment-fast-breeder-reactors/#.U2j9Blfi91s

Kyodo

PARIS – Japan and France agreed Monday to open talks on joint development of defense equipment, signed a document on developing fast-breeder reactor technology and confirmed plans to foster economic dialogue.

In addition to jointly producing unmanned submersibles for surveillance, Prime Minister Shinzo Abe and French President Francois Hollande reached an accord to hold a summit meeting every year to the extent possible, according to a joint paper that was released after their talks in Paris.

"As the security situation in Europe and East Asia becomes increasingly severe, close coordination between the two countries has never been more necessary," Abe said as he greeted the press together with Hollande.

The French leader expressed a willingness to hold security dialogue with Japan on many occasions.

Abe has been hoping to forge stronger ties with France, which recently been expanding economic coordination with China.

Japan and France will hold a round of "two-plus-two" security talks between their defense and foreign ministers in Tokyo next year.

In an apparent reference to Russia's annexation of Crimea and China's increasing naval assertiveness in Asia, Abe and Hollande voiced opposition to countries that acquire, or assert claims to, part of another country through the use of force in violation of international law, the joint paper said.

To strengthen cooperation on nuclear energy technology, Tokyo and Paris agreed to cooperate on civil nuclear power technology as long as priority is given to ensuring the highest level of safety in the world. In connection with this, officials from both countries signed a document Monday on developing fast-breeder reactor technology designed primarily to reduce radioactive waste.

On the free trade deal being negotiated between Japan and the European Union, the two leaders shared the view that such a deal would be an opportunity to promote growth and employment on both sides and reaffirmed plans to reach an agreement on the pact in the near future.

Abe has so far visited Germany, Britain, Portugal, Spain and France during his swing through Europe. He is scheduled to visit Belgium before returning to Tokyo on Thursday.

May 6, 2014

Japan, France to start talks on joint defense equipment development

http://mainichi.jp/english/english/newsselect/news/20140506p2g00m0dm034000c.html

PARIS (Kyodo) -- Japan and France agreed Monday to start negotiating a deal to jointly develop defense equipment, while confirming plans to strengthen cooperation on nuclear energy technology and foster dialogue between their economic ministers.

In addition to joint development of equipment such as unmanned submersibles for surveillance, Prime Minister Shinzo Abe and French President Francois Hollande reached accord on holding a summit meeting every year to the extent possible, according to a joint paper released after their talks in Paris.

"As the security situation in Europe and East Asia becomes increasingly severe, close coordination between the two countries has never been more necessary," Abe said as he met the press together with Hollande.

The French president expressed his willingness to hold security dialogue with Japan on many occasions.

Abe has been hoping to forge stronger ties with France at a time when China is expanding its economic coordination with the European country.

Japan and France will hold the next round of "two-plus-two" security talks between their defense and foreign ministers in Tokyo next year.

Apparently with Russia's annexation of Crimea and China's increasing presence in regional waters in mind, Abe and Hollande voiced their opposition to a country acquiring, or asserting its claims to, an area of another country through the use of force in violation of international law, according to the joint paper.

On civil nuclear power, Tokyo and Paris agreed to cooperate under the policy of giving priority to ensuring the highest level of safety in the world. In connection with this, officials of the two countries signed on Monday a document aimed at developing fast-breeder technology designed primarily to reduce radioactive waste.

On a free trade deal being negotiated between Japan and the European Union, the two leaders shared the view that it would be an opportunity to promote growth and employment on both sides and reaffirmed their plans to reach an agreement on the pact in the near future.

Abe has so far visited Germany, Britain, Portugal, Spain and France during his latest swing through Europe. He is scheduled to visit Belgium before returning to Tokyo on Thursday.

Alarm bells for other utilities?

May 22, 2014

Editorial: Oi nuclear power plant ban sounds alarm bells for other operators

http://mainichi.jp/english/english/perspectives/news/20140522p2a00m0na003000c.html

A Fukui District Court ruling on May 21 banning the restart of two reactors at the Oi Nuclear Power Plant in Fukui Prefecture sounded alarm bells against the government's intention to reactivate idled atomic power stations one after another.

This is the first court ruling on a lawsuit demanding an injunction on the restart of nuclear plants since the outbreak of the Fukushima nuclear crisis in March 2011. It would be extremely difficult to resume operations at most nuclear plants across the country if the views that the court expressed in the ruling on the safety of atomic power stations are to be respected.

The district court stated that individuals' personal right to protect their lives and livelihoods are of the highest value under the Constitution. The court then concluded that "it would be only natural to suspend nuclear plants if they pose specific risks of danger -- though it would be an extreme argument to say the existence of such plants is impermissible under the Constitution."

It was a landmark decision in that the court placed top priority on the safety of residents of areas hosting atomic power stations. The court also judged that residents within a 250-kilometer radius of the Oi plant are qualified to be plaintiffs in this lawsuit because operations at the power station could infringe on their personal rights, noting that the then head of the Japan Atomic Energy Commission had once considered issuing an evacuation advisory to people in areas within a radius of 250 kilometers from the Fukushima No. 1 Nuclear Power Plant following the plant's meltdowns.

Kansai Electric Power Co. (KEPCO), the operator of the Oi plant, is poised to appeal the ruling to a higher court. Unless the latest ruling is finalized, KEPCO can legally restart the two reactors at the Oi plant if they pass safety inspections by the Nuclear Regulation Authority (NRA). However, if the government is to ignore the ruling and give the green light to restarting the reactors, it would certainly stir protests from the public.

The March 2011 Great East Japan Earthquake that triggered the tsunami and the nuclear crisis has reminded the public that it is impossible to predict where and when a powerful earthquake will occur next in this quake-prone country. Based on the lessons of the triple disasters, the ruling determined that systems to cool down cores of the No. 3 and 4 reactors at the Oi plant in case of a powerful temblor and their structure to prevent radioactive substances from leaking are flawed. In other words, the ruling pointed out that the operator of the plant was too optimistic about the crucial dangers of nuclear plants and failed to develop sufficient safety technologies or create safety equipment.

The court dismissed KEPCO's argument during hearings that restarting the two reactors would help stabilize electric power supply and reduce expenses. "The large trade deficit as a result of the suspension of operations at nuclear plants should not be regarded as an outflow or loss of national wealth. Inability to restore abundant national land and people's livelihoods that have taken root there would be a true loss of national wealth," the ruling said.

Should a serious accident occur at a nuclear plant, it would threaten the lives of numerous residents in areas hosting the facility. The ruling's demand that operators of atomic power stations "take all possible measures to protect citizens from radioactive substances" if a serious accident were to occur is convincing.

The court also rebuffed the view that nuclear plants should be operated to help prevent global warming. "The accident at the Fukushima No. 1 Nuclear Power Plant is the worst pollution -- the worst environmental contamination. It is wrong to base calls for operations at nuclear plants on the need for environmental protection," the court ruled. Many people affected by the Fukushima nuclear crisis apparently agree with this view.

The Cabinet of Prime Minister Shinzo Abe intends to restart nuclear reactors if they pass NRA safety inspections. However, the government should not allow utilities to resume operations at idled nuclear power stations one after another as if it had forgotten all about the Fukushima nuclear disaster.

JFBA: Nukes "cause human rights violations"

May 31, 2014
JFBA opposes right to collective self-defense, nuclear power
http://mainichi.jp/english/english/newsselect/news/20140530p2g00m0dm045000c.html

TOKYO (Kyodo) -- The Japan Federation of Bar Associations on Friday expressed opposition to the government's move to lift the nation's self-imposed ban on the right to collective self-defense.

Japan should pursue "diplomatic and defense policies to achieve global security through peaceful means, not by military power, under the pacifist Constitution," the JFBA said in its resolution adopted at its annual general meeting in Sendai, Miyagi Prefecture, and released by its public relations office.

"Japan's Constitution, which renounces war before the rest of the world, should be the guideline" for that purpose, it noted. "We strongly oppose the move to allow Japan to exercise the right to collective self-defense by reinterpreting the Constitution as it goes against the (constitutional) pacifism."

The resolution came after a panel of security experts proposed the reinterpretation to respond to a changing regional security landscape, given China's assertiveness and North Korea's nuclear and missile programs.
After receiving the panel report, Prime Minister Shinzo Abe, who has a strong will to revise the Constitution, expressed a desire to remove the ban on the right to collective self-defense, or coming to the defense of an allied nation under attack.

Japan has long maintained that it has the right to collective self-defense under international law but cannot exercise it due to Article 9 of the Constitution, which stipulates that people in Japan "forever renounce war as a sovereign right of the nation and the threat or use of force as means of settling international disputes."

While Abe hopes to have Cabinet approval for removing the self-imposed ban, the lawyers' group said it cannot accept the policy as the government aims to revise the basic principle of the Constitution without calling for a vote of confidence of the people.

"It goes against constitutional clauses that designate the Constitution as 'the supreme law' and oblige state ministers and public officials to respect and uphold the Constitution" as a safeguard to restrict the government's power and protect human rights, the JFBA said in the resolution.

The Japanese Constitution seeks to achieve permanent peace without depending on military power and by renouncing the right of belligerence, and these principles "have a pioneering significance that we can boast to the world," it said.

At the general meeting, meanwhile, the JFBA urged the government to withdraw from nuclear power generation and nuclear fuel-cycle policy in the wake of the March 2011 nuclear disaster, triggered by the deadly earthquake and tsunami.

"**It is a quite alarming situation and a serious human rights violation**" that many victims of the triple-disaster still face economic and psychological difficulties even after more than three years have passed since the tragedy, the JFBA said.

Given such recognition, it also urged the government to terminate the policy of exporting nuclear power plants, saying, **"Nuclear plant exports are likely to cause human rights violations and environmental destruction to the importing countries and their surrounding nations."**
May 31, 2014(Mainichi Japan)

Nuclear power treated against U.S. aid in Fukushima

June 13, 2014

Japan may ratify atomic treaty for U.S. aid in Fukushima cleanup

http://www.japantimes.co.jp/news/2014/06/13/national/japan-may-ratify-atomic-treaty-u-s-aid-fukushima-cleanup/#.U5qlVSji91s

Bloomberg

The Abe administration will likely introduce legislation this year to ratify a civil nuclear power treaty that will encourage U.S. companies to assist with the cleanup at Fukushima No. 1, U.S. Deputy Energy Secretary Daniel Poneman said.

The treaty, known as the Convention on Supplementary Compensation for Nuclear Damage, or CSC, is being promoted by the U.S. as a means to compensate victims of accidents and to protect nuclear plant manufacturers from liability.

Atomic plant operators would take on the liability risk and that would permit U.S. companies to help out in Fukushima, Poneman said in an interview in Tokyo on Thursday. As the power plant holds three melted reactors and thousands of tons of radioactive water, the cleanup holds additional risk of accidents.

"Everyone understands that the important thing is to do everything that we can to facilitate the cleanup and decontamination of the Fukushima site," he said. "In so far as the CSC is a means to support U.S. companies in being active in that role, I think that is basically a critical factor in why it is getting the support you're now seeing."

Poneman was in Tokyo for a meeting of the U.S.-Japan Bilateral Commission on Civil Nuclear Cooperation, which was established after the March 2011 catastrophe at Tokyo Electric Power Co.'s Fukushima No. 1 plant.

Participants in the meeting were scheduled to discuss responses to the accident, nuclear safety and security, and research and development in the field, the Foreign Ministry said in a statement earlier this week.

U.S. companies have expressed interest in helping Tepco decommission the three stricken reactors.

Bechtel Group Inc., Babcock & Wilcox Co. and Chicago Bridge & Iron Co. were among 25 companies offering their services at a February business forum in Tokyo.

"If there is confusion about liability, they're just not about to take a business risk of getting into new markets," Poneman said. "To the extent that CSC provides for channeling of liability, focusing that liability on the operator who is the likeliest party to be able to manage and ensure that risk, that's going to give confidence to U.S. companies."

To cover potential damage claims, the CSC would tap member countries for a fund of 300 million "special drawing rights," the equivalent of about $465 million. An nuclear plant operator would have access to that fund after paying out an equivalent amount itself.

The CSC was proposed after the Chernobyl nuclear accident in 1986 and adopted in 1997. The only countries to ratify the pact have been the U.S., Argentina, Morocco and Romania, which together have 316 gigawatts of installed nuclear capacity, according to the International Atomic Energy Agency.

The addition of Japan's 131 gigawatts would carry the treaty past the 400-gigawatt threshold needed for the pact to come into force. Canada, with 46 gigawatts, introduced legislation this year to implement the treaty, though it has yet to ratify it.

June 12, 2014
Senior US official welcomes Japan's nuclear stance
http://www3.nhk.or.jp/nhkworld/english/news/20140613_01.html

A senior US official is hailing a basic energy plan recently adopted by the Japanese government. The plan calls nuclear power a key energy source.

US Deputy Secretary of Energy Daniel Poneman gave an interview to NHK in Tokyo on Thursday.

Poneman commented on the plan approved by the Cabinet in April. It describes nuclear power as an important, base-load source.

Poneman says Washington agrees with Tokyo, and regards nuclear power as valuable in efforts to cut carbon dioxide emissions.

He expressed hope of further promoting technical collaboration between the US and Japanese governments, as well as private companies. He noted both countries have a high number of nuclear plants.

Japan and the US have strong ties in the nuclear power industry. Private nuclear-related firms from the two countries operate in what can be seen as consortiums. They are leading work to build nuclear plants around the globe.

Tokyo and Washington encourage the use of nuclear power for peaceful purposes.
Jun. 12, 2014 - Updated 16:44 UT

Annual report: Japan to resume operation of nuclear plants

June 17, 2014

Energy report calls for reliance on nuclear power

http://www.japantimes.co.jp/news/2014/06/17/national/energy-report-calls-for-reliance-on-nuclear-power/#.U5_mZyji91s

Kyodo

The government released an annual energy report Tuesday that called for a return to nuclear power generation, saying increasing fuel costs for thermal power and a surge in CO2 emissions are reasons why Japan should power up its idled reactors.

The report reflects the pro-nuclear government's latest national energy policy, which defined nuclear power as an "important base-load power source."

All reactors nationwide are currently offline, as most of them have remained since the disaster at the Fukushima No. 1 plant, triggered by the massive earthquake and tsunami of March 2011.

The report says 88 percent of Japan's energy consumption depended on fossil fuels in fiscal 2013, higher than the 80 percent at the time of the oil crisis in the 1970s.

Imports of fuels such as liquefied natural gas rose ¥10 trillion from 2010 to ¥27 trillion in 2013, mainly because thermal power plants have been operating flat out to replace lost nuclear capacity.

"Increasing imports of fossil fuels is seen as a problem not only on the energy front but also in the economic arena," the report said.

The report also noted that CO2 emissions by utilities surged 112 million tons to 486 million tons in fiscal 2012 from fiscal 2010, which could "raise a question about our nation's stance, after taking a leadership role in international efforts against global warming."

Japan plans to "resume operations of nuclear plants" that have satisfied what the government calls "the world's toughest" regulatory standards, introduced following the Fukushima accident, under the premise that safety is the top priority.

In the Basic Energy Plan, adopted by the government of Prime Minister Shinzo Abe in April, the government overturned a nuclear phase-out goal introduced by the previous government, led by the Democratic Party of Japan

Shiga gubernatorial election & nukes

June 26, 2014
Campaigning begins for Shiga gubernatorial race
http://mainichi.jp/english/english/newsselect/news/20140626p2g00m0dm053000c.html

OTSU, Japan (Kyodo) -- Official campaigning started Thursday for the July 13 gubernatorial election in Shiga Prefecture, western Japan, with the race among three newcomers expected to focus on the economy and nuclear power.

The three who filed candidacy to succeed Gov. Yukiko Kada were Takashi Koyari, 47, a former Economy, Trade and Industry Ministry official, Taizo Mikazuki, 43, a former Democratic Party of Japan lawmaker, and Ikuo Tsubota, 55, a junior high school teacher, all of them running as independents.

Koyari is backed by local chapters of the ruling Liberal Democratic Party and its coalition partner, the New Komeito party, while Mikazuki is supported by the main opposition DPJ and Kada, who is known for her antinuclear stance. Tsubota is backed by the Japanese Communist Party.

Kada, 64, who is now in her second term, said earlier that she will not seek a third term and instead back Mikazuki as her successor. They have agreed to call for a greater say for Shiga in whether to allow nuclear reactors in neighboring Fukui Prefecture to be reactivated, with plans to form a political group together.

If Mikazuki loses, it would likely deal a blow to DPJ leader Banri Kaieda, with some members within the party speaking of a change in party leadership as the DPJ continues to face difficulties regaining momentum to mount a challenge to Prime Minister Shinzo Abe's LDP.

The main focuses of the election are Kada's record in office over the past eight years, economic revitalization measures as well as the restart of nuclear power generation in Fukui.
June 26, 2014(Mainichi Japan)

Japan Gov't still intent on exporting nukes

July 3, 2014
Toshiba nearing Bulgaria nuclear reactor deal
http://www.japantimes.co.jp/news/2014/07/03/business/corporate-business/toshiba-nearing-bulgaria-nuclear-reactor-deal/#.U7WwkLHi91s

Kyodo, JIJI, AFP-JIJI

Toshiba Corp. is close to striking a deal to build a nuclear reactor for a Bulgarian state-owned utility firm for about ¥500 billion, company sources said Thursday.

The Japanese firm plans to build the reactor with output capacity of around 1.1 million kilowatts through its U.S. unit Westinghouse Electric Co.

It is also considering investing in a company related to the utility, Bulgarian Energy Holding EAD, through Westinghouse.

Toshiba and the energy holding company are expected to reach a basic agreement shortly, the sources said.

The report comes as some European countries are looking to cut their reliance on Russia for their energy needs as the Ukraine crisis rumbles on.

Japanese engineering giants including Toshiba, Hitachi and Mitsubishi Heavy Industries have been eyeing opportunities abroad as they try to rekindle an nuclear energy business hammered by the 2011 Fukushima crisis.

The country's nuclear reactors have been shuttered since a tsunami slammed into the Fukushima plant, sending reactors into meltdown and setting off the worst nuclear crisis in a generation.

Last year, Japan and Turkey agreed on a long-awaited deal to build a sprawling nuclear power plant on the Black Sea coast, marking the first order for Japan's atomic sector since the 2011 tragedy.

Bulgaria, which currently depends heavily on thermal power generation using natural gas imported from Russia, is aiming to increasing the use of nuclear power to ensure a more stable energy supply, according to the company sources.

Earlier this week, Toshiba finished buying a 60 percent stake in British nuclear energy firm NuGeneration Ltd. for £102 million(¥17.8 billion).

NuGeneration plans to install three nuclear reactors to be supplied by Westinghouse Electric Co., a U.S. unit of Toshiba, at a new power station in Sellafield in Britain. The station will enter into service in 2024.

NuGeneration was previously held 50-50 by Spanish power firm Iberdrola SA and French energy giant GDF Suez. Toshiba bought all Iberdrola's holdings in NuGeneration and a 10 percent stake from GDF Suez.

Yes, safety is expensive

July 5, 2014

Nuclear safety expenditures top ¥2 trillion

http://www.japantimes.co.jp/news/2014/07/05/national/nuclear-safety-expenditures-top-%C2%A52-trillion/#.U7gniLHi91s

JIJI

The cost of taking nuclear safety measures at the nation's 10 major power companies has reached ¥2.2 trillion, the latest tally said Saturday, up 1.5-fold from a year ago.

Most of the costs involve complying with the new safety standards introduced in July last year as a result of the Fukushima disaster triggered at Tokyo Electric Power Co.'s old Fukushima No. 1 plant by the March 2011 mega-quake and tsunami.

With some companies planning additional safety measures, the costs are expected to grow further, industry sources said.

The utilities comprise all of the regional power providers and Japan Atomic Power Co., but exclude Okinawa Electric Power Co., which has no reactors.

The data cover the costs that the utilities have incurred since the Fukushima disaster, but only partially include Tepco's costs, which date back to the powerful earthquake that struck central Japan in 2007.

Before restarting, all reactors must comply with the new safety regime set up by the Nuclear Regulation Authority. This includes installing equipment and building facilities to help the power plants withstand major quakes and tsunami.

The costs have ballooned from the utilities' initial estimates because some of them are being asked to do more by the NRA, the sources said.

Tepco applied for NRA safety screenings of the No. 6 and 7 reactors at the giant Kashiwazaki-Kariwa power plant in Niigata last September. The beleaguered utility saw safety costs grow to ¥470 billion from ¥320 billion estimated in July 2013 as it added plans to install filtered vents, as required by the new standards, and enhanced measures for fires.

Filtered vents will reduce the danger of releasing radioactive steam from reactor containment vessels during severe nuclear accidents.

Chubu Electric Power Co., which applied for an NRA safety screening for the No. 4 reactor at its Hamaoka nuclear plant in Shizuoka Prefecture, now expects to spend ¥300 billion on safety measures, compared with ¥150 billion as of July last year.

The measures include building a 22-meter breakwater and reinforcing pipes to prepare for a potential earthquake in the Nankai Trough off the Pacific coast.

Kansai Electric Power Co.'s expenses are now estimated at ¥297.5 billion, up slightly from ¥285 billion the year before. Kepco has applied for NRA screenings for reactors 3 and 4 at its Oi nuclear plant and units 3 and 4 at its Takahama plant, both in Fukui Prefecture.

But Kansai Electric may face a surge in safety costs because it plans to make stronger earthquake projections than currently available.

Tohoku Electric Power Co., which kept its safety costs unchanged, said they will eventually rise.

Utilities are likely to face pressure to engage in more cost-cutting because the nuclear safety expenditures are likely to force them to hike prices.

Nukes policies in Germany and Japan

Source : Rocky Mountain Institute

http://blog.rmi.org/blog_2014_07_08_opposite_energy_policies_turned_fukushima_disaster_into_a_loss_for_japan_and_a_win_for_germany

How Opposite Energy Policies Turned The Fukushima Disaster Into A Loss For Japan And A Win For Germany

Jul 8, 2014

Amory B. Lovins

Japan thinks of itself as famously poor in energy, but this national identity rests on a semantic confusion. Japan is indeed poor in fossil fuels—but among all major industrial countries, it's the richest in renewable *energy* like sun, wind, and geothermal. For example, Japan has nine times Germany's renewable energy resources. Yet Japan makes about nine times less of its electricity from renewables (excluding hydropower) than Germany does.

That's not because Japan has inferior engineers or weaker industries, but only because Japan's government allows its powerful allies—regional utility monopolies—to protect their profits by blocking competitors. Since there's no mandatory wholesale power market, only about 1% of power is traded, and utilities own almost all the wires and power plants and hence can decide whom they will allow to compete against their own assets, the vibrant independent power sector has only a 2.3% market share; under real competition it would take most of the rest. These conditions have caused an extraordinary divergence between Japan's and Germany's electricity outcomes.

Before the March 2011 Fukushima disaster, both Germany and Japan were nearly 30% nuclear-pow-ered. In the next four months, Germany restored, and sped up by a year, the nuclear phaseout schedule originally agreed with industry in 2001–02. With the concurrence of all political parties, 41% of Germany's nuclear power capacity—eight units of 17, including five similar to those at Fukushima and seven from the 1970s—got promptly shut down, with the rest to follow during 2015–22.

In 2010, those eight units produced 22.8% of Germany's electricity. Yet a comprehensive package of seven other laws passed at the same time coordinated efficiency, renewable, and other initiatives to ensure reliable and low-carbon energy supplies throughout and long after the phaseout. The German nuclear shutdown, though executed decisively, built on a longstanding deliberative policy evolution consistent with the nuclear construction halts or operating phaseouts adopted in seven other nearby countries both before and after Fukushima.

Moreover, the *Energiewende* term and concept began before 1980, and Germany's formal shift to renewables—now well over 70 billion watts installed—began in 1991, 20 years before Fukushima, then was reinforced in 2000 by feed-in tariffs. Those aren't a subsidy but a way for customers to buy, and hence developers to finance and build, the renewables society chose, with a reasonable chance for sellers to earn a fair return on their investments. FITs' values have plummeted in step with renewable costs, so developers now commonly opt to earn higher market prices instead.

This integrated policy framework and the solid analysis behind it meant that the output lost when those eight reactors closed in 2011 was entirely replaced *in the same year*—59% by the 2011 growth of renewables, 6% by more-efficient use, and 36% by temporarily reduced electricity exports. Through 2012, Germany's loss of 2010 nuclear output was 94% offset by renewable growth; through 2013, 108%. At this rate, renewable growth would replace Germany's entire pre-Fukushima nuclear output by 2016.

Contrary to widespread misreportage, closing those eight reactors did not cause more fossil fuel to be burned. Whenever renewable sources run in Germany, both law and econom-ics require them to displace costlier sources, so renewables always make fossil-fueled plants run less, though often in more complex patterns. The data confirm this: from 2010 through 2013, German nuclear output fell by 43.3 TWh,

renewable output rose by 46.9 TWh, and the power sector burned almost exactly as much more coal and lignite as it burned less of the costlier gas and oil. German utilities bet against the energy transition and lost. Now they gripe that the renewables in which most of them long underinvested have made their thermal plants too costly to run.

Despite those big utilities' self-inflicted woes, Germany adopted a coherent and effective strategy of boosting efficiency and renewables and ensuring their full and fair competition. In contrast, Japan replaced its own, larger lost nuclear generation almost entirely by increasing its imports of costly fossil fuels. These opposite policies produced opposite results.

Japanese people sweltered through the summer of 2011 with impressive cohesion but inadequate electricity and much personal sacrifice. Spurred by Metropolitan Government policies, Tōkyō peak demand fell by 10.7 billion watts or 18% (for big businesses, a remarkable 30%), roughly displacing TEPCO's lost peak nuclear output. Across the metro area, TEPCO's electricity sales fell 11%. But that was not true for Japan as a whole, so power plants' fuel use soared. In contrast, Germany's electricity supply remained so ample that it continued to export more electricity than it imported, even to nuclear-powered France. Germany's net power exports have set new records in each of the past two years.

Japan's economy wilted while Germany's throve, adding several hundred thousand clean-energy jobs—part of the energy transition's net macroeconomic benefit. Japan's electricity prices soared while Germany's whole--sale electricity prices fell more than 60%—including 13% in 2013 alone, when year-ahead prices hit eight-year lows. That's why French energy-intensive industries complain that they can't beat their German competitors' one-fourth-lower power prices. The latest manufactured myth of German "deindustrialization" is ironic because big German industries pay approximately those low and falling wholesale prices and are exempted from paying for the renewables that cause them, as well as from grid charges. Those burdens were instead heaped on households (whose bills are half taxes), though household tariffs have now stabilized as providers' old contracts roll over.

Japan's carbon emissions soared while Germany's power plants and industries emitted no more carbon. (German power-sector emissions fell slightly in 2013: more solid fuel was burned but more efficiently, saving slightly more than electricity output rose.) To be sure, *total* German carbon emissions rose slightly in 2012 due to a cold winter, and in 2013 due to the record power exports that were coal-fueled because of a trifecta of spiking gas prices, cheap coal diverted from shrinking U.S. markets, and an overallocated European carbon-emissions market. But in the first quarter of 2014, German coal-burning and carbon emissions shrank again, as is expected to continue. Germany remains far ahead of meeting its Kyōto climate obligations—by far the most stringent in Europe.

In short, German policy gave renew-ables fair access to the grid, promoted competition, weakened monopolies, and helped citizens and communities own half of renewable capacity. In 2013, Germany's nuclear generation reached a 30-year low while renewable generation, 56% greater, set a new record, reaching an average of 27% of domestic use in the first quarter of 2014 and a brief peak of 74% on 11 May.

Japan has 5% more land, 68% more people, 74% more GDP, and far more sun and wind than Germany, but through February 2014 had added only about one-fifth as much solar power as Germany, and almost no windpower. These produced just 0.97% of Japan's 2012 electricity—one-third India's share, or #29 worldwide—and 1.5% in 2013. Of the roughly 41 billion watts (95% solar) in Japan's order pipeline, much remains lawfully stalled by utility red tape and intransigence.

More than the sacred sun on Japan's flag, its leaders appear to worship old policies that retard wide use of the energy sources now taking over the global market. Since 2008, half the world's added electric generating capacity has been renewable. Non-hydroelectric renewables, chiefly wind and solar, got a

quarter-trillion dollars of private investment and added over 80 billion watts in each of the past three years. Three of the world's top four economies—China, Japan, and Germany, as well as India—now produce more electricity from non-hydro renewables than from nuclear power. Japan is on that list only because its nuclear production is roughly zero; it remains the rich nations' renewable laggard. Perhaps the unexpected May 2014 court decision that prohibited restart of the Oi reactors as unsafe, and for the first time prioritized public safety over utility profits, may signal an emergent change beyond the cosmetic reforms offered by the executive and legislative branches—2016 "deregulation" in name only.

In 2012 and 2013, China made more electricity from wind than from the world's most aggressive nuclear power program. In 2013, China added more solar power than its first developer, the United States, has installed in its whole history. But Japan is heading in the opposite direction: of the 8 GW of renewables brought into operation in the first 20 months after it introduced renewable FITs in July 2012, 97.5% was solar and only 1% windpower. Windpower (especially onshore where it's cheapest) is stymied, first by uniquely slow and onerous approval processes and then by outright rejection by utility monopsonists who get to bar competitors from their regional grids. Japan's windpower association projects the same market share in 2050 that Spain achieved three years ago.

It's not hard to figure out why. Solar power displaces daytime peak that's costly to generate, but the way the solar feed-in tariff works, it's profitable for utilities. In contrast, they lose money on cheap wind-power that also runs at night, displacing coal and nuclear. Japan's latest rules reiterate utilities' right to refuse renewable power that would displace such legacy "baseload" plants. Japanese business leaders may be upset to learn that their electricity, among the world's costliest, is even costlier because their utilities run their own costlier thermal plants while rejecting windpower with nearly zero operating cost.

The electricity reforms passed in late 2013 by the lower house of the Diet (23 years after Germany's reforms began) still let Japan's utilities reject cheaper renewable power for any reason or no reason. Many claim renewables could harm grid stability. So why do Germany, with 25% renewable electricity in 2013, and Denmark, with at least 47%, have Europe's most reliable electricity, about ten times more reliable than America's? These countries, like three others in Europe (none very rich in hydropower) that used roughly half-renewable electricity in 2013—Spain 45%, Scotland 46%, Portugal 58%—simply require fair grid access and competition. Of all major industrial nations, only Japan doesn't.

Germany also uses energy more efficiently. In each of the past three years, German electricity consumption fell while GDP grew. During 1991–2013, i.e. since reunification, German real GDP grew 33% using 4% less primary energy and 2% less electricity, and emitting 21% less carbon. Even more ambitious savings are available and planned.

In contrast, Japan's world-leading energy efficiency gains in the 1970s later stagnated. Japanese industry has continued to improve, and remains among the most efficient of 11 major industrial nations, but Japan ranks tenth in industrial cogeneration and commercial building efficiency, eighth in truck efficiency, and next-to-last (tied with the U.S.) in car efficiency. Yet Japan's sky-high energy prices make energy efficiency very profitable, most of all in buildings. Semiconductor company Rohm's office opposite Kyōto Station, for example, cut its energy use 46% and repaid its cost in two years. With a few exceptions, like the Tōkyō Metropolitan Government's efficiency efforts, few Japanese buildings have received the kind of *kaizen* (continuous improvement) that has long distinguished Japanese industry.

To revitalize its economy and politics, Japan needs an efficiency-and-renewables leapfrog that enables the new energy economy, not protects the old one. Japanese frogs jump too, says Bashō's famous haiku "The old pond / frog jumps in / plop." But we're still waiting for the plop.

This blog post originally appeared on Forbes.

Atom's share of global power at its lowest since 1980s

July 30, 2014

Global nuclear power contribution falls to lowest level since 1980s
http://www.japantimes.co.jp/news/2014/07/30/world/global-nuclear-power-contribution-falls-to-lowest-level-since-1980s/#.U9i0mrHi91s

Reuters

Atomic power's share of the global electricity supply is at the lowest level since the 1980s following the shutdown of Japan's reactors after the Fukushima disaster, and may fall further without major new plant construction.

The forecast is one of the main conclusions of the World Nuclear Industry Status Report 2014, a draft copy of which was passed to Reuters before general release later Tuesday.

The report paints a bleak picture of the industry more than three years after the March 11, 2011, earthquake and tsunami triggered the meltdowns of three reactors at Tokyo Electric Power Co's Fukushima No. 1 power plant.

Rising costs, construction delays, public opposition and aging fleets of reactors will make it difficult for nuclear to reverse the decline in its share of global energy supply, even after two reactors in Japan won provisional approval to restart earlier this month.

Discounting the bulk of Japan's 48 reactors due to their long-term outage, the report said the number of operating units in the world has fallen to 388, 50 less than the peak in 2002.

Nuclear's share of global power generation has fallen to 10.8 percent, down from a high of 17.6 percent in 1996 and the the lowest since the 1980s, it said.

The report also pointed to delays in construction projects, even in China, where the government is strongly pushing for nuclear power to replace heavy carbon emitting coal stations.

Of the 67 reactors under construction globally as at July 2014, at least 49 were experiencing delays and eight had been under construction for 20 years, it said.

The average age of reactors has also increased, rising to more than 28 years, while more than 170 units, or 44 percent of the total, have been operating for more than 30 years or more.

"More than 200 reactors may face shutdown in the coming two decades," Tatsujiro Suzuki, a former Vice Chairman of the Japan Atomic Energy Commission, said in the foreword of the report.

"If new construction pace does not match the pace of shutdown, it is clear that the nuclear share will decline rapidly," Suzuki said.

Renewable energy is taking up an increasing share of the energy mix, the report said. Installed solar capacity in China topped operating nuclear capacity, while in Spain more power was generated from wind in 2013 than any other source, beating nuclear for the first time.

The report's lead authors are industry analysts Mycle Schneider, who is based in Paris, and London-based Antony Froggatt. Both have advised European government bodies on energy and nuclear policy issues.

In Japan, where the pro-nuclear ruling Liberal Democratic Party faces strong public opposition to restarts, the nuclear industry won some relief when the Cabinet reversed the previous government policy of a gradual abolition of atomic power.

But it also endorsed a push for more renewables and set no targets for nuclear energy.

Nuclear pact with India?

August 28, 2014

India's Modi eyes breakthrough nuclear pact on Japan trip
http://www.japantimes.co.jp/news/2014/08/28/national/indias-modi-eyes-breakthrough-nuclear-pact-japan-trip/#.U_9i5mOnrIU
Reuters
NEW DELHI – India is hoping to win Japanese backing for a nuclear energy pact during a visit by Prime Minister Narendra Modi, and to lure investment into its $85 billion market while addressing Japan's concerns about doing business with a nuclear armed country.

India has been pushing for an agreement with Japan along the same lines as a 2008 deal with the United States, under which India was allowed to import U.S. nuclear fuel and technology without giving up its military nuclear program.

But Japan wants explicit Indian guarantees not to conduct nuclear tests, and more intrusive inspections of its nuclear facilities, to ensure that spent fuel is not diverted to make bombs.

India, which sees its weapons as a deterrent against nuclear-armed neighbors China and Pakistan, has sought to meet Japan's concerns. Over the past month, the two sides have sped up negotiations ahead of Modi's visit.

"Serious efforts are being made to resolve any special concerns that Japan has. Whether it will be fully resolved and ready for signing before the end of the PM's trip is unclear," said a former member of India's top atomic energy commission who has been consulted in the drafting of the energy pact.

"I would give it a little better-than-even chance at this point," he said, asking not to be identified because of the sensitivity of the negotiations.

Modi will travel to Japan on Saturday for a five-day visit, his first major bilateral trip since taking office in May. The visit is being billed as an attempt by the two democracies to balance the rising weight of China across Asia.

Modi and host Prime Minister Shinzo Abe are also expected to boost defense ties, speeding up talks on the sale of an amphibious aircraft to the Indian Navy.

Another focus is infrastructure, with the Indian leader seeking Japanese backing for the high-speed bullet trains he promised to voters in his election campaign.

But it is the nuclear pact that can transform ties in a way the deal with the United States did by establishing India as a strategic partner, although nuclear commerce with the United States has since foundered because of concerns over India's liability laws.

Officials in Japan were tight-lipped about the prospects for a nuclear deal.

A civil nuclear energy pact with India would give Japanese nuclear technology firms such as Toshiba Corp. and Hitachi Ltd. access to India's fast-growing market as they seek opportunities overseas to offset an anti-nuclear backlash at home in response to the 2011 Fukushima nuclear disaster.

India operates 20 mostly small reactors at six sites with a capacity of 4,780 megawatts, or 2 percent of its total power capacity, according to the Nuclear Power Corporation of India Limited. The government hopes to increase its nuclear capacity to 63,000 megawatts by 2032 by adding nearly 30 reactors.

India is considering a Japanese proposal for a separate commitment not to test nuclear weapons over and above a self-imposed moratorium it declared after testing in 1998.

Another possibility is that Modi would give a personal assurance to Abe on India's nuclear weapons program to help allay concerns in Japan, the only country to have suffered a nuclear attack, which has since been a champion of nonproliferation and disarmament.

"India and Japan are laying the foundations of a bigger deal," said Lt. Gen. A.S. Lamba, former vice chief of the army and an expert on ties with Japan.

"It's no use rushing into something that fails to get off the ground, which is what happened to the India-U.S. agreement," Lamba said. "This is being constructed slowly, this is a defining moment."

New environment Minister vows to help Fukushima

September 4, 2014

New environment chief Mochizuki takes on Fukushima radiation woes

Staff Writer

New Environment Minister Yoshio Mochizuki on Thursday stressed the ministry's commitment to speeding up efforts to reduce Fukushima's radiation woes and vowed to get the prefecture's radioactive waste storage facility up and running.

Mochizuki's appointment comes after Fukushima Mayor Yuhei Sato on Saturday officially agreed to let the government build a storage facility near the crippled Fukushima No. 1 power plant, where contaminated waste will be kept for 30 years until the government can figure out a way to safely dispose of it.

The exact location of the facility hasn't been decided yet, but it will be somewhere within the boundaries of Okuma and Futaba, the two tainted towns hosting the wrecked plant.

Despite the flimsy details, the government nonetheless hopes to start transporting tainted soil and other waste to the site as soon as next January, but concerns are mounting over the feasibility of the schedule.

"I know the road ahead is rough, but the ministry is determined to follow through on our current plan. We shouldn't let our uncertainty affect our determination, at least for now," Mochizuki said.

Meanwhile, Mochizuki said he was eager to achieve the ambitious goal set forth by his predecessor, Nobuteru Ishihara, to make renewable energy account for as much as 30 percent of Japan's total estimated power output for 2030.

"That's a goal, and I'd probably have to do a lot of thinking from now on to assess its (feasibility)," he said. "But still, I'm determined to ensure that Japan won't lag behind global standards and will live up to its reputation as an environment-friendly nation."

No new nukes

September 4, 2014

New METI chief Obuchi rules out new nuclear power plants

http://www.japantimes.co.jp/news/2014/09/04/national/new-meti-chief-obuchi-rules-new-nuclear-power-plants/#.VAizPWOnq1s

by Kazuaki Nagata

Staff Writer

Newly appointed trade and industry minister Yuko Obuchi on Thursday ruled out the construction of new nuclear power plants anytime soon.

"Safety checks of existing nuclear plants are being conducted now, so I'm not expecting to see new plants built at this point," the first woman ever to head METI said in a group interview with the media. But Obuchi, 40, said the government will support restarting Japan's existing reactors once the Nuclear Regulation Authority confirms they meet its new safety standards.

In July, reactors 1 and 2 at the Sendai plant in Kagoshima Prefecture became the first to pass the stricter safety standards drafted after the Fukushima nuclear crisis emerged in 2011, making them the closes to being restarted.

Obuchi, who is the daughter of the late Prime Minister Keizo Obuchi, is likely to have a tough time overseeing the industry because anti-nuclear forces at both the local and national levels will be fiercely fighting restarts, especially those involving nuclear plants as old as doomed Fukushima No. 1 and those built on or near fault lines.

"I think it is more important than anything to win over people in local areas," she said.
As for national energy policy, Obuchi stressed that Japan needs to reduce its dependence on atomic power as much as possible while attempting to see how far it can go with renewable energy, as stated in the basic energy plan approved by the Cabinet in April.
Prime Minister Shinzo Abe reshuffled his Cabinet Wednesday and appointed five female ministers to show he is committed to female empowerment.

Restart & decommission to win public support

September 10, 2014

Japan to OK nuclear plant return while pushing to close old reactors

http://www.japantimes.co.jp/news/2014/09/10/national/japan-ok-nuclear-plant-return-pushing-close-old-reactors/#.VA_uvmOnq1s

Reuters

Japan is set to give the go-ahead to restart its idled nuclear industry just as it moves to definitively close some of its oldest reactors, launching a cull of the long-monolithic industry.
As Japan nears the end of its first full year without nuclear power since 1966, regulators are expected to give final safety approval on Wednesday to restart a power station in the south of the country.
At the same time, the government is pressing regulators to make the tough decision on whether to decommission the oldest of the country's 48 reactors, which face higher safety hurdles than the rest. A quarter of those reactors could be targeted for permanent shutdown.
By weeding out reactors that are 40 years old or more, the government appears to be trying to win support for the long process of restarts from a public that turned against nuclear power because of the 2011 Fukushima disaster, the worst since Chernobyl in 1986.
"For myself, I would like to proceed with smooth decommissioning (of some plants) and at the same time the restart of nuclear power stations certified as safe," Yuko Obuchi, the new minister for economy, trade and industry, who oversees the nuclear industry, said last week.
The government of Prime Minister Shinzo Abe has been pressing to restart reactors that receive safety approval from the Nuclear Regulation Authority to reduce Japan's reliance on expensive imported fuel. But until recently, the government had not stressed the need for making hard choices about the oldest reactors.
The push for a reckoning on some plants is "clearly part of the strategy by the government and utilities to send a signal to the people of Japan that they are listening and taking into account the lessons of Fukushima," said prominent nuclear power critic Arnie Gundersen, director of Fairewinds Energy Education.
"But it also reflects the challenge faced by utilities in finding the funds to bring older reactors to a standard that can pass NRA approval," Gunderson, a veteran U.S. nuclear engineer who turned against nuclear energy for safety reasons, said by email.
Under post-Fukushima rules, reactors are supposed to be decommissioned after 40 years. They can receive a 20-year extension but that is subject to more rigorous and costly safety regulations.

As many as two-thirds of Japan's 48 idled nuclear units may never return to operation because of the high costs, local opposition or seismic risks, while one-third will probably come back online eventually, a Reuters analysis showed this year.
The NRA is expected to give final safety clearance at a meeting on Wednesday for Kyushu Electric Power Co's Sendai plant, after granting the two-reactor power station preliminary approval in July.
While the approval certifies the upgraded design and safety features of the reactors, the units, which have been shut for more than three years, will still have to undergo operational safety checks and be given the green light to restart by local authorities.
Local media said the restart of the Sendai plant in Kagoshima Prefecture may not come until next year.
Utilities that want to extend the operating life of old reactors must submit detailed safety applications by July 2015, explaining how those facilities could be updated to meet the tougher safety standards put in place.
NRA chief Shunichi Tanaka said it takes time and money to clear the additional hurdles. The ageing reactors' capacity is typically about half that of newer ones and it may not make economic sense to make the necessary massive investments.
Kansai Electric Power Co sees scrapping the Mihama plant's reactors 1 and 2, both over 40 years old, as an option, a company official said.
Kyushu Electric is considering decommissioning its 38-year-old Genkai plant's reactor 1, a government source told Reuters.
Chugoku Electric Power Co President Tomohide Karita said in March the utility was considering scrapping the 40-year-old Shimane plant's reactor 1.
The government is likely to ask the operators of 12 reactors that began operations before 1980 to decide by the end of the year whether to decommission them, media reports said last week.

Worrying

September 18, 2014

Editorial: Nuclear plant support measures run counter to official policy

http://mainichi.jp/english/english/perspectives/news/20140918p2a00m0na003000c.html
The Ministry of Economy, Trade and Industry is considering boosting support for nuclear power plants as Japan moves toward full liberalization of its electricity retailing market.
Under the system eyed by the ministry, consumers would shoulder the huge costs of building and decommissioning reactors so that even if there were an electricity price war, power companies wouldn't go into the red. In essence, the system makes it easy to build and rebuild nuclear power plants and maintain them in the future.
But proposals that attempt to extend the life of nuclear power plants when the government has yet to present a picture for the future of the nation's energy policies cannot be justified.
Nuclear power costs much more than thermal and other forms of power, yet for decades power companies have recovered expenses, protected by regional monopolies and the full cost pricing method that tacks the cost of producing electricity onto power bills.
With the full liberalization of electricity retailing set to be implemented in fiscal 2016, however, those power companies will lose their regional monopolies. And then the full cost pricing method will be

abolished. If more newcomers enter the electricity market and the price of electricity drops, it will become even harder for power companies to recover costs associated with nuclear power.
The Ministry of Economy, Trade and Industry therefore proposed new measures to support nuclear power at a meeting to deliberate the role of the nation's nuclear power plants. With respect to the system guaranteeing a set price for electricity produced though nuclear power, the ministry proposed that the cost of decommissioning nuclear reactors and the disposing of spent nuclear fuel be made part of a standard price, with consumers forced to cover the difference if the market price falls below that standard.
The ministry is also reportedly set to consider revisions to accounting systems to ease the effects of reactor decommissioning on management.
In terms of fuel alone, nuclear power plants can be run more cheaply than oil-fired power plants or those running on liquefied natural gas. This is probably why power companies are rushing to restart reactors. But when it comes to building a new nuclear plant or rebuilding an existing one, then the circumstances are entirely different. The latest support measures indicate that if market principles were to be given free reign, then the option of maintaining nuclear power would vanish.
The basic energy plan that the Cabinet approved in April this year states that Japan will aim to reduce its reliance on nuclear power "as much as possible." At the same time, it describes nuclear power as an "important base-load power source" and says the government will determine the level that should be secured. The proposed measures run counter to the policy of breaking with nuclear power. When considering the government's keenness to restart nuclear power plants, it seems that its real intention is to rely on nuclear power.
It is probably difficult to do away with nuclear power immediately when considering the importance of a stable supply of electricity, global warming countermeasures, energy security and other such issues. But Japan has gone through the Fukushima nuclear disaster, and it should be aiming to achieve a society that does not rely on nuclear power.
The government should therefore outline a path for solving these issues and provide an explanation to the public. Policies that take nuclear power for granted will not win public support.
September 18, 2014(Mainichi Japan)

International nuclear compensation pact?

September 22, 2014

Abe preps bill to join nuclear redress-immunity pact

http://www.japantimes.co.jp/news/2014/09/22/national/japan-joining-nuclear-compensation-pact-would-clear-way-for-international-cleanup-aid/#.VCBrfxanp1s
Kyodo, JIJI, Staff Report
DECON, GOING SLOW: PAGE 3 – The administration of Prime Minister Shinzo Abe plans to submit a bill to the Diet by the end of the year to have Japan join an **international pact on compensation in the event of a nuclear disaster,** Chief Cabinet Secretary Yoshihide Suga said Monday
Under the Convention on Supplementary Compensation for Nuclear Damage, known as the CSC, contributions from member states partially cover damages payments in the event of an atomic disaster.

"By ratifying the treaty, (Japan) can support the participation of overseas companies in the decommissioning of — and measures against radiation-tainted water at — the Fukushima No. 1 nuclear power plant," Suga told a news conference.
Suga's comment echoed one by science minister Shunichi Yamaguchi, who conveyed Japan's plan to submit the bill, to U.S. Energy Secretary Ernest Moniz in Vienna Sunday.
Moniz praised the move, noting Tokyo's ratification will help the pact take force, Japanese officials said.
The treaty has been ratified by the United States, Argentina, Morocco, Romania and the United Arab Emirates.
Japan's participation in the CSC is seen as necessary for U.S. companies to take part in the hazardous decontamination and decommissioning work underway at Tokyo Electric Power Co.'s crippled atomic plant.
It is also seen as crucial for Japanese manufacturers who are considering marketing nuclear technology overseas, because ratification would make them immune from liability claims resulting from a nuclear disaster.
Last October, Abe's team said it planned to join the treaty at the request of the U.S., which was promoting it as a way to compensate accident victims and protect the makers of nuclear plants from liability.
Under the convention, liability falls solely on the operators of the plants, which would make it easier for U.S. firms to help out in Fukushima.
The Japan Federation of Bar Associations, however, is opposed to the treaty.
In a statement Aug. 22, the lawyers' group said the plan is "part of moves to push for the exporting of nuclear plants," a move that is unacceptable as the promotion of nuclear plants overseas "could inflict irreparable damage to the human rights of people in recipient countries and their neighboring countries, and could lead to environmental problems."
The U.S. energy chief vowed support for restarting two reactors at Kyushu Electric Power Co.'s Sendai power plant in Kagoshima Prefecture. Yamaguchi told him the units recently passed the Nuclear Regulation Authority's new safety tests.
Yamaguchi and Moniz are in Vienna to attend the general meeting of the International Atomic Energy Agency, which started Monday in the Austrian capital.

What future for nukes?

September 22, 2014
Source : Climate Spectator
http://www.businessspectator.com.au/article/2014/9/22/energy-markets/rio-tintos-great-big-nuclear-delusion

Rio Tinto's great big nuclear delusion

Matthew Wright

Rio Tinto's energy chief, quoted in *The Australian Financial Review* article this month 'The burning question of coal', believes "there will be a return to nuclear" and that China will lead it, stating that a joint

venture has “quietly developed” between China’s state nuclear technology company and the Toshiba Westinghouse Corporation”.

The problem is that that consortium hasn’t produced a third-generation nuclear reactor. In fact, nobody has and all the so-called Gen III-plus reactors under construction globally are behind schedule and over budget – including those in China.

Kenyon-Slaney is living in hope as Rio is invested so heavily in uranium – a mineral which peaked in 2005, well before Germany decided to exit nuclear and Japan idled their entire reactor fleet.

It would be comical if it wasn’t so serious, but Kenyon-Slaney’s nuclear industry just can’t put a foot right. Delays are mounting up in the west, and OECD countries and huge resources are being spent keeping old ageing reactors online. The expenditure that could be better directed is immense.

As a well-known supporter of serious action on climate change, including decarbonisation of all sectors, I have on numerous occasions written about nuclear energy. Following those articles, supporters of nuclear energy have often asked, if I’m serious about climate change, why would I oppose nuclear (a low emissions source of electricity)? In this column I’ll answer that question. But, first I’ll give an update on a few of the latest nuclear industry disaster stories from around the globe.

Japan

The Fukushima disaster clean-up bill will now exceed $112 billion*.

Another problem is the failed plan to construct an underground ice wall to stop radioactive water from flowing into the Pacific Ocean – Tokyo Electric Power has all but admitted it’s a complete failure.

Elsewhere at the Fukushima site, another reactor that wasn’t destroyed during the earthquake-tsunami had a leak in its spent fuel rod pool, which almost spiralled out of control, which would have created yet another calamity.

Broad public support for restarts is non-existent across Japan – even the country’s first lady, the wife of the pro-nuclear Prime Minister has come out against further use of the technology. In order to rally public support some proposals have been floated, including retiring the oldest 25 per cent (14 units) of reactors – or even as much as 33 per cent (16 units) – to try and convince the public that government and regulators are taking safety seriously. Measures like this are unlikely to sway public sentiment.

The direct cost of importing fuel to substitute for the lost production from Japan’s nuclear reactors is estimated to be about $38 billion per year, while some analysts have put the entire trade deficit, now running at $120 billion, down to direct and indirect costs of having the reactors shutdown. Additionally, in 2012 Japan abandoned its fast breeder reactor program after wasting $13 billion dollars on it since 1984.

Europe

Europe’s nuclear industry is struggling. Many reactors are currently off-line for much longer periods than scheduled, Germany and Switzerland are phasing out their reactors and most countries –including Spain, Austria, Sweden and Italy – won’t be building any reactors.

Areva, the world’s biggest builder of nuclear along with French utility EDF, can’t deliver on a new reactor project. Reactors under construction at Flamanville, France and Olkiluoto in Finland are years behind schedule and billions over budget. In the last couple of weeks, Areva has admitted that the Finnish project, originally planned to be online and delivering electricity in 2008, will now be delayed until late 2018. This is another way of saying 2019, 2020 or ... never.

United States

All four nuclear reactors being constructed in the US are suffering costly delays. The reactors rated at 990MWe (2100MWe gross) under construction in Georgia and South Carolina were supposed to begin power generation in 2016. These four reactors are reported to cost $28 billion. Georgia Power says that “it

remains cheaper to finish building the nuclear plant than to stop and instead build gas-fired power plant", meaning that it would have been far better for consumers if they never started in the first place.
The US reactor building delays are being downplayed but, as we know from previous experience, once builders/authorities announce one delay you can be sure that they will follow with many more. In South Carolina ratepayers are already paying more than 20 per cent of their bill for electricity from nuclear power plants that don't even yet exist.
In the meantime, a number of nuclear plants have been shuttered due to failures including serious radioactive leaks, or inability to compete with renewables in the US wholesale electricity market.
China
The central government had ambitious plans to build a significant amount of nuclear power plants, but since Fukushima their local Gen II designs being used on every project have been scrapped for future projects, and Gen III designs. These Gen IIIs have never been built anywhere, and are the only acceptable options for future projects. And here's the problem: just like in France, Finland, Georgia and South Carolina, China's projects are significantly over budget and behind schedule, adding millions of dollars of cost for every additional day without power generation. Back in 2010, China claimed that it would build 80GW of new nuclear by 2020, but the reality is it is likely to add just 20GW, around 75 per cent short of their target.
So why should we be against nuclear?
If the post-Fukushima Japan reactor shutdown delivers an accrued trade deficit over four years of ~$400 billion, as reported, and the clean-up is to cost $100 billion, then that $500 billion alone would have delivered a 100 per cent renewable Japan. Indeed $500 billion would buy 250GW of wind at today's prices, but due to the massive scale of cash into the sector it would drive learning, scaling, and innovation to deliver in excess of 500GW – or 1½ times the wind energy capacity to provide the equivalent of all of Japan's electricity.
And it would be similar for solar, where learning rates and reduction in costs – including balance-of-plant costs – are even greater with scale. At today's prices $500 billion would buy 310GW of solar PV; enough to provide a third of Japan's electricity. Taking into account continued and accelerated cost reductions in technology, such capital injections would lead to twice or thrice that figure –enough to more than power the entire needs of the Asian superpower.
So, if we want cheap and resilient power sooner, faster and as a viable opportunity for all people in all nations, then it is with renewables. But by taking a diversionary path to expensive options like nuclear we are delaying the point at which we inevitably achieve cheap renewables that can be deployed anywhere by anyone.
So put simply, if the extraordinary amounts of money spent on the nuclear fuel cycle were redirected to renewables we would get a lot more electricity generated for every dollar invested.
**All figure are in Australian dollars.*
***Matthew Wright** is executive director of Zero Emissions Australia and a resident columnist at* Climate Spectator.

Not worried about proliferation

September 30, 2014

U.S. nuclear concerns sidelined by plutonium plans

Bloomberg

http://www.japantimes.co.jp/news/2014/09/30/national/u-s-nuclear-concerns-sidelined-plutonium-plans/#.VCruLBanp1s

VIENNA – U.S. concern over the long-term proliferation risk of nuclear waste isn't stopping countries from planning to extract plutonium from radioactive refuse to power a new generation of atomic reactors.

French, Japanese, Russian and South Korean officials lined up against their U.S. counterparts in September at the International Atomic Energy Agency, where two weeks of meetings on waste, proliferation and energy ended Monday in Vienna.

"We've made it pretty clear that we are not interested or supportive," U.S. Secretary of Energy Ernest Moniz said last week at a briefing.

Countries that do move forward with plans to reprocess nuclear waste into new reactor fuel should make sure to keep plutonium inventories at a minimum, he said.

About 8 kg of plutonium are needed to make a nuclear weapon and it's technically impossible to account for all the material in the biggest reprocessing facilities. With about 50 metric tons of stockpiled weapons-grade plutonium, the U.S. decided in the 1970s not to separate more of the heavy metal for civilian purposes. Other countries are pressing toward a vision that would keep nuclear waste as an asset rather than a liability by stripping it of plutonium.

By reprocessing plutonium "we reduce the amount of waste for disposal and we reduce the footprint of the repository," Gerald Ouzounian, international director at France's Radioactive Waste Management Agency, said Sept. 23 at an IAEA panel.

Russia is nearing a decision to begin selling a new generation of reactors that will run on mixed-oxide, or MOX, fuel using plutonium, Rosatom's director of innovation, Vyacheslav Pershukov, told the IAEA.

Plutonium processing is also "in the pipeline" for South Korea, the country's minister of science, Yanghee Choi, said last week.

Japanese plans to start a $21 billion reprocessing plant stoked tensions with China in March after it emerged that more than 9 tons of plutonium were stockpiled without any use after the country's reactors were shut down following the March 2011 tsunami that wrecked the Fukushima No. 1 nuclear plant.

"A major concern" for the U.S. is that plutonium is piling up in Japan without being used to fuel reactors, Moniz said. "Clearly in Japan, until a significant number of nuclear reactors — if and when — are restarted, there will be no end use of the MOX."

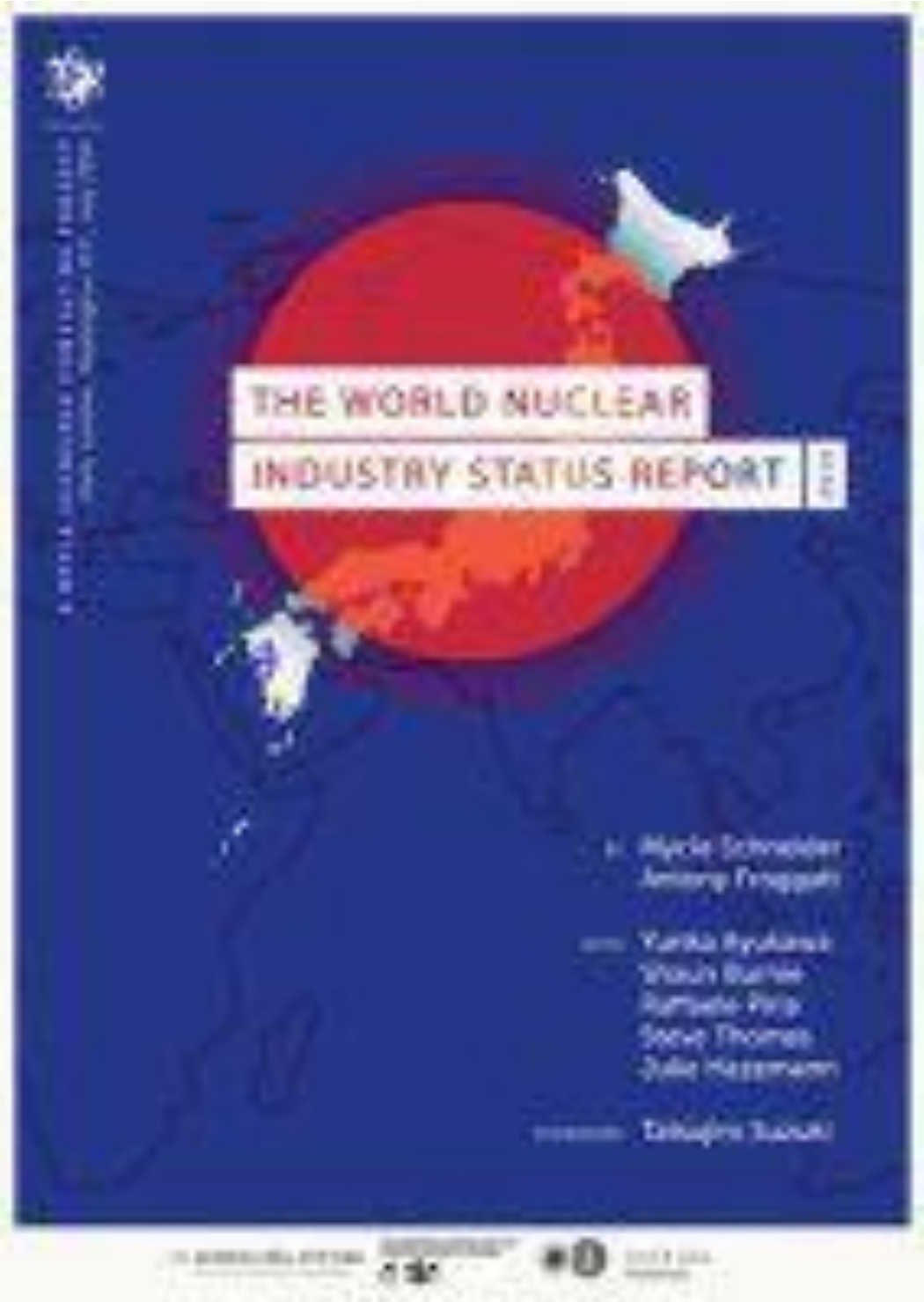
It will be difficult for Japan Nuclear Fuel Ltd. to start its reprocessing plant in Rokkasho, Aomori Prefecture, as planned in October because it is still under regulatory review, spokesman Yoshi Sasaki said Sept. 24. The company has not decided on a revised start date, he said.

The long-term viability of creating a market for plutonium requires the commercialization of new reactors, said U.S. Nuclear Regulatory Commission Chairman Allison MacFarlane. Only Russia's BN-800 sodium-cooled fast reactor is close to commercialization.

The U.S., which stopped developing fast reactor technologies in the 1990s, prefers direct disposal of nuclear waste rather than reprocessing.

"You do have a proliferation issue with the kind of reprocessing that is practiced by France and some other countries," MacFarlane said at the IAEA. "By directly disposing you don't develop that large proliferation hazard."

World Nuclear industry Status Report 2014



http://www.worldnuclearreport.org/-2014-.html

2014

The World Nuclear Industry Status Report 2014

The world's nuclear statistics are distorted by an anomaly whose cause is not technical but political. Three years after the Fukushima events started unfolding on 11 March 2011, government, industry and international institutional organizations continue to misrepresent the effects of the disaster on the Japanese nuclear program. To find a more appropriate way to deal with this situation, the *World Nuclear Industry Status Report 2014* proposes a new category called Long-Term Outage (LTO).

Read online or download the PDF version

World Nuclear Industry Status Report 2014 (2)

Report 2014: Executive Summary

http://www.worldnuclearreport.org/The-World-Nuclear-Industry-Status-Report-2014.html

Tuesday 29 July 2014

Paris, London, Washington, 29 July 2014.

"The 2014 World Nuclear Industry Status Report brings clear, careful, honest, and transparent reporting to a topic often obscured by spin and wishful thinking. Any serious student of this complex industry will reach first for this admirable volume."

Amory B. Lovins, Chief Scientist, Rocky Mountain Institute

The world's nuclear statistics are distorted by an anomaly whose cause is not technical but political. Three years after the Fukushima events started unfolding on 11 March 2011, government, industry and international institutional organizations continue to misrepresent the effects of the disaster on the Japanese nuclear program. In statistical documents on the issue, with the exception of the six units at Fukushima Daiichi, the entire Japanese reactor fleet of 48 units is considered operating. The International Atomic Energy Agency (IAEA) classifies all of these Japanese reactors as "in operation"—11 percent of what the IAEA considers the world nuclear fleet—despite the fact that none of them have generated power since September 2013, only two produced electricity in 2013 and just ten in 2012. The *average* outage of these Japanese "operational" units is over three years, as this report documents. In fact, three units have not generated power for the past *seven* years. To find a more appropriate way to deal with this situation, the *World Nuclear Industry Status Report 2014* proposes a new category called Long-Term Outage (LTO).

Taking into account reactors in LTO, the number of operational reactors in the world drops by 39 (9 percent) from 427 in July 2013 to 388 in July 2014—50 fewer than at the peak in 2002— and brings world nuclear statistics into closer alignment with reality.

Mycle Schneider, Project Coordinator and Lead Author of the WNISR, states: "It is time to match the international nuclear statistics to the industrial reality. The introduction of the new category Long-Term Outage (LTO) more appropriately represents the operational status of nuclear power plants and provides industry analysts, political decision-makers and investors with a tool that mirrors empirical facts rather than wishful thinking."

The *World Nuclear Industry Status Report 2014 (WNISR)* provides a comprehensive overview of nuclear power plant data, including information on operation, production and construction. The WNISR assesses the status of new-build programs in existing as well as in potential newcomer nuclear countries and looks in detail at how the changing market conditions are affecting the economics of nuclear power. WNISR2014 also updates a Fukushima Status Report featured for the first time in 2013 that triggered widespread media and analyst attention. While the Nuclear Power vs. Renewable Energy chapter provides comparative data on investment, capacity, and generation and assesses how nuclear power performs in systems with high renewable energy share.

Finally, a detailed country-by-country analysis provides an overview of all 31 countries operating nuclear power plants, with extended sections on China, Japan, and the United States.

Some of the key features of the *World Nuclear Industry Status Report 2014* include:

• **Declining role.** Nuclear power's share of global commercial primary energy production declined from the 2012 low of 4.5 percent, a level last seen in 1984, to a new low of 4.4 percent.

• **Aging.** The average age of the world's operating nuclear reactors to increase and by mid-2014 stood at 28.5 years.

• **Construction Delays.** At least 49—including three quarters of the Chinese projects—of the total of 69 construction sites have encountered delays, many of them multi-annual. Construction of two units in Taiwan was halted.

• **Project Cancellations.** Several projects have been cancelled and new programs indefinitely delayed, including in the Czech Republic and in Vietnam.

• **Operating Costs Soar.** Nuclear generating costs jumped by 16 percent in real terms in three years in France, and several units are shut down in the U.S. because income does not cover operating costs. The economic survival of nuclear plants is also threatened in Belgium, Germany and Sweden.

• **Renewables vs. Nuclear.** In 2013 alone, 32 gigawatts (GW) of wind and 37 GW of solar were added to the world power grids. By the end of 2013, China had 91 GW of wind power and 18 GW of solar capacity installed, solar exceeding for the first time operating nuclear capacity. China added four times more solar than nuclear capacity in the past year. And Spain generated more power from wind than from *any* other source, outpacing nuclear for the first time. It is also the first time that wind has become the largest electricity generating source over an entire year in any country. Spain has thus joined the list of nuclear countries that produce more electricity from new renewables—excluding large hydro-power—than from nuclear power that includes Brazil, China, Germany, India and Japan.

For further information and full copies of all previous reports see WNISR2014 - browse online.

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Download the executive summary as PDF

Beyond Nuclear on the World Industry 2014 Report

Introducing JUST THE FACTS
Our new series, ***JUST THE FACTS*,** delivers timely and topical nuggets of empirical data from the World Nuclear Industry Status Report countering nuclear myths in the media. This week we responded to James Conca's erroneous lead in *Forbes magazine* that "Nuclear energy is growing around the world." Among our points: there are 50 fewer plants operating now than at the 2002 peak; even if the 67 reactors under construction are completed by 2020 (unlikely, given delays and soaring costs), installed nuclear capacity will still drop; the global nuclear market share has in fact decreased; and meanwhile installed capacity for renewables is soaring.

Nuclear growth: the reality check

http://www.beyondnuclear.org/storage/wnisr-blips/BN%20WebForbes_Conca_response.pdf

By Paul Gunter
Director of Reactor Oversight, Beyond Nuclear

Is nuclear power really growing as James Conca asserts in the opening line of his recent column (The Nuclear Weapons States: Who Has Them and How Many)? That rather depends on how you define "growing."

Growing in operating units and if so, compared to what and when? Growing in capacity or output? Growing in share of the world's power generation? Growing in new construction sites?

Let's take a reality check before accepting the "growth" myth. This can readily be done by consulting the independent 2014 World Nuclear Industry Status Report,which deliberately omits plans and aspirations and looks only at empirical data.

Conca cites the 430 "operational number" pulled from the International Atomic Energy Agency, which considers a reactor as "in operation" even when it is idle. The IAEA counts all 48 of the currently shuttered reactors in Japan as "operating." More correctly,
the IAEA number should be defined as "operable." The true count is 388, as found in the WNISR(page 16),50 fewer than the peak in 2002. So operationally, nuclear power is in decline.

There are currently 67 reactors under construction worldwide in 14 countries. But "under construction" does not indicate eventual completion. Eight of the 67 have been "under construction" for more than 20 years including one in the U.S. -- at Watts Bar, TN --
which has been "under construction" for a whopping 41 years.

Significant construction delays and sky-rocketing cost over-runs are par for the nuclear course as witnessed at the remaining four sites underway in the U.S. and the plodding pace of the French EPR in France and Finland also mired in fights over financing and
safety.

While 67 represents "growth" compared to the lowest ebb of 2005, it is far behind the peak years of the 1980s. As the WNISR(pg. 19) states, "simply having an order for a reactor, or even having a nuclear plant at an advanced stage of construction, is no
guarantee for grid connection and power production."

Even if all 67 reactors currently under construction miraculously reached completion and came on line by 2020, installed nuclear capacity would still drop globally by 7.5 GW according to the
WNISR (pg. 23). Therefore, the promise of new reactors, even if
realized, does not in fact represent growth.

Nuclear electricity production has declined dramatically worldwide from its historic peak in 2006. Stability over the last two years does not necessarily indicate growth either, as the trajectory over time remains downward. This is also the case with the nuclear share
of the electricity marketplace, which has declined steadily from a historic peak of 17.6 percent in 1996 to 10.8 percent in 2013, according to the WNISR (page 6.)

The report also observes that any "increases in nuclear generation are mostly as a result of higher productivity and uprating at existing plants rather than due to new reactors." However, this pathway inevitably lowers safety margins.

The WNISR(pg. 24) concludes that "the number of reactors in operation will stagnate at best but will more likely decline over the coming years unless lifetime extension beyond 40 years becomes widespread." The costs of running these aging and degrading plants
60 or even 80 years makes this scenario economically unappealing. In the past year we have already witnessed the closure of four reactors in the U.S., where the owners preferred shutdown over expensive safety fixes (a fifth, Vermont Yankee, is scheduled to shut permanently in December.)

Conca's other myth, that"No nuclear weapons program ever came out of a nuclear energy program," is not borne out by the facts. A look back at the genesis of the nuclear weapons programs in France, India, Pakistan, China, South Africa, Israel and North Korea all point to the development, first, of so-called civilian nuclear power plants to establish the pathway to the bomb. Iran is another case in point where debate still rages around that country's true nuclear intentions. The eagerness to develop expensive nuclear power programs in solar-friendly countries, particularly in the Middle East and Asia, is a clear indicator that even just the potential this affords to transition to an atomic weapons program is a desirable political bargaining tool.

So where is genuine growth to be found in the energy sector?

In terms of installed capacity, renewables have soared since 2000 while nuclear has stagnated. Solar PV has seen an annual growth rate of 43 percent, 25 percent for wind and 0.4 percent for nuclear. Given the rapidity with which renewable energy capacity is installed, and the falling costs (which explains the recent slight decrease in renewable investment globally even as capacity increases) we can fully expect the upward trajectory for renewable energy to continue as nuclear continues to decline.

Spinning the numbers may create an illusion of growth in the nuclear sector, but the hard facts paint a very different story. The real "growth" is happening in the renewable energy sector, which, for the sake of planetary survival, is exactly the way things need
to be.

Paul Gunter is the Director of Reactor Oversight at Beyond Nuclear, a nuclear energy watchdog organization based in Takoma Park, MD
http://www.beyondnuclear.org/

Too much clean energy? (2)

October 4, 2014

EDITORIAL: Measures needed to prevent renewable energy boom from going bust

http://ajw.asahi.com/article/views/editorial/AJ201410040038

The positive growth of electricity production using renewable energy powered by the feed-in-tariff (FIT) system is beginning to show signs of losing steam.
Major power utilities are suspending the acceptance of new entries into the FIT program because the capacity of their transmission lines to take additional electricity has reached its limit in some areas. Of the 10 big utilities that are legally required to purchase all power generated from renewable energy sources at fixed prices, five, including Kyushu Electric Power Co., have stopped making new FIT contracts in almost all the areas they serve.
This inability by utilities to accept all the electricity produced under the FIT program due to capacity deficiency reflects the strong investment interest in renewable energy and the high expectations for the use of green power.
But solar and wind power has one big drawback. The amount of electricity generated with these energy sources tends to fluctuate wildly due to factors such as weather conditions, time of day and the season. Such fluctuations in power generation, unless they are properly adjusted, can affect the frequency and voltage of the power, causing power failures and malfunctioning equipment.

One solution is to expand transmission lines for integrated operations to wider areas so that the effects of the fluctuations in power generation can be buffered more easily.
Thicker power lines between utilities will allow for the transmission of surplus power generated from renewable energy sources in one area, say Kyushu, to other areas where there is demand.
Decisions on investing in power grids in the past had been left up to the individual utilities.
The situation, however, will change when the scheduled power market reform separates the operation of transmission lines from the business of power generation. This will encourage investment in transmission grids based on a broader perspective that is not restricted by the needs of the individual utilities.
Starting in April next year, a new operational entity will take charge of integrating the transmission lines operated by regional power companies. The new body will be responsible for developing trunk transmission lines and connecting lines between utilities.
This new system will make it easier to expand and enhance transmission grids in response to policy needs and requests from power generation companies.
Some issues remain to be sorted out, such as how the costs should be shared. But it is vital to carry through such power system reforms without delay.
It will take time, however, to build up a large network of transmission lines covering wide areas. There are also problems that need to be solved, including the insufficient capacity of transmission lines at locations where they are connected to power plants.
The Ministry of Economy, Trade and Industry will set up a working group to study the formula for calculating the maximum amount of green electricity individual utilities can accept, as well as conditions for such acceptance.
The ministry should consider taking steps to ensure early, preferably ahead-of-schedule, implementation of plans to bolster transformers and storage batteries, instead of leaving utilities to decide when to take these measures.
As for large-scale solar farms, which account for the majority of applications for power sales under the FIT program, the ministry may need to ensure the appropriate scale by using the price mechanism. It can do so, for instance, by reviewing the purchase prices more frequently than the current once a year.
Promoting the use of renewable energy is a global trend. It is important from the viewpoint of developing alternative energy sources that can replace nuclear power and fossil fuels and of tackling global warming.
In its new basic energy supply plan, the government designated about three years from 2013 as a period for "maximum possible acceleration" in the effort to spread the use of renewable energy. It has set a target of increasing the share of clean power as part of the nation's overall electricity production to more than 20 percent by 2030.
The government should figure out ways to prevent the current renewable energy boom from going bust.
--The Asahi Shimbun, Oct. 4

Too much clean energy? (3)

October 5, 2014

Unprepared for green electricity

http://www.japantimes.co.jp/opinion/2014/10/05/editorials/unprepared-green-electricity/#.VDFjNxanp1s

Under the feed-in-tariff system introduced in July 2012 by the then Democratic Party of Japan administration, the nation's major power companies are required by law to buy, in principle, all the electricity generated by solar, wind, geothermal and medium-to-small-scale hydro-power sources and biomass at fixed prices.

The purchase costs are to be added to electricity charges. It was hoped that the system would help revitalize local economies and reduce Japan's dependence on nuclear power. Recently, however, one power company after another has announced a decision to stop such purchases.

They say the oversupply of green electricity due to the required purchase of all such power could wreck the stable supply of electricity to businesses and households.

The situation has prompted the trade and industry ministry to prepare for a review of the feed-in-tariff system. Given what has happened, it is clear that the system was not well thought out and needs to be redesigned.

But in the review, the ministry should not use the recent development as an excuse to put a brake on the expansion of power generation through renewable sources and to maintain the weight of nuclear power in the supply of electricity. It should uphold the goal of expanding green power generation, and bring together the accumulated knowledge and technologies of the power and other industries to achieve it.

On Sept. 24, Kyushu Electric Power Co. announced that it would halt the purchase of green electricity in the whole Kyushu region, starting the next day, including putting on hold some 70,000 plans for generation of green power by entities that have applied to Kyushu Electric for contracts to sell the electricity.

Kyushu Electric's decision affected not only the renewable energy businesses but also local governments, including the Kumamoto prefectural government, which had pushed for introduction of green electricity.

Okinawa Electric Power Co. had stopped the feed-in purchases in August.

Hokkaido Electric Power Co., Tohoku Electric Power Co. and Shikoku Electric Power Co. followed the Kyushu power firm with a decision to suspend the purchase of green electricity beginning this month.

Tokyo Electric Power Co. and Kansai Electric Power Co. have also halted such purchases in some parts of the areas serviced by them.

In making their moves, the power companies have cited a clause in the Law on Special Measures Concerning Procurement of Renewable Electric Energy by Operators of Electric Utilities, which exempts them from the duty to buy green electricity if the purchase of such power poses a danger to stable supply of electricity.

Behind their moves is a rapid increase in the volume of green electricity they have had to agree to buy.

Green energy operators rushed to make last-minute applications for electricity sales to the power firms before the government lowered on April 1 the prices at which the utilities must buy power from various renewable energy sources.

The power companies explain that if all the electricity from renewable energy sources is supplied to their transmission grids, the total supply will exceed their capacity, which could lead to stoppage of the power companies' generators.

They also say that the wild ups and downs in the output of solar and wind power due to weather changes will make it extremely difficult for them to adjust the output of their power generators to cope with the fluctuations. If the adjustments fail, it could damage their power grids.

Both cases could result in blackouts.

The government should be blamed for failing to foresee a large number of applications for sale of green electricity to the power companies.
There may be some entities that have applied to the power firms for the electricity purchase contracts without proper investment plans. However, many entities have already carried out necessary investments for power generation through renewable energy sources on the belief that the power firms will fulfill their duty to buy the electricity from them.
The government and the power companies should realize that power from renewable sources accounted for only 2.2 percent of the total electricity generated in fiscal 2013.
Green electricity has the advantages of emitting very little carbon dioxide in the process of power generation. Severe accidents like the one that may happen at a nuclear power plant are unlikely. Green power generation facilities scattered around the country reduce the risk of severe power shortages. It is clear that green electricity's weight in total power generation in this country should be sharply increased.
In reviewing the feed-in-tariff system, the trade and industry ministry should not forget this point and should remember that the government's energy basic plan adopted in April calls for reducing Japan's reliance on nuclear power as much as possible as well as for aggressive introduction of renewable energy, citing a government advisory body's document that states that green electricity should account for about 20 percent of the total power generation in 2030.
The Natural Resources and Energy Agency estimates that if all the green energy facilities that have signed feed-in-tariffcontracts with power companies and received approval from the government as of the end of May went into operation, their total output in 2030 would top 20 percent of the nation's total power generation.
Development of large-capacity and high-efficiency batteries, an increase in the capacity of the power grids, including building of transmission lines across different service areas, and upgrading of the facilities to convert the different frequencies of electric currents — 50 Hertz in eastern Japan and 60 Hertz in western Japan — are needed to solve major technical problems inherent to the supply of electricity generated through green sources.
Trillions of yen are estimated to be needed for such projects, and power companies are reluctant to invest. To stimulate such investments, the government should first declare clear percentages as goals in expanding the share of green electricity in the nation's total power generation.
Also important for the government would be to clarify what party or parties should shoulder the cost of such investments — which was left unaddressed when the system was introduced in 2012.

The impact of power-saving

October 13, 2014

EDITORIAL: Power-saving efforts should mark transition away from nuclear energy
http://ajw.asahi.com/article/views/editorial/AJ201410140024
This year's summer was Japan's first nuclear-free one since the Fukushima nuclear disaster started in 2011.
Two nuclear reactors of Kansai Electric Power Co. were online last summer. With those reactors idled this summer, Kansai Electric initially planned to ensure a supply leeway of 3 percent at peak demand by

operating other power-generating facilities, such as thermal power plants, at full throttle and procuring additional power from Tokyo Electric Power Co.

As it turned out, the Osaka-based regional utility managed to maintain a supply leeway of 6.6 percent even during the highest demand on July 25, and it never had to obtain electricity from TEPCO.

The relatively mild summer was certainly one factor that dampened general demand for power. But the peak demand in the Kansai region occurred on a day of scorching heat, when temperatures exceeded 37 degrees in Osaka. The supply leeway, however, remained relatively spacious.

Kansai Electric has attributed the situation to **1.08 gigawatts more power being saved on top of its initial expectations. That difference is roughly worth the output of one nuclear reactor.**

Kyushu Electric Power Co.'s Sendai nuclear power plant, for which safety screenings of the Nuclear Regulation Authority are at the most advanced stage, will likely not be restarted before next year, so Japan is expected to remain nuclear-free during the coming winter. Although we cannot afford to be too optimistic, what we have achieved to this point provides promising signs.

More than 90 percent of business offices and nearly 70 percent of households told a survey conducted in Kansai Electric's service area that they had tried to save on power. So many users are willing to cooperate in power-saving efforts to the best extent they can.

Efforts on the side of power utilities only appear tardy in the light of those endeavors.

Utilities adhere to their argument that reactor restarts are essential for ensuring a stable supply of electricity because aged thermal power plants run the risk of failures. Hokkaido Electric Power Co. plans to raise its electricity rates for a second time in November on grounds that growing fuel costs are weighing heavily on its management. Other utilities are seeking to follow suit.

But **their eagerness to stick to nuclear power generation may be applying the brakes on reforms needed to adapt to a changing management environment.**

The more stringent safety measures implemented after the Fukushima nuclear disaster have turned the purported "inexpensive and stable" power source--the longtime promotional blurb for nuclear power--into a thing of the past.

Nuclear power plants could even become a burden on management when the current full-cost pricing method, which allows all expenses to be collected as part of electricity charges, ends with the liberalization of the power retail market from 2016.

The imperative of survival would only necessitate the utilities to seek alternative power sources and phase out their dependence on nuclear energy.

Regional utilities have taken major steps of late to begin supplying power to users outside their own service areas. In the meantime, a number of utilities have stopped signing new contracts to purchase power generated from renewable energy sources on grounds that the capacity of their power grid is running short.

These actions, taken more than three and a half years since the nuclear disaster prompted a national debate on energy policy, seem illogical.

The utilities should see the current availability of broad-based cooperation in power-saving efforts as marking a precious transition period, and they should establish solid management strategies for phasing out their reliance on nuclear power. Merely reiterating their calls for nuclear reactor restarts may no longer pull at the heartstrings of their users.

--The Asahi Shimbun, Oct. 13

Shaking up the power industry

October 21, 2014

New power industry alliances

http://www.japantimes.co.jp/opinion/2014/10/21/editorials/new-power-industry-alliances/#.VEZNbRanp1s

The comprehensive alliance struck recently between Tokyo Electric Power Co. and Chubu Electric Power Co. in their thermal power generation business raises expectations of a further shakeup in the power industry — likely involving companies from other sectors — ahead of the full liberalization of the retail sale of electricity in 2016.

While Tepco and Chubu Electric have their own reasons for the accord, it should be a welcome development if the tieup results in cutting electricity costs for consumers.

According to the basic agreement announced Oct. 7, the two companies will create a jointly owned firm that will integrate their liquefied natural gas (LNG) procurement to reduce fuel purchasing cost. The two firms combined buy roughly 40 million tons of LNG annually — or nearly half Japan's total imports of 88 million tons — and they hope the expanded volume will boost their power to negotiate procurement pricing with producing countries.

Through the new firm, Tepco and Chubu Electric will also seek to replace aging thermal power plants with more fuel-efficient plants as well as to increase output from coal-fired plants, which generate power at less than half the fuel costs of LNG-fueled plants. As a first example, the new firm reportedly plans to work with Electric Power Development Co., popularly known as J-Power, to build and run a latest-generation coal-fired power plant at Tepco's Yokosuka thermal power plant in Kanagawa Prefecture.

Tepco, which faces the massive cost of compensation for people affected by the March 2011 triple meltdowns at its Fukushima No.1 nuclear power plant, sees the alliance with Chubu Electric as a key pillar of its financial reconstruction. Tepco needs to improve its earnings to cover the trillions of yen in compensation, which it has been paying by borrowing from a government-backed fund. Since its nuclear power plants remain shut down in the wake of the 2011 disaster — just like other utilities — it is also imperative for Tepco to lower the cost of procuring LNG to run thermal power plants.

Chubu Electric is relatively unscathed from the shutdown of nuclear power plants, which accounted for only 15 percent of its power generation before 2011. Still, it faces the prospect of greater competition on its home turf in central Japan as a decades-old regional monopoly by major power firms is about to be fully dismantled. In 2016, the remaining restrictions on electricity sales to households will be lifted, making it possible for any power-generating entity to service customers anywhere across Japan. The alliance with Tepco will give Chubu Electric access to a power-generation source and a foothold for sales in the lucrative Tepco-serviced areas.

Moves are afoot by the major power firms to tap into demand in regions previously dominated by the others — often involving companies from other sectors such as gas, oil and general trading firms. Before reaching the accord with Chubu Electric, Tepco also explored other firms including Kansai Electric Power Co., Tokyo Gas Co., Osaka Gas Co. and JX Nippon Oil & Energy Corp. as potential partners. It is reported that Osaka Gas may later join the Tepco-Chubu Electric alliance. There is also the possibility that the firms that did not reach agreement with Tepco may explore their own alliance.

There are uncertainties as to how the Tepco-Chubu Electric alliance will evolve. Tepco is said to have urged Chubu Electric to place all of its main thermal power plants under the umbrella of the new jointly funded firm, but they eventually agreed only on the replacement of aging plants and construction of new

facilities. They say integrating the operation of their thermal power plants will remain on the agenda of future discussions, and the scope of the alliance will substantially differ if they agree on such arrangements.
Given the uncertainties over reactivating its Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture, which it counts on in its financial reconstruction plan, Tepco will likely need to make greater efforts to restructure its business. Other regional utilities and companies from different sectors are also eyeing the market thus far dominated by Tepco.
But from a consumer viewpoint, active realignment of the power industry, which has for decades been effectively dominated by the regional monopolies, should be a welcome development if it leads to lower electricity bills.

Maintain the momentum

October 21, 2014

New ministers pledge no interruption to nuclear policy, female empowerment

Staff Writers
On his first day in his new job, industry minister Yoichi Miyazawa said Tuesday he will soon be ready to visit communities near nuclear power plants, apparently pledging to maintain the momentum for reactor restarts.
The Nuclear Regulation Authority has cleared the Sendai nuclear power plant in Kagoshima Prefecture, and all that remains before it fires up once more is for the central government to secure local approval.
"Of course, I'd like to visit Kagoshima as soon as possible," Miyazawa said as he began work as minister of economy, trade and industry.
His predecessor, Yuko Obuchi, resigned Monday over a political funds scandal.
At his first news conference at the ministry, Miyazawa, 64, said he doesn't know exactly when he will visit Kagoshima as he has to work out the timing with various municipalities and the prefectural government.
The Kagoshima Prefectural Assembly had been asking Obuchi to go there and explain in person why the central government believes the two reactors at the plant in Satsumasendai should be fired up once more.
A visit is seen as critical to securing the understanding of local communities.
The two Sendai units are the only reactors that have so far cleared new safety hurdles created by the NRA in response to the Fukushima nuclear crisis.
The central government wants to restart reactors that clear the NRA's checks, but some observers have said they believe the shake-up in the Ministry of Economy, Trade and Industry, which oversees the nuclear industry, may slow the process.
Miyazawa, the nephew of the late Prime Minister Kiichi Miyazawa, said he will steadily push ahead with reactor restarts, saying his job is to promote "responsible energy policies."
The new METI chief said nuclear will remain a "baseload power source" for the country.
But he also said Japan must explore ways to boost its use of renewable energy to lower the reliance on nuclear power.
[...]

US and Russia join forces against nuke safety

U.S. Said to Join Russia in Blocking Nuclear Safety Moves

http://www.bloomberg.com/news/2014-10-23/u-s-said-to-join-russia-in-blocking-nuclear-safety-moves.html

By Jonathan Tirone Oct 23, 2014 2:57 PM GMT+0200
Photographer: Koji Sasahara/Pool via Bloomberg

The U.S. and Russia are joining forces to block a European plan to raise the protection of nuclear reactors against natural disasters after the meltdowns at Japan's Fukushima Dai-Ichi power plant, diplomats say. Envoys from both countries are trying to derail a Swiss-led initiative that would force nuclear operators to invest more on safety, undermining attempts to harmonize global safety regulation, according to eight European and U.S. diplomats who attended meetings in Vienna last week. All asked not to be named in line with rules kept by the Convention on Nuclear Safety, the legal body overseeing the talks.

Even as relations between Russia and the U.S. have sunk to a post-Cold War low over the crisis in Ukraine, the two powers have come together to press their shared interest in resisting more stringent safety guidelines, said the diplomats. The U.S. is the world's biggest nuclear-power generator, while Russia exports more reactors than anyone else.

"Switzerland, as the initiator of the proposal, will continue to collaborate with all delegations and do everything to find a solution that is acceptable to all of us," Georg Schwarz, deputy director general of the Swiss nuclear-safety regulator, ENSI, said in an e-mailed reply to questions.

Nuclear Secrecy

The U.S.-Russia collaboration reflects a nuclear-safety convention whose secrecy is laid bare in documents obtained by Bloomberg News under a Freedom of Information Act request.

It also underscores the **high stakes for an industry trying to bounce back after the Fukushima accident.** European attempts to impose higher safety standards would make nuclear power more costly just as plant operators come under price pressure from cheaper natural gas.

Atomic Power Looking Better and Worse

Prompted by the March 2011 Fukushima incident, European regulators are seeking to rewrite international standards to ensure nuclear operators not only prevent accidents but mitigate consequences if they occur, by installing costly new structures built to survive natural disasters. The meltdown caused by a tsunami forced 160,000 people to flee radioactive contamination and led to the shutdown of all of Japan's nuclear plants.

The European attempt became public in April during the previous Convention on Nuclear Safety meeting in Vienna. Switzerland consulted with engineers, regulators and diplomats from more than 50 countries before proposing the new rules. The stricter requirements were in line with a European Union directive issued three months later that required nuclear operators to bolster infrastructure at existing plants.

Less Stringent

U.S. regulators aren't requiring the same stringent modifications, according to Edwin Lyman of the Cambridge, Massachusetts-based Union of Concerned Scientists, an advocacy group. European utilities pay as much as five times more to fit out plants to withstand earthquakes and floods as a result, he said.

Electricite de France SA is spending about 10 billion euros ($13 billion) on additional safety features for its 59 reactors, according to its regulator, the Autorite de Surete Nucleaire. U.S. utilities will spend about $3 billion on portable generators and cooling reserves for about 100 reactors, FirstEnergy Corp. (FE) President Pete Sena said in July 31 testimony to the Nuclear Regulatory Commission.

'Hardened Core'

French costs are higher because operators have to build a "hardened core" around their reactors that will be able to contain fallout if an accident occurs, its regulatory chief, Jean-Christophe Niel, said in July testimony to the NRC in Rockville, Maryland. Engineers are designing reinforced bunkers for back-up power and installing emergency cooling systems to contain a meltdown. The country is also reinforcing the concrete bases of its oldest reactors and creating elite teams of emergency responders.

At last week's meeting, convened at the International Atomic Energy Agency's headquarters, Russian envoy Oleg Postnikov offered praise for his American counterpart, Eliot Kang, after the U.S. argued against the European initiative, people who attended the meeting said. U.S. officials confirmed that their delegation fell into an uneasy alliance with Russia.

The U.S. State Department declined to comment on the record. Russian diplomats accredited to the IAEA didn't respond to written requests and phone calls seeking comment.

'Shocking' Secrecy

Created in response to the 1986 Chernobyl nuclear reactor meltdown in Ukraine, the convention has struggled to broaden safety standards. The group's own secrecy has often undermined its intents. One former French envoy, Jean-Pierre Clausner, said that the opacity of the organization was "shocking," according to the documents obtained under the Freedom of Information request.

"The whole process needs to be reviewed and significant changes should be introduced if the contracting parties are willing to maintain the usefulness of the convention," Clausner wrote in 2005, the first year that the body allowed notes taken from its meeting to be preserved.

While nuclear meltdowns are considered cross-border incidents because of the radioactive fallout that can result, no international authority exists to compel countries to adopt safety standards. Instead, regulators from around the world routinely review each other's practices to figure out which works best. Laggards face peer criticism that can make them look bad in forums like the convention.

Falsified Data

At the convention's 2008 meeting -- the last before Fukushima -- Japan was criticized by peers for being slow to overhaul a reporting system that had been caught using "falsified inspection data," the documents show. Participants also urged Japan, then the world's third-largest nuclear-power generator, to review how safe its reactors were against earthquakes.

Countries like China and India, where companies are building new reactors to cover growing electricity demand, have given some support to the European initiative, according to the diplomats. The safety-upgrade costs to new reactors aren't as burdensome as retrofitting existing infrastructure, they said.

The U.S. said that the Europeans bushwhacked their delegation earlier this year by calling a vote to consider the safety amendment. **The country's nuclear industry would suffer if the European measure were to be adopted because it would create an international perception that the U.S. took safety less seriously.**

"The nuclear industry in the U.S. is under great pressure from lower natural gas prices," said Lyman from Vienna, where he is attending an IAEA meeting. "At the same time, the potential for capital upgrades to deal with post-Fukushima requirements was a worry that it could push them over the edge."

Argentina's IAEA envoy, Rafael Mariano Grossi, will convene the next safety meeting Feb. 9 to 13, when countries will decide on the Swiss measure.

The biggest challenge for the U.S. and Russia may not be convincing enough countries to vote against the measure, according to an official who organized last week's talks. Their real test, he said, will be to come up with something better.

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Koizumi: For a society without nukes

November 1, 2014

Koizumi calls for society without nuclear plants

http://www3.nhk.or.jp/nhkworld/english/news/20141102_05.html
Nov. 1, 2014 - Updated 23:25 UTC+1
Former prime minister Junichiro Koizumi has called for a society with more renewable energy and no nuclear plants.

In a speech in Tokyo on Saturday, Koizumi referred to the delay in the timetable for decommissioning the No.1 reactor at the Fukushima Daiichi nuclear plant.

He said there have been many human errors and technical failures at nuclear plants. And he said serious accidents have enormous impacts.

Koizumi also said Japan has not experienced a single power outage since its reactors went offline, and he said that is evidence that people can live without nuclear energy.

Koizumi also rejected claims that renewable energy is not ready to meet the needs of communities around the world. He said with government support, it could soon take the place of nuclear power.

What to do with aging nuclear plants

October 30, 2014

Aging nuclear power plants

http://www.japantimes.co.jp/opinion/2014/10/30/editorials/aging-nuclear-power-plants/#.VFM9pxZ5B1s

The government is weighing measures to aid power companies that decommission aging nuclear power plants and host municipalities that will lose nuclear power-related revenue. To facilitate the moves to scrap aging plants, some steps may be necessary to ease the process. But support should not be extended in ways that perpetuate the reliance of the power firms and the host municipalities on nuclear power. Under safety regulations tightened after the March 2011 meltdowns at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant, utilities are not allowed in principle to run nuclear power reactors for longer than 40 years. The operators can seek to extend reactor operations for up to 20 years, but they

need to undergo special inspections by the Nuclear Regulation Authority, which would require huge investments to upgrade aging equipment to beef up their safety.

Of the 48 nuclear power reactors in Japan, four — the No. 1 reactor at Japan Atomic Power Co.'s Tsuruga plant, the Nos. 1 and 2 reactors at Kansai Electric Power Co.'s Mihama plant and the No. 1 reactor at Chugoku Electric Power Co.'s Shimane plant — have already been in operation for more than 40 years, while three others — Nos. 1 and 2 reactors at Kansai Electric's Takahama plant and the No. 1 reactor at the Genkai plant of Kyushu Electric Power — will reach the 40-year mark in July 2016.

The power firms need to apply to the NRA by next summer if they want to extend the reactors' operation.

The utilities are said to be considering the choice of decommissioning the aging reactors, which typically have small output capacity and are unlikely to churn out profits that match the massive cost of renovation.

The government is ready to facilitate the move, apparently on the belief that scrapping aging reactors will help win public support for reactivating other reactors that were put offline after the Fukushima disaster. While urging the power companies to make swift decisions, the government has kicked off discussions on measures to support the moves by the utilities.

Decommissioning a nuclear power reactor takes 20 to 30 years. In addition to the direct cost of scrapping the reactor, there will be other expenses such as those for disposing of the large amount of radioactive waste.

While the utilities have set aside reserves to pay for future decommissioning by adding the cost on to electricity bills, moving forward schedules for scrapping reactors due to new safety regulations will require additional expenses. The power companies also need to devalue the reactors once they are decommissioned and report the losses.

Local governments hosting the nuclear power plants stand to lose national government grants to such municipalities as well as revenue from fixed asset taxes on the reactors to be decommissioned. There are concerns about severe damage to local economies from the cuts of such revenue, along with losses to related businesses.

Under discussion at a panel of the trade and industry ministry are measures such as changing accounting rules that currently require the power companies to report losses on the reactors immediately after decommissioning them, as well as maintaining government financial support for the host municipalities even after the reactors have been scrapped.

Also reportedly under consideration is a system that will include in the price of electricity generated by nuclear power the total power generation costs — including the expenses of future decommissioning of reactors and disposal of spent fuel — even after the retail sale of power is fully deregulated.

The decommissioning of reactors that are aging and more vulnerable to severe accidents or natural disasters should be promoted, and steps will need to be taken to eliminate hurdles, including financial concerns, that deter such moves. But the steps need to be limited to temporary measures that ease the financial burden on the power firms and host municipalities.

Preferential treatment toward nuclear power that could encourage the utilities to keep relying on it as a source of commercial electricity, as well as policies that keep the local economies depending on the nuclear power industry, will run counter to the government's pledge in its latest basic energy plan to reduce "as much as possible" the nation's reliance on nuclear power, and therefore must be avoided.

US continue to conduct plutonium tests

November 5, 2014

Mayors of Hiroshima, Nagasaki protest against U.S plutonium tests

http://mainichi.jp/english/english/newsselect/news/20141105p2g00m0dm037000c.html
HIROSHIMA/NAGASAKI, Japan (Kyodo) -- The mayors of Hiroshima and Nagasaki have sent letters to U.S. President Barack Obama protesting reported U.S. plutonium tests in September and October.
Hiroshima Mayor Kazumi Matsui in his letter criticized the United States for reportedly conducting the tests using plutonium to examine the capabilities of nuclear weapons, saying, "It is unforgivable as they demonstrate will to maintain nuclear weapons although the tests did not involve nuclear explosions."
Such U.S. tests "will give other countries an excuse to develop nuclear weapons" and make it difficult to realize a world free from nuclear weapons as Obama proposed in 2009.
Nagasaki Mayor Tomihisa Taue in his letter urged Obama to take leadership in realizing a nuclear-free world.
Taue, as head of the National Council of Japan Nuclear Free Local Authorities, also mailed a written protest to U.S. Ambassador to Japan Caroline Kennedy, saying the tests would nullify efforts by people worldwide to eliminate nuclear weapons.
Hiroshima Gov. Hidehiko Yuzaki sent a similar letter to Obama on the same day.
The cities of Hiroshima and Nagasaki were devastated by atomic bombs dropped by the United States in 1945 in World War II.

Japan to build nukes in Wales

November 5, 2014

Wales minister says nuclear power remains a good investment

http://www.japantimes.co.jp/news/2014/11/05/business/wales-minister-says-nuclear-power-remains-good-investment/#.VFtTh8l5B1u

by Kazuaki Nagata
Staff Writer
While the nation debates the wisdom of restarting its nuclear power plants, the energy source remains central to some nations' investments for tomorrow. The process to construct a new two-reactor facility in Wales has been going as planned, the British province's economy minister said.
There's a confidence that the plant will be delivered, that it will work well, and that it will do good for the local community in terms of employment opportunities," said Edwina Hart, economy minister of the National Assembly for Wales. She was speaking to The Japan Times last week during a working visit to Japan.
Horizon Nuclear Power, which is wholly owned by Hitachi Ltd., plans to build two advanced boiling water reactors on Anglesey Island.

Known as the Wylfa Newydd project, the program is currently at the community consultation phase. This involves soliciting opinions of local residents and authorities.
"People need to understand what things look like, how they look and everything," said Hart.
"This type of engagement is very important," she said.
When it comes to safety, prime responsibility lies with the operator. The U.K. government oversees the industry and the role of the Welsh Assembly is to get local companies involved in the supply chain and to provide a skilled workforce, she said.
Horizon says the community consultation is a pre-application process. It plans to submit an application for a development consent order in 2017, with completion and operation of the reactors anticipated in the mid-2020s.
"It's a very long process. This is the issue. But the point is that it is a process that is proceeding as we would expect," Hart said.
The firm says construction will create up to 8,500 jobs, while operation of the plant will require 900 to 1,000 new jobs.
Hart also visited Japan last year on a trade mission and tried to encourage Japanese companies to invest in Wales.
It apparently paid off, as she said Friday that Calby Inc., Japan's biggest snack maker, had picked Wales as the location of its first investment in Europe.
The new facility will be a site for manufacturing and distribution, as well as research and development.
Wales hosted 50 Japanese firms as of 2012, including Sony and Toyota.
Another target for Wales is Japanese tourists.
For the past few years, Japanese visitors to the U.K. have numbered 220,000 to 245,000 annually.
They "tend to fly into Heathrow (airport), go into London, nip to the Lake District, the Cotswolds and up to Scotland, and go back down to Heathrow. So, we wanted them to make that journey further west into Wales. We do think there is a market and potential there," said Hart, adding that she has met people in the travel industry and asked what appeals to Japanese tourists.
She said Wales offers a wide range of attractions, such as gardens, castles and coastal sites.
As for Scotland's independence referendum in September, Hart said she was watching with interest because "what the Scots do affects all of us in terms of our respected devolution settlements."
She said opinion polls show there is little support for independence in Wales, but people want to see further powers devolved to Wales from the U.K. government.
For instance, the Welsh government does not have power over railways and energy, she said.
Hart said while the Welsh government supported Scotland's continued membership of the U.K., the independence movement has triggered discussion of devolution settlements across the U.K.

"Drastic reform" needed

November 6, 2014

As I See It: Total picture needed for future electric power system

http://mainichi.jp/english/english/perspectives/news/20141106p2a00m0na005000c.html

Five utilities including Kyushu Electric Power Co. have suspended signing new contracts to buy power generated with renewable energy, such as solar power and wind power, under a system in which major electricity suppliers are required to buy such power at a fixed price. This is because these firms were not fully prepared to accept renewable energy, highlighting the inadequacy of the government's institutional program.

The government, which is now reviewing the system, should proactively and patiently work on drastic reform of the electric power generation and supply system.

The system was launched in July 2012 largely out of reflection of the crisis at the tsunami-hit Fukushima No. 1 Nuclear Power Plant that broke out in March 2011. The spread of renewable energy is effective in preventing global warming and power generation using such energy sources has a low risk of accidents. Since businesses that use renewable energy to generate electricity do not have their own power grids, the government requires major power companies to purchase power generated by designated businesses using renewable energy for up to 20 years.

The system is modeled after one in Germany that is an advanced country in terms of the use of renewable energy. However, the five utilities stopped signing new contracts to purchase power generated with renewable energy on the grounds that the amount of such power is likely to exceed their capacity. No wonder the system, which Japan introduced by imitating one in Europe despite power companies not being prepared to accept such power, hit a snag.

To ensure a stable power supply, a demand-supply balance that is perfect must be achieved at all times, according to industry sources. If the supply of power surpasses or dips below demand, it would destabilize the frequency and voltage, which could trigger a power blackout.

However, most renewable energy that utilities are supposed to buy is solar power, which is unstable because the generated amount of such power depends largely on weather conditions. Such being the case, the amount of power could surpass demand on a sunny day, which could cause power outages.

Surplus power should be sold to other utilities that have enough capacity to accept electricity. However, it is technically impossible under the current system. The capacity of power cables connecting power grids owned by different utilities is limited. Therefore, solar power and electricity generated with other renewable energy sources cannot be supplied to these cables in principle because the generating amount cannot be predicted. This is because major power companies have enjoyed regional monopolies and seldom supply surplus power to other firms or receive such electricity from other companies, while the government approved such monopolies.

The service area of Tokyo Electric Power Co. fell seriously short of power following the Fukushima No. 1 plant accident, highlighting the need for power interchange between electric power companies. The government has finally begun to reform the system and set up an organization that will play a leading role in controlling the power interchange next spring. However, the establishment of a broad power interchange system will come later.

A senior official of the Economy, Trade and Industry Ministry admitted that many officials knew that the current system under which power companies are required to buy power generated with renewable energy at a fixed price would be deadlocked sooner or later. Numerous solar power generation companies were set up one after another for the sole purpose of making profits, contributing to the confusion.

Three years have already passed since the law regulating the power purchase system came into force. Nevertheless, the government failed to take any action while being aware of problems with the system, nor did it set a numerical target for expanding the use of renewable energy for power generation. It

highlights the irresponsibility of the government while the administration of Prime Minister Shinzo Abe is enthusiastic about restarting nuclear power stations.
The Fukushima Prefectural Government, which regards the spread of renewable energy as the pillar of its disaster recovery efforts, has solicited solar power generation companies to set up power stations in the prefecture. Therefore, an official of the prefectural government expressed concern that the five major utilities' suspension of signing new contracts to purchase renewable energy could adversely affect the prefecture's recovery plans.
Japan lags behind many other countries in the introduction of renewable energy. According to the International Energy Agency, the ratio of renewable energy to the total power generation amount is high among European countries -- 20.9 percent in Germany and 26.4 percent in Spain. The figure comes to 6.2 percent in the United States, but in Japan it is a mere 2.2 percent. The ratio has doubled from the pre-nuclear disaster period, but still remains low. Therefore, Japan needs a system under which utilities are required to buy renewable energy at a fixed price.
Japan should learn from European countries' efforts to expand the use of renewable energy. The power grids of European countries are connected with each other by cables with sufficient capacity, allowing these countries to supply surplus electricity generated with renewable energy to others within the region. European countries are introducing a system to predict the amount of power that can be generated with renewable energy based on meteorological observations and a device to automatically limit the amount of power generated with such energy sources if the supply of electricity is likely to reach a surplus.
The costs of establishing such systems pose a challenge. A study group within the Economy, Trade and Industry Ministry estimates that it will cost 4 to 6 trillion yen to improve power grids owned by utilities to prevent blackouts if the amount of solar power is increased to 53 million kilowatts -- almost equal to power generated by nuclear plants before the outbreak of the Fukushima crisis -- by 2030. The costs of buying renewable energy are added to utility fees consumers pay. As such, if power grids are reinforced, it will further increase the financial burden on consumers. This is one of the reasons why the government has not reviewed the system under which utilities must buy renewable energy at a fixed price.
However, **power companies are expected to spend a combined amount of over 2 trillion yen on safety measures in preparation to reactivate idled nuclear plants. If utilities are prepared to pay such a huge amount of money, they should trim the financial burden of renewable energy on consumers.**
In the German electric power system, top priority is placed on the use of renewable energy while thermal power is used to make up for fluctuations in generation amounts at power stations using renewable energy.
In contrast, Japan puts priority on nuclear and thermal power while pushing renewable energy to the sidelines. In reviewing the system, it is necessary to rectify Japan's excessive reliance on solar energy among various renewable energy sources. However, efforts to spread renewable energy sources must not be dampened. The government and the electric power industry should present a total picture of the future of Japan's electric power generation and supply system in which renewable energy will play a key role.
(By Masahiro Nakai, Tokyo Economic News Department)
November 06, 2014(Mainichi Japan)

Sendai restart & uranium prices

November 8, 2014

Uranium mining stocks jump as Japan clears way to reactors restart

http://www.japantimes.co.jp/news/2014/11/08/business/uranium-mining-stocks-jump-as-japan-clears-way-to-reactors-restart/#.VF-le8l5B1s

Bloomberg

VANCOUVER – Uranium prices and producers' shares soared after Japan cleared the way for restart of the first of the nuclear reactors shut after the March 2011 earthquake and tsunami.

Cameco Corp., Canada's largest uranium producer, increased 11 percent, the biggest gain since August 2010. Denison Mines Corp. climbed 20 percent and explorer Fission Uranium Corp. rose 18 percent in Toronto.

Kyushu Electric Power Co. on Friday received final local approval to resume power generation at its Sendai nuclear plant in Kagoshima Prefecture. All reactors in Japan have been shut since the March 2011 meltdowns crisis at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear plant.

"We have been waiting for this moment for a long time," David Sadowski, a Vancouver-based analyst at Raymond James Financial Inc., wrote Friday in a note to clients. "Restarts in Japan will reduce the threat that Japan's utilities will dump their uranium inventories into the market."

Sendai's two reactors are in position to be the first in Japan to resume operations under more stringent safety rules set by the Nuclear Regulation Authority, the industry watchdog. Officials in Satsumasendai, which hosts the Sendai plant, last month voted in favor of allowing restart. Final reviews of construction and safety rules must still be completed.

The Solactive Global Uranium Total Return Index, which tracks 21 companies in the uranium mining industry, rose the most since December 2008. The index is still down 80 percent from its highest closing price in 2011.

The price of U3O8, a tradable form of uranium, rose 4.3 percent to $39.50 a pound on Friday, the biggest gain since March 2011, data compiled by Bloomberg show. The metal traded as high as $73 in January 2011.

"We are hearing that several utilities are in the market looking for supply," Sadowski said.

An "unprecedented rate" of decommissioning

November 12, 2014
12.11.2014_No356 / News

World Energy Outlook Warns Nuclear Industry On Decommissioning And Disposal

http://www.nucnet.org/all-the-news/2014/11/12/world-energy-outlook-warns-nuclear-industry-on-decommissioning-and-disposal

Policies & Politics

12 Nov (NucNet): The nuclear energy industry needs to be ready to manage "an unprecedented rate" of decommissioning with almost 200 of the 434 reactors that were operating commercially at the end of 2013 to be retired by 2040, a report by the International Energy Agency says.

World Energy Outlook 2014 (WEO), released today in London, says "the vast majority" of these reactor retirements will be in the European Union, the US, Russia and Japan.

The industry will need to manage this unprecedented rate of decommissioning, while also building

substantial new capacity for those reactors that are replaced, WEO says.

The IEA estimates the cost of decommissioning plants that are retired to be more than $100 billion.

But WEO warns that "considerable uncertainties" remain about these costs, reflecting the relatively limited experience to date in dismantling and decontaminating reactors and restoring sites for other uses.

Regulators and utilities need to continue to ensure that adequate funds are set aside to cover these future expenses, WEO says.

It also warns that all countries which have ever had nuclear generation facilities have an obligation to develop solutions for long-term storage.

In one scenario examined in WEO, the cumulative amount of spent nuclear fuel that has been generated (a significant portion of which becomes high-level radioactive waste) more than doubles, reaching 705,000 tonnes in 2040.

Today – 60 years since the first nuclear reactor started operating – no country has yet established permanent facilities for the disposal of high-level radioactive waste from commercial reactors, which continues to build up in temporary storage, WEO says.

It says nuclear power is one of the few options available at scale to reduce carbon dioxide emissions while providing or displacing other forms of baseload generation. Nuclear has avoided the release of an estimated 56 gigatonnes of CO2 since 1971, or almost two years of total global emissions at current rates.

Policies concerning nuclear power will remain an essential feature of national energy strategies, even in countries which are committed to phasing out the technology and that must provide for alternatives, WEO says.

In WEO's central scenario, global nuclear power capacity increases by almost 60 percent from 392 gigawatts in 2013 to more than 620 GW in 2040. However, its share of global electricity generation, which peaked almost two decades ago, rises by just one percentage point to 12 percent.

This growth is concentrated in just four countries – China, India, South Korea and Russia. These are markets where electricity is supplied at regulated prices, utilities have state backing or governments act to facilitate private investment.

Of the growth in nuclear generation to 2040, China accounts for 45 percent while India, South Korea and Russia collectively make up a further 30 percent. Generation increases by 16 percent in the US, rebounds in Japan – although not to levels seen before the Fukushima-Daiichi accident – and falls by 10 percent in the European Union.

WEO says despite the challenges nuclear faces, it has specific characteristics that underpin the commitment of some countries to maintain it as a future option. "Nuclear plants can contribute to the reliability of the power system where they increase the diversity of power generation technologies in the

system. For countries that import energy, it can reduce their dependence on foreign supplies and limit their exposure to fuel price movements in international markets."

Although the upfront costs to build new nuclear plants are high and, often, uncertain, nuclear power can offer economic benefits by adding stability to electricity costs and improving balance of payments, WEO says.

A new plant on Iwaishima Island?

November 12, 2014

COMMENTARY: Kaminoseki nuke plant plan should be scrapped to end community division
http://ajw.asahi.com/article/views/column/AJ201411120007
By YUSUKE OGAWA/ Staff Writer
KAMINOSEKI, Yamaguchi Prefecture--I realized the need for the earliest possible settlement after I covered a 32-year-old protest movement on Iwaishima island here opposing Chugoku Electric Power Co.'s plan to build the Kaminoseki nuclear power plant on the other side of a strait.
"The central government and Chugoku Electric are probably waiting for us to die," one of the interviewees told me.
Iwaishima island is home to "Tsudoi no Ie: Ohisama" (Community home: The sun), where women in their 80s and similar ages gather twice a week. Kiyoko Sakai, a survivor of the atomic bombing of Hiroshima who was actively opposed to the planned nuclear plant, and her colleagues set up the establishment in a refurbished vacant house four months after the Great East Japan Earthquake and tsunami triggered the Fukushima nuclear disaster in March 2011.
About 10 women, who formerly were central members of the islanders' protests against the planned nuclear plant, get together at the community home to chat over lunch.
Sakai died of lung cancer at age 87 in February 2013.
Takako Nakamura, the 84-year-old president of a local women's association who has led protest marches, said fewer people are joining protests these days.
"I have only wished to pass on to posterity the seas and mountains that we inherited from our ancestors," Nakamura said. "I would return as a ghost if a nuclear plant were to be built after I died."
One can only ask how many islanders have died without seeing a resolution of the issue.
The plan to build the nuclear plant became public in 1982. The island had 450 residents as of Oct. 1, about one-third the number 32 years ago. Seventy-five percent of the islanders are aged 65 or more.
The entire town of Kaminoseki has also seen its population halved during the last 32 years.
Chugoku Electric began reclaiming land on the planned plant site in 2009, but announced suspension of the work immediately after the 2011 disasters. The utility applied in October 2012 for an extended license to reclaim land, but the government of Yamaguchi Prefecture has yet to decide whether it will approve or reject an extension.
When Yamaguchi Governor Tsugumasa Muraoka said in May that he would not be making a decision for another year, Toshiyasu Shimizu, 59, the leader of a group of islanders, moaned, "It's like as if we are being kept in a protracted limbo."

The town of Kaminoseki wants to host the nuclear plant because doing so would give it access to a lucrative revenue source.
The town government has received some 7 billion yen ($64.74 million) since fiscal 1984 in central government subsidies related to nuclear power, which it has spent on building facilities and providing services to its residents. It has annual town tax revenues of only about 200 million yen.
Kaminoseki Mayor Shigemi Kashiwabara has openly said there would be no need to have the nuclear plant built if only the livelihoods of the townspeople could be maintained.
The Cabinet of Prime Minister Shinzo Abe in April approved a basic energy plan, which defined atomic power as an “important base-load power source.” The document, however, stopped short of spelling out plans to build new nuclear reactors, which leaves the future of the planned Kaminoseki plant in limbo.
But existing nuclear plants in Japan are not even getting restarted. Some nuclear proponents in Kaminoseki have said they may not be able to see the nuclear plant built in their lifetimes.
Since the work on the nuclear plant was suspended, in the meantime, the town has been seeking ways to revitalize itself without relying on nuclear power, such as by tourism and the development of a so-called “senary" industry, which combines the output of farm and marine products (primary industry) with processing (secondary industry) and marketing (tertiary industry).
The Abe administration is calling for revitalization of regional communities. Given that, I would propose scrapping the plan to build the nuclear plant while providing a source of revenue for stemming depopulation and fostering new industries.
It would be too cruel to keep the plan alive and the local community divided.

Oma plant ready in 2021?

November 13, 2014

J-Power plans to start operating Oma nuclear power plant in fiscal 2021

http://mainichi.jp/english/english/newsselect/news/20141113p2a00m0na004000c.html
AOMORI -- Electric Power Development Co., known as J-Power, notified local municipalities on Nov. 13 of its plan to start operating the Oma Nuclear Power Plant currently under construction in the Aomori Prefecture town of Oma in fiscal 2021.
It is the first time the electricity wholesaler has shown the plan to local governments in Oma and its vicinity. J-Power also reported to municipal governments that it would work out safety measures to raise the so-called "design basis earthquake ground motion" -- the maximum ground motion assumed and required for earthquake-resistant design -- from the current 450 gal to 650 gal, as well as to raise the assumed maximum height of tsunami from 4.4 meters to 6.3 meters.
J-Power President Masayoshi Kitamura attended a special committee meeting of the Oma Municipal Assembly on the morning of Nov. 13. He explained that his company had revised its plan for the completion of the Oma nuclear plant from "undecided" to December 2020. He then said his company would apply with the Nuclear Regulation Authority for safety screening of the nuclear power plant as early as the end of this year. Kitamura subsequently reported the plan to the neighboring villages of Sai and Kazamaura. He is to visit the Aomori Prefectural Government on the afternoon of Nov. 13. At the same time, a senior official of J-Power would also explain the plan to the Hokkaido Government and the Hakodate Municipal Government.

Decommissioning IS expensive

November 12, 2014

IEA: $100 bil. in costs to retire 200 reactors

http://www3.nhk.or.jp/nhkworld/english/news/20141113_29.html
Nov. 13, 2014 - Updated 08:39 UTC+1
The International Energy Agency says about **200 nuclear reactors around the world will be retired by 2040**, and that 100 billion dollars will be needed to decommission them.

The IEA issued its world energy outlook on Wednesday.

The report says about 200 of the 434 reactors that were operating, or could be operational, at the end of 2013 are expected to be retired by 2040. It says **most of them are in Europe, the United States, Russia and Japan.**

The IEA estimates the cost to decommission the reactors at about 100 billion dollars. It points out the need for power companies and regulators to secure adequate funds.

The report also says nuclear power helps countries lower their dependence on foreign energy sources and reduce the impact of fuel price movements.

The IEA estimates the world can cut about 4 years' worth of carbon dioxide emissions with increases in nuclear power production in China, India, Russia, the US and other countries.

The IEA also estimates the amount of spent fuel to double over the period. It says **countries are obliged to work out solutions for long-term storage.**

OMa plant construction

November 13, 2014

Municipalities briefed on Oma plant construction

http://www3.nhk.or.jp/nhkworld/english/news/20141113_40.html
Nov. 13, 2014 - Updated 13:27 UTC+1
A Japanese power company has notified the northern city of Hakodate of its plan to apply for a government safety screening as a step toward operating a nuclear plant in neighboring Aomori Prefecture.

Senior officials of Electric Power Development Company, or J-Power, visited the Hakodate municipal office on Thursday.

The city is challenging construction of the Oma plant in court. It says should an accident occur at the plant, damage to the city would be severe.

Hakodate lies less than 30 kilometers from the plant across the Tsugaru Strait.

The utility officials said they will apply as early as the end of the year to the Nuclear Regulation Authority for a safety screening of the Oma plant, hoping to start operation in fiscal 2021.

They asked the city for understanding, saying that they will step up safety measures at the plant.

Hakodate Mayor Toshiki Kudo expressed his displeasure at a news conference later on Thursday and pledged to continue fighting in court.

The mayor said J-Power is acting based on the assumption it will proceed with the plant's construction. He added that the utility merely presented a safety plan in its favor.

Earlier on Thursday, J-Power President Masayoshi Kimura visited Oma Town, where the plant is being constructed.
Kimura told members of the town assembly the utility will seek to complete construction by the end of fiscal 2020.

He said the utility raised its estimate of the maximum level of shaking of possible earthquakes from 450 gals to 650. He also said his company will start building a quake-resistant facility that would be the operating base in the event of accidents.

The assembly members asked him not to delay the construction plan any longer.

J-Power stopped construction work at the plant after the 2011 Fukushima Daiichi nuclear disaster. It resumed work in late 2012.

The Oma plant is the world's first commercial station to run exclusively on a mixture of uranium and plutonium recycled from spent nuclear fuel, or MOX.
November 13, 2014

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Japan to sign international treaty

November 19, 2014

Diet approves nuclear compensation treaty

http://www3.nhk.or.jp/nhkworld/english/news/20141119_23.html
Nov. 19, 2014 - Updated 06:56 UTC+1
Japan's Diet has approved a bill to join an international treaty on sharing the costs of compensation in a nuclear disaster.

The bill on the Convention on Supplementary Compensation for Nuclear Damage cleared the Upper House on Wednesday.

The treaty obliges the signatories to set aside the equivalent of 47 billion yen, about 400 million dollars, to compensate victims in a nuclear accident.

If the cost of compensation in Japan exceeds its reserve, other signatories would provide around 60 million dollars more. Conversely, Japan would have to contribute about 34 million dollars to help compensate for a nuclear accident in another country.
The treaty will be ratified after passage of another bill requiring nuclear plant operators to contribute to the reserve.

The government expects the treaty to encourage foreign companies to join the cleanup and decommissioning of reactors at the Fukushima Daiichi nuclear power plant.

Five countries have signed the convention so far, including the United States and Argentina.

Build new plants or/and extend life of older reactors?

November 14, 2014

Nuclear operators push to open new plant, extend life of aging reactors

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201411140068
THE ASAHI SHIMBUN

Across Japan, utilities are backing the Abe administration's support of nuclear power generation by continuing construction of a new facility and seeking to extend the life of reactors that have been operating for about 40 years.

Electric Power Development Co. (J-Power) announced Nov. 13 that it will apply to the Nuclear Regulation Authority for safety screenings to start operations at its Oma nuclear power plant, which is currently under construction.

The announcement came at a town assembly meeting at Oma, Aomori Prefecture, where J-Power President Masayoshi Kitamura said the company will submit the application by the end of the year and plans to have the new facility fully operational in fiscal 2021.

If everything proceeds as scheduled, the Oma plant will be the first instance in which power companies applied for the start of operations at new reactors that are still under construction.

While the No. 1 reactor at Tokyo Electric Power Co.'s Higashidori plant in Aomori Prefecture and Chugoku Electric Power Co.'s Shimane plant No. 3 reactor in Matsue are also currently under construction, the utilities have not submitted applications to start the reactors.

Although the central government's basic energy plan states that dependency on nuclear power should be reduced as much as possible, it does not clearly mention the construction of new nuclear facilities.

The government does not deem nuclear plants as "new or additional" if their construction started before the March 2011 Great East Japan Earthquake, which set off the nuclear disaster at the Fukushima No. 1 power plant.

Forty percent of the construction of the Oma plant had been completed prior to the disaster.

However, there is no guarantee that the screening process will proceed smoothly because the structure and operation procedures of the Oma facility are different from those of conventional nuclear plants.

The Oma plant will be the world's first 100 percent MOX nuclear facility, where only mixed-oxide (MOX) fuel, consisting of plutonium and uranium, is used at reactor cores for the purpose of consuming plutonium produced in processing spent nuclear fuel.

At conventional plutonium-thermal nuclear plants, MOX fuel is used at just one-fourth to one-third of their reactor cores at most, and conventional uranium fuel is used for the remaining part.

Compared with uranium fuel, it is more difficult for control rods to suppress nuclear chain reactions of MOX fuel.

Although countermeasures, such as enhancing the capabilities of control rods and introducing larger tanks for boric acid water to better control atomic reactions, will be taken at the full MOX facility, those efforts are expected to be carefully examined during the safety screening by the NRA to check if they are sufficient.

"**No full MOX facility has so far gone online around the world,"** NRA Chairman Shunichi Tanaka said at a Nov. 12 news conference. "We will examine extremely carefully (if countermeasures are sufficient)."
Meanwhile, J-Power said Nov. 13 that it will also take the necessary steps to meet the stricter safety standards introduced after the Fukushima nuclear crisis.
The company said it will raise its projected earthquake preparedness scale from the current 450 gals to 650 gals. Measured with seismographs, a gal is a unit of acceleration that measures the extent of an earthquake's seismic waves. Earthquakes with high levels of magnitude also have high gal measurements.
J-Power will also have to set up the required second control room to counter possible terrorist attacks, such as ones utilizing airplanes.
J-Power estimates that the costs needed to introduce additional safety measures to comply with the new regulations will total 130 billion yen ($1.12 billion).

PROLONGING LIFE OF AGED REACTORS

Elsewhere, with the Abe administration supporting the restarts of the nation's idle reactors after they pass NRA safety screenings, Kansai Electric Power Co. is making efforts to prolong the operating lives of aged reactors.
The government set the acceptable operational term of nuclear reactors at 40 years, in principle, after the Fukushima disaster, but it allows utilities to extend the period on a one-time basis by a maximum of 20 years.
Kansai Electric is currently considering applying for prolonging the operation of the No. 1 and 2 reactors of its Takahama plant in Fukui Prefecture. The two reactors began service in 1974 and 1975, respectively .
Seven reactors nationwide that will be more than 40 years old by July 2016 need to submit applications by July 2015 if the plant operators hope to extend their operational periods.
Kansai Electric is expected to apply to the government for the extension as early as next spring.
"From the beginning, we have been upgrading our facilities on the assumption that we will use the reactors for more than 60 years," said a senior Kansai Electric official. "We hope to continue to use them if we will be able to solve safety and cost issues."
Old nuclear power plants can recoup almost all of the costs needed to build them during their prolonged time of operations. Therefore, the longer they are operational, the more profits they are able to produce.
Because the Takahama plant No. 1 and 2 reactors have an output as large as 826 megawatts, if their lives are extended, it is estimated that Kansai Electric will save around 10 billion yen monthly by allowing it to lower its dependency on thermal power.
Although Kansai Electric is expected to spend more than 100 billion yen to introduce additional safety measures to pass the NRA screening, there remain **safety concerns** about prolonging the operational periods of aged reactors.
Hu**ge costs for upgrading could also add a financial burden on reactor operators.**
Kansai Electric is considering decommissioning the No. 1 and 2 reactors of its Mihama plant in Fukui Prefecture, which have turned 40 years old. Considering that the reactors have a power generation capability of 500 megawatts or less, it is difficult for them to help drastically improve the company's financial situation.
(This article was compiled from reports by Gen Kaga, Toshio Kawada, Koji Nishimura and Tomoyoshi Otsu.)

Uilities "stalled in an age of incandescent bulbs"

November 17, 2014

COMMENTARY: In age of LEDs, utilities thinking in incandescent-bulb mode

http://ajw.asahi.com/article/views/column/AJ201411170001

By TOSHIHIDE UEDA/ Senior Staff Writer

MIYAKO, Iwate Prefecture--One recent weekend took me to this northeastern city on the Sanriku coast.

In the Seatopia Naado roadside rest area that faces a port in Miyako, I saw light-emitting diodes illuminating a ground floor shop that sells local products.

The two-story facility, severely damaged by the towering tsunami generated by the Great East Japan Earthquake, reopened in July 2013 following total reconstruction. “Naado” means “What about ...” in the local dialect, I was told.

The quake and tsunami of March 2011 took a toll on many power plants and transmission facilities, causing blackouts in nearly all areas affected by the disasters. People were forced to respond to the unprecedented calamity, which was complicated further by the Fukushima nuclear disaster, in total darkness.

Having learned a lesson from that experience, the Iwate prefectural government is pushing to install facilities using renewable energy sources at regional disaster management bases, such as government offices, schools, hospitals and evacuation shelters, so that those establishments can cover their electricity needs on their own.

In the aftermath of the 2011 disasters, the city of Miyako weighed the option of introducing solar power whenever it builds public facilities.

One pillar of the “master plan on renewable energy sources,” which the city government worked out last year, is “enhancing the energy self-sufficiency rate and realizing local production (of energy) for local consumption.”

The Naado rest area also had solar panels installed on its rooftop and LED lighting introduced during the overall repairs.

As I drove north from the port and entered the Taro district of Miyako, I was greeted by a string of streetlamp-like objects with compact solar panels along National Route No. 45.

The “escape route guide lamps,” as the objects are called, are designed to store solar power in their rechargeable batteries and emit light to indicate escape routes even at night. They were installed by the land ministry before the quake and tsunami and were not damaged in the disasters, officials said.

The city plans to increase the number of similar guide lamps and guide signs as part of its post-disaster rebuilding efforts.

“We plan to install light-emitting signs that lead people to move to higher ground, without their knowing it, as they follow the string of lights,” said an official in the city government’s crisis management division.

“We will not install products that use commercial power sources (provided by utilities). A quest for compact products with modest power consumption would naturally single out LED lighting as the solution.”

A combination of solar panels, rechargeable batteries and LED lighting is helping a disaster-hit community that seeks “local energy production for local energy consumption.”

'GREAT PROMISE' OF LEDS

The announcement of Nobel Prize winners never leaves me unexcited.

That was particularly true this year, when the physics prize was awarded jointly to Isamu Akasaki, a professor with Meijo University, Hiroshi Amano, a professor with Nagoya University, and Shuji Nakamura, a Japanese-born professor with the University of California at Santa Barbara, for developing blue LEDs and bringing them to practical application.

"Using blue LEDs, white light can be created in a new way" (white LEDs), the Royal Swedish Academy of Sciences said in explaining the selection. "The LED lamp holds great promise for increasing the quality of life for over 1.5 billion people around the world who lack access to electricity grids; due to low power requirements, it can be powered by cheap local solar power."

In fact, the blue LEDs constitute a groundbreaking invention that answers the call of the times to preserve the Earth's environment. They already provide more than six times the light intensity per watt of power consumed by incandescent bulbs. They made it possible to provide access to minimum light required for daily lives even in the absence of large power generating facilities.

Power supply is currently available everywhere in Japan.

I wrote in an Asahi Shimbun column in September 2013 about Taimagura village in Miyako, which was the last to gain access to electricity on Dec. 27, 1988, at the height of Japan's asset-inflated economic growth. One theory says Taimagura means a "path leading into deep woods" in the Ainu language.

A practicable incandescent light bulb was invented in 1879 by U.S. master inventor Thomas Edison. The process of modernization since that time has also been a history of electrification.

Building power plants and power transmission facilities represented a major goal of Japan's modernization. And the longtime dream of making power supply available to everybody in the country was achieved 26 years ago in a mountain village in Miyako.

But the power plants and power transmission facilities, which we have taken more than a century to build, are so vulnerable to the workings of nature. The LED lighting, which ended an age of incandescent bulbs, also provides a "great promise for increasing the quality of life" for people in this country.

UTILITIES LAG IN INNOVATION

Japan had 54 nuclear reactors before the quake, tsunami and Fukushima nuclear disaster. All of them are idled now, but there are still no power blackouts.

Figures on the supply and demand of power for this past summer were presented Oct. 1 to a subcommittee of the Advisory Committee for Natural Resources and Energy, a central government panel on energy policy. The peak demand figures relative to pre-disaster levels in 2010 were down 17.0 percent for Tokyo Electric Power Co., down 13.8 percent for Kansai Electric Power Co., down 9.5 percent for Chubu Electric Power Co. and down 8.4 percent for Tohoku Electric Power Co.

Both corporate and household users are saving on their power use.

Power-saving awareness is taking root among the people, and LED lighting is pushing that trend. Disaster-hit communities are eagerly working to realize distributed energy sources. In addition, the population is waning.

But power utilities are stalled in an age of incandescent bulbs.

Five regional utilities--Kyushu Electric Power Co., Tohoku Electric, Hokkaido Electric Power Co., Shikoku Electric Power Co. and Okinawa Electric Power Co.--have said successively, from the end of September, that they are no longer accepting new contracts to purchase power generated from renewable energy sources under Japan's feed-in tariff system.

Nobuaki Abe, an executive vice president with Tohoku Electric, cited concerns that the supply potential could far exceed demand. The utilities, however, continue to seek restarts of their nuclear reactors, with the exception of Okinawa Electric, which has no nuclear reactor.

They continue to bank on gigantic contraptions, which the nuclear reactors are, in this age of waning power demand. One could only guess if they missed an opportunity for technical innovation to keep abreast of the times, or if they are simply not interested in keeping abreast.
That represents a problem, in any case.
* * *

Nukes: What future?

November 25, 2014

Nuclear power's dark future

http://www.japantimes.co.jp/opinion/2014/11/25/commentary/world-commentary/nuclear-powers-dark-future/#.VHS3uMl5B1s
by Brahma Chellaney
Nuclear power constitutes **the world's most subsidy-fattened energy industry**, yet it faces an increasingly uncertain future. The global nuclear power industry has enjoyed growing state subsidies over the years, even as it generates the most dangerous wastes whose safe disposal saddles future generations..
Despite the fat subsidies, new developments are highlighting the nuclear power industry's growing travails. For example, France — the "poster child" of atomic power — is rethinking its love affair with nuclear energy. Its parliament voted last month to cut the country's nuclear-generating capacity by a third by 2025 and focus instead on renewable sources by emulating neighboring countries like Germany and Spain.
As nuclear power becomes increasingly uneconomical at home because of skyrocketing costs, the U.S. and France are aggressively pushing exports, not just to India and China, but also to "**nuclear newcomers**," such as the cash-laden oil sheikhdoms in the Persian Gulf. Such exports raise new challenges related to freshwater resources, nuclear safety and nuclear-weapons proliferation.

Still, the bulk of the reactors under construction or planned worldwide are in just four countries — China, Russia, South Korea and India.

Six decades after Lewis Strauss, the chairman of the U.S. Atomic Energy Commission, claimed that nuclear energy would become "too cheap to meter," nuclear power confronts an increasingly uncertain future, largely because of unfavorable economics. The just-released International Energy Agency's World Energy Outlook 2014 report states: "Uncertainties continue to cloud the future for nuclear — government policy, public confidence, financing in liberalized markets, competitiveness versus other sources of generation, and the looming retirement of a large fleet of older plants."

The stock of the state-owned French nuclear technology giant Areva recently tumbled after it cited major delays in its reactor projects and a "lackluster" global atomic-energy market to warn of an uncertain outlook for its business.

For example, the Areva-designed plant in Finland, on Olkiluoto Island, is running at least nine years behind schedule, with its cost expected to rise from €3.2 billion to almost €8.5 billion. Even in Areva's home market, the Flamanville 3 reactor project in northern France is facing serious delays and cost overruns.

In Japan, the last of its 48 commercial reactors went offline in September 2013. Repeated polls have shown that the Japanese public remains opposed to nuclear restarts by a 2 to 1 margin, despite toughened safety regulations after the March 2011 disaster at the Fukushima No. 1 nuclear power plant. Yet the southern city of Satsuma Sendai in Kagoshima Prefecture recently gave its consent to restarting, as soon as early next year, two reactors operated by Kyushu Electric Power Company.

Nuclear power has the energy sector's highest capital and water intensity and longest plant-construction time frame, making it hardly attractive for private investors. The plant-construction time frame, with licensing approval, still averages about a decade, as underscored by the new reactors commissioned in the past decade. In fact, **the World Nuclear Industry Status Report 2014 acknowledges that 49 of the 66 reactors currently under construction are plagued with delays and cost overruns**. Commercial reactors have been in operation for more than half a century, yet the industry still cannot stand on its own feet without major state support. Instead of the cost of nuclear power declining with the technology's maturation — as is the case with other sources of energy — the costs have escalated multiple times. **Just in the past decade, average costs jumped from $1,000 per installed kilowatt to almost $8,000/kW.**

In this light, nuclear power has inexorably been on a downward trajectory. The nuclear share of the world's total electricity production reached its peak of 17 percent in the late 1980s. Since then, it has been falling, and is currently estimated at about 13 percent, even as new uranium discoveries have swelled global reserves. With proven reserves having grown by 12.5 percent since just 2008, there is enough uranium to meet current demand for more than 100 years. Yet the worldwide aggregate installed capacity of just three renewables — wind power, solar power and biomass — has surpassed installed nuclear-generating capacity. In India and China, wind power output alone exceeds nuclear-generated electricity.

Before the Fukushima disaster, the global nuclear power industry — a powerful cartel of less than a dozen major state-owned or state-guided firms — had been trumpeting a global "nuclear renaissance." This spiel was largely anchored in hope.

However, the triple meltdown at Fukushima not only reopened old safety concerns but also has set in motion the renaissance of nuclear power in reverse. The dual imperative for costly upgrades post-Fukushima and for making the industry competitive, including by cutting back on the munificent government subsidies it enjoys, underscores nuclear power's dimming future. New nuclear plants in most countries are located in coastal regions so that these water-guzzling facilities can largely draw on seawater for their operations and not bring freshwater resources under strain.

But **coastal areas are often not only heavily populated but also constitute prime real estate. Moreover, the projected greater frequency of natural disasters like storms, hurricanes, and tsunamis due to climate change, along with the rise of ocean levels, makes seaside reactors particularly vulnerable.**

The risks that seaside reactors face from global-warming-induced natural disasters became evident more than six years before Fukushima, when the 2004 Indian Ocean tsunami inundated the Madras Atomic Power Station. But the reactor core could be kept in a safe shutdown mode because the electrical systems had been installed on higher ground than the plant level.

In 1992, Hurricane Andrew caused significant damage at the Turkey Point nuclear power plant in Florida, but fortunately not to any critical system. And in a 2012 incident, an alert was declared at the New Jersey Oyster Creek nuclear power plant — the oldest operating commercial reactor in the U.S. — after water rose in its water intake structure during Hurricane Sandy, potentially affecting the pumps that circulate cooling water through the plant.

All of Britain's nuclear power plants are located along the coast, and a government assessment has identified as many as 12 of the country's 19 civil nuclear sites as being at risk due to rising sea levels. Several nuclear plants in Britain, as in a number of other countries, are just a few meters above sea level

Yet even as Germany steps out of the nuclear power business, Britain is pressing ahead with a costly new nuclear power station at Hinkley Point, underscoring the divisions among European countries over nuclear power. Britain indeed intends to build several more plants to replace its aging nuclear stations. The Hinkley Point project, however, is running years behind schedule, with the costs mounting.

Globally, nuclear power is set to face increasing challenges due to its inability to compete with other energy sources in pricing. Another factor **is how to manage the rising volumes of spent nuclear fuel in the absence of permanent disposal facilities.** More fundamentally, without a breakthrough in fusion energy or greater commercial advances in the area that the U.S. has strived to block — breeder (and thorium) reactors — nuclear power is in no position to lead the world out of the fossil-fuel age.

Brahma Chellaney, a regular contributor to The Japan Times, is a geostrategist and the author, most recently, of "Water, Peace, and War" (Rowman & Littlefield).

Vision for no-nuke society missing

November 25, 2014

Editorial: Clarify vision for a society free of nuclear power

http://mainichi.jp/english/english/perspectives/news/20141125p2a00m0na008000c.html

A vision for how to create a society that does not rely on nuclear power remains unclear although three years and eight months have passed since the outbreak of the crisis at the tsunami-ravaged Fukushima No. 1 Nuclear Power Plant. Rather than phasing out atomic power, the 2-year-old government of Prime Minister Shinzo Abe has been once again trying to rely on nuclear power stations.

The Basic Energy Plan that the Abe Cabinet approved in April this year recognizes atomic power as an important base-load power source, while declaring that Japan will reduce its dependence on such power as much as possible. Moreover, the government has postponed a decision on an ideal ratio between power sources.

If the government is truly enthusiastic about pursuing a society that does not rely on atomic power, it is the role of politicians to clearly show a road map toward eliminating nuclear plants, set specific targets

including the ratio between power sources and implement specific measures to achieve this goal. The government should also judge whether individual nuclear plants should be restarted within the framework of the policy toward phasing out nuclear power.

The Abe administration's failure to do so suggests that the government intends to put as many nuclear power plants as possible into operation by carrying out a fait accompli.

In fact, the government is attempting to allow Kyushu Electric Power Co. to reactivate its Sendai nuclear plant in Kagoshima Prefecture based solely on the fact that its reactors meet the new regulatory standards set by the Nuclear Regulation Authority. The effectiveness of a plan to evacuate local residents in case of a serious disaster at the plant and efforts to convince residents of municipalities around the plant remain unaddressed. An opinion poll the Mainichi Shimbun conducted this past September shows that 60 percent of the public is opposed to restarting the power station. However, **the government is showing no consideration of public opinion.** Such an attitude could lead to a new safety myth, such as a massive amount of radiation would never be released in case of a meltdown since regulatory standards have been stiffened.

The government's lack of enthusiasm about decreasing Japan's dependence on nuclear power has led to power companies' refusal to sign new contracts to purchase power generated with renewable energy. The promotion of renewable energy sources would help not only lessen the country's dependence on atomic power but also create new industrial sectors and vitalize local economies. If Japan were to lose such chances because the government has failed to thoroughly implement measures to promote the introduction of renewable energy, it could be criticized as a serious policy misstep.

Little progress has been made on a review of a social system based on a policy of promoting atomic power, such as grants to local governments hosting nuclear plants. The government is considering a system to facilitate the decommissioning of aging nuclear reactors. However, measures to phase out atomic power as a whole are far from sufficient.

A more serious problem is that the government has hardly changed the way it decides Japan's nuclear power policy since the pre-Fukushima nuclear crisis era and failed to show an attitude to form public consensus on atomic power policy.

The previous government led by the Democratic Party of Japan (DPJ) attempted to form public consensus by conducting a deliberative poll and taking other steps, and eventually set a goal of eliminating atomic power by the 2030s. In contrast, the Abe government employed an outdated method of relying solely on an advisory panel to the Economy, Trade and Industry Ministry, which is aspiring to promote atomic power, in working out a specific nuclear power policy and considering the ideal ratio between power sources. If the government is to continue such a practice, Japan can not eliminate its reliance on atomic power.

The disposal of spent nuclear fuel also poses a challenge. The Abe government has taken over the nuclear fuel cycle project, in which all spent nuclear fuel would be reprocessed and plutonium extracted from such radioactive waste would be burned at nuclear reactors. A disposal facility and fast-breeder reactors would be used for the project. However, questions remain about the technological feasibility and safety of the project as well as its costs.

Serious doubts have been raised over the project from the aspect of nuclear proliferation. Japan possesses 47 metric tons of plutonium, which can be used to produce nuclear weapons, both domestically and overseas. However, there are no prospects that the material can be consumed. If Japan were to begin reprocessing spent nuclear fuel under such circumstances, it could raise serious concerns in the international community.

Regardless of whether Japan will phase out atomic power, the issue of the final disposal of radioactive waste will pose a challenge. In a major policy change, the government decided late last year to play a leading role in selecting a candidate site for a final disposal facility. In line with the decision, a special panel under the Economy, Trade and Industry Ministry is considering standards for selecting a site. However, superficially changing the way the site is selected alone would not be a solution. What is important is to establish a method acceptable to all concerned parties. However, no efforts to that end have been made. The government has also failed to consider setting the upper limit on the total amount of radioactive waste in line with the policy of phasing out atomic power.

The policy of promoting exports of nuclear plants highlights the Abe government's enthusiasm about restarting idled nuclear reactors. This policy shows that the administration places top priority on economic policy. Moreover, promoting exports of nuclear plants is a policy in line with the intensions of the United States that wants to rely on Japan's technology of building nuclear plants and placing worldwide nuclear technology under its control. However, **by exporting nuclear power stations, Japan will also export risks of nuclear accidents and proliferation of nuclear weapons.** The government is apparently paying little attention to these negative aspects of exporting nuclear plants.

If Japan is to promote a policy of phasing out atomic power, power companies would be forced to increase the operations of their thermal power stations, whose fuel costs are high, and adversely affect economic conditions, just as the Abe government worries. It is no easy task to consider ways to secure a stable supply of electricity and who would shoulder such a burden, while cutting back on energy consumption.

Regardless, as long as a majority of the people of Japan, which experienced a serious nuclear disaster, are calling for a society without atomic power, it is the mission of politicians to make efforts to phase out nuclear power.

November 25, 2014(Mainichi Japan)

Energy policy: Wait till summer

November 26, 2014

Industry minister sets summer deadline for energy policy

http://ajw.asahi.com/article/behind_news/politics/AJ201411260046

THE ASAHI SHIMBUN

With pressure growing from both anti-nuclear activists and proponents of nuclear power, the industry minister said Nov. 25 that Japan’s energy policy will be determined by next summer.

“We want to decide as soon as possible after studying the state of resumption of nuclear power plants, the spread of renewable energies and the results of international negotiations on global climate change,” Yoichi Miyazawa, minister of economy, trade and industry, said after a Cabinet meeting.

Prime Minister Shinzo Abe has been reluctant to make a decision on the ratios of nuclear power and other energy sources amid divided public opinion on nuclear power generation following the Fukushima nuclear disaster.

Both opponents and proponents have called for a numerical commitment from the government.

But with a Lower House election slated for Dec. 14, the Abe administration apparently wants to gain public understanding by showing it is actively working on energy policy.

Miyazawa is the first industry minister to clearly set a deadline for the nation’s energy mix, or the range of energy sources to be used in Japan after the Fukushima disaster.

He added that the decision on the new energy policy could come sooner than the summer deadline.
“I do not mean that we will make the decision next summer, but that we will decide as soon as possible,” he said.
All of Japan’s 48 nuclear reactors are currently offline.
Japan’s new energy policy could also help determine its commitment to cutting emissions of greenhouse gases as part of international efforts to reduce the impact of climate change.
The European Union pledged in October to reduce carbon emissions by 40 percent by 2030, and the United States and China recently agreed to lower their emissions of greenhouse gases.

Tanigaki: Nuke restart "necessary"

December 2, 2014

LDP bigwig Tanigaki stresses benefits of 'Abenomics,' says nuke power 'necessary'

http://mainichi.jp/english/english/newsselect/news/20141202p2a00m0na030000c.html
The 12-day campaign period for the Dec. 14 House of Representatives election has officially kicked off. The Mainichi Shimbun recently talked to leaders of Japan's political parties on their basic policies and will carry a series of special articles based on their interviews during the campaign period. Below is an outline of comments from ruling Liberal Democratic Party (LDP) Secretary-General Sadakazu Tanigaki.
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Our party has been pushing Prime Minister Shinzo Abe's key economic policies, dubbed "Abenomics," to stop decade-long deflation and create a positive growth cycle. Since the LDP returned to power, jobs have been created for some 1 million people. The ratio of job offers to job seeks has improved in all 47 prefectures of the country, and the average wage growth topped 2 percent at annual labor-management negotiations this past spring. Many companies have enjoyed record-high profits. We are promoting Abenomics as the only way towards economic recovery.
Some say this election does not have a cause, but Prime Minister Abe decided to postpone the sales tax increase from the current 8 percent to 10 percent, which would have a significant impact on Japan's economy and fiscal policies. Therefore, it's right for a prime minister to seek consent from the public as policies will not be carried out as planned. I take this matter very personally as I was the LDP president at the time of the three-party agreement among the LDP, Komeito and Democratic Party of Japan on the tax hike.
Stable supply of energy is also an important issue. We have to mull over what would be the "best mix" (of power sources). We have not changed our goal to reduce Japan's dependence on nuclear power while seeking the possibility of renewable energy, but such a goal cannot be achieved right away. **It is necessary to restart nuclear power plants that have passed safety checkups while we work to win support from local residents.**
On national security, our predecessors had paid special attention not to be a threat to neighboring nations since the end of the war. Some countries, however, want Japan to do what is possible to protect regional peace and security. We look to establish a seamless security system while reinterpreting the Constitution to exercise the right to collective self-defense.
Voters tell us they want a stable government. Winning a combined majority (with Komeito) is a must; the challenge is how to win additional seats. Our goal is to have all LDP official candidates and party-backed candidates to win seats. (Interview by Tetsuya Kageyama, Political News Department)

December 02, 2014(Mainichi Japan)

And this is not reassuring

December 5, 2014

Japan eyes returning to nuclear power, enthusiasm about renewable energy stymied

http://mainichi.jp/english/english/newsselect/news/20141205p2a00m0na011000c.html

Three years and nine months after the outbreak of the Fukushima nuclear disaster, Japan is considering turning to nuclear power once again in a policy shift from abandoning nuclear generation and promoting renewable energy.

On Aomori Prefecture's Shimokita Peninsula dotted with nuclear facilities, Electric Power Development Co. (J-Power), the nation's largest electric power wholesaler, is proceeding with building the Oma Nuclear Power Plant with an output capacity of 1.38 million kilowatts with a view to beginning operations in fiscal 2021. Mitsuo Omi, 83, chairman of a local construction company, says that when the power plant will go on line has been the talk of the town.

Construction began in May 2008 but was suspended in the aftermath of the disaster at the Fukushima No. 1 Nuclear Power Plant triggered by the March 11, 2011 Great East Japan Earthquake and tsunami. Some 1,700 workers were reduced to about 350. J-Power announced Nov. 13 that it is applying to the Nuclear Regulation Authority (NRA) as early as the end of this year for safety screening of the Oma plant under construction. Omi pins hopes on a resumption of the Oma plant construction, saying he and other construction companies will receive orders and guest houses and supermarkets will benefit.

The Oma plant would be the world's first reactor to operate solely on plutonium-uranium mixed oxide fuel. The city of Hakodate in Hokkaido, just north of Oma, filed suit against the central government and J-Power seeking a halt to the power plant project. Despite the plea from Hakodate across the Tsugaru Straits, many townspeople in Oma are turning a deaf ear. In February this year, J-Power suspended construction of a wind power station with an output capacity of about 18,000 kilowatts in the villages of Kazamaura and Sai, citing a shortage of power line capacity. Kazamaura village chief Koichi Iida and other townspeople got angry, saying the municipality should reconsider its cooperation with J-Power.

Aomori Prefecture boasts the country's largest wind power capacity of 333,000 kilowatts. The Shimokita Peninsula is an ideal location for wind power generation thanks to constant strong winds throughout the year but the power lines to power-consuming places are full to capacity. Tohoku Electric Power Co. says it cannot boost its power line capacity to only certain locations.

A 500,000-kilowatt mega solar project by a German company, Japan's largest, in the town of Yokohama was in jeopardy in September when Tohoku Electric announced a suspension of accepting solar power, saying supply tops the district's demand of 9.7 million kilowatts. A Yokohama town official says it is strange for Tohoku Electric to refuse solar power while lamenting idled nuclear reactors.

Similar tales of putting brakes on renewable energy due to a probable renewed reliance on nuclear power are omnipresent in other parts of the country. The main cause of the familiar scenes is the absence of a future energy mix policy.

The government planned to lay out an energy mix policy under a basic energy program adopted by the Cabinet in April, but the Ministry of Economy, Trade and Industry and other parties balked, saying if high-cost renewable energy expands, it would squeeze households and corporate profit. The basic energy program said Japan will utilize nuclear power as an important base-load source of power generation and

restart idled nuclear reactors. It also said Japan would reduce its dependence on nuclear power as much as possible by turning more to renewable energy but stopped short of setting any specific numerical target.

Japan is expected to decide on a future energy mix policy around June next year when the Group of Eight (G-8) major countries will discuss global warming during the annual summit. During the current general election campaign, there has been no specific debate on nuclear power and renewable energy, prompting the anti-nuclear opposition camp to accuse the ruling coalition of the Liberal Democratic Party (LDP) and Komeito of covering up the debate on nuclear power.

Prime Minister Shinzo Abe, who is also LDP president, and Banri Kaieda, head of the largest opposition Democratic Party of Japan, stumped in Fukushima Prefecture at the outset of campaigning Dec. 2 for the House of Representatives election. Kaieda denounced the Abe government for trying to restart idled nuclear reactors while Abe stressed the reconstruction efforts from the multiple disasters in 2011 but made no mention of nuclear power or energy issues.

In the absence of a clear-cut energy mix policy, electric power companies, confronted with aggravating financial conditions, are accelerating efforts to restart their idled nuclear reactors. Due to a shift to thermal power, their fuel costs rose by 3.6 trillion yen a year and the cumulative deficit by the nation's nine major utilities for the last three years since the Fukushima nuclear disaster surpassed 3 trillion yen. As electric power companies are raising prices one after another, an LDP executive warns the Japanese economy could be shaken to its foundations.

But it is not clear how many idled nuclear reactors would restart. The NRA began screening the safety of idled nuclear reactors in July last year but only two reactors at the Sendai Nuclear Power Plant in Kagoshima Prefecture cleared the hurdle.

While the government says it will approve restarting idled nuclear reactors after the NRA's clearance, NRA Chairman Shunichi Tanaka says he is not saying it is safe and would not commit to endorsing restarts.

Nagasaki University professor Tatsujiro Suzuki, a former acting chairman of the Japan Atomic Energy Commission, says that first of all there has to be debate on how much Japan should reduce nuclear power. He says the government is not serious about reducing Japan's dependence on nuclear power.

In July 2012, Japan launched a feed-in-tariff system which requires electric power companies to purchase electricity generated from renewable energy at fixed prices. But five electric power companies such as Tohoku and Kyushu suspended their purchases because only solar power increased.

Purchase prices for solar power were set much higher than those for wind power and other renewable energy, attracting massive applications. State-sanctioned solar power through August this year amounted to about 66 million kilowatts, accounting for more than 90 percent of all renewable energy.

The utilities say solar power alone sometimes tops each power district's overall demand and may lead to power failures. They appear to avoid an expansion of renewable energy due to rapid fluctuations of output and their ''poor quality,'' as compared to nuclear and thermal power.

In Europe, the share of renewable energy in relation to overall power generation in 2013 stood at 26.4 percent in Spain and 20.9 percent in Germany, as compared with 2.2 percent in Japan in fiscal 2013. Mika Obayashi, director of the Japan Renewable Energy Foundation, says it is urgent for Japan to reform the nation's electric power system to broadly accommodate excess power generation from renewable energy.

December 05, 2014(Mainichi Japan)

Japan's emissions record high in 2013

December 5, 2014

Thermal power reliance pushes Japan's greenhouse gas emissions to record high

http://ajw.asahi.com/article/sci_tech/environment/AJ201412050033

By DAISUKE SUDO/ Staff Writer

Japan's greenhouse gas emissions hit a record high in fiscal 2013, as the nation's reliance on thermal power generation increased in the absence of nuclear power, the Environment Ministry said.

The figure, equivalent to 1.395 billion tons of carbon dioxide, represents a rise of 1.6 percent over the previous year, according to the ministry's preliminary report released on Dec. 4.

"We must push ahead, root and branch, with energy saving and the introduction of renewable energy as much as possible," a ministry official said.

The ministry said more fossil fuels were burned to run thermal power plants needed to cover the shortfall in electricity produced by nuclear power plants. All nuclear reactors in Japan are currently offline in light of stricter safety standards introduced after the 2011 Fukushima nuclear accident.

The ministry's report showed that greenhouse gas emissions increased over the previous year in the industry and operational sectors, which cover factories, stores and offices. However, emissions in the transportation and household sectors were slightly down.

Although the government has set a target of reducing greenhouse gas emissions in fiscal 2020 by 3.8 percent from fiscal 2005 levels, the fiscal 2013 figure rose 1.3 percent from the fiscal 2005 levels.

The previous record for greenhouse gas emissions in Japan was set in fiscal 2007, with a carbon dioxide equivalent of 1.394 billion tons.

Emissions fell to 1.234 billion tons in fiscal 2009, but they have since continued to increase.

For a comparison purpose, the ministry also calculated fiscal 2013 emissions if average emissions per 1 kilowatt-hour of electricity generated remained on the same level as that in fiscal 2010, when dependence on thermal power plants was much lower.

It found that Japan's total emissions would have dropped by 147 million tons to 1.248 billion tons, a decrease of 9.4 percent from fiscal 2005 levels.

Trying to avoid turning nukes into election issue

December 12, 2014

2014 CHOICE: Ruling, main opposition camp stay cool toward nuclear issue despite heated public interest

http://ajw.asahi.com/article/behind_news/politics/AJ201412120052

THE ASAHI SHIMBUN

Although the public is strongly divided over the Abe administration's pro-nuclear stance, the main opposition camp along with the ruling party are avoiding turning it into a campaign issue for the Dec. 14 Lower House election.

On Dec. 11, in Satsuma-Sendai, Kagoshima Prefecture, which is home to Kyushu Electric Power Co.'s Sendai nuclear plant, Prime Minister Shinzo Abe briefly touched on the issue for the first time since campaigning began earlier in the month.

While Abe spoke of the Sendai reactors, expected to resume operations next year, he did not use the term "nuclear plant" in his speech.

"The cheap and stable supply of energy is essential to protecting the lives of the Japanese people," Abe said, emphasizing the significance of atomic power generation. "I really appreciate your providing electricity."

When the prime minister announced his decision to dissolve the Lower House on Nov. 18, Abe said he hoped to "have fruitful discussions" with opposition parties over atomic power policies.

However, the prime minister had never directly addressed the issue in more than 60 street speeches he's given for the Dec. 14 poll.

"It is not a good idea to make the issue a key point of contention, because many citizens oppose promoting nuclear power," a local lawmaker said.

In contrast to the pro-nuclear Abe, the main opposition Democratic Party of Japan pledges to phase out all nuclear plants in Japan by the 2030s in its campaign manifesto.

But DPJ leader Banri Kaieda has also avoided directly mentioning atomic power in street speeches, because his party is backed by electronics and electricity labor unions that support resuming operations of reactors.

There is also a disagreement within the DPJ membership about whether to restart reactors, which are currently all offline across the nation for safety inspections and other reasons. It appears to be another reason Kaieda is not willing to address the issue.

Minor opposition parties, however, are not shy about taking a public stand on the issue.

The Japan Innovation Party argues that reactors should not be restarted until it becomes clear when final disposal facilities for radioactive waste will likely be completed, while the Japanese Communist Party, the People's Life Party, the Social Democratic Party and the New Renaissance Party are opposed to resumption of operations at nuclear plants.

However, nuclear power has not become the main campaign issue even in Fukushima Prefecture, heavily impacted by the nuclear disaster triggered by the March 2011 Great East Japan Earthquake and tsunami.

LDP member Shinjiro Koizumi, who is a parliamentary secretary in charge of reconstruction from the 2011 disaster, visited Iwaki, Fukushima Prefecture, on Dec. 11.

"We will work to decommission all reactors in Fukushima Prefecture," Koizumi vowed in his speech in front of JR Iwaki Station.

But Masayoshi Yoshino, 66, an LDP member running for the Lower House from the Fukushima No. 5 constituency, did not mention the planned restart of reactors in a speech he delivered prior to Koizumi's.

As residents in six municipalities in the electoral district, which hosts Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant, are not allowed to live in the area now, 60,000 people are currently forced to lead their lives elsewhere within and outside the prefecture.

While the Japanese Communist Party's candidate, Eisaku Yoshida, 55, campaigns on a platform of eliminating all reactors across the country as soon as possible, Yoshino and DPJ candidate Izumi Yoshida, 65, have not clarified their stances toward the issue of atomic power in their speeches.

The two have instead spent more time discussing economic policies while campaigning on the street.

The Fukushima prefectural branches of the LDP and the DPJ pledge in their campaign platforms that the parties will work toward the decommissioning of reactors within the prefecture after the Lower House poll. But both do not directly mention possible restarts of reactors outside Fukushima Prefecture.

Behind their passive stances toward the nuclear power issue is the fact that there are many employees of TEPCO and its partner companies in the constituency, so politicians generally avoid vigorously discussing it.
Azusa Fukushima, a 41-year-old DPJ city assembly member in Iwaki, said the trend in the national poll of avoiding a debate over nuclear power may accelerate the dimming of memories of the Fukushima nuclear crisis.
"I am sorry that the nuclear issue has not become the key point of contention, although most of the voters (in the electoral district) are feeling pain from it even now," Fukushima said.
(Shinichi Sekine contributed to this article.)

Fukui and nuclear power

December 12, 2014

In Fukui, economy, reactors inseparable in election debate

http://www.japantimes.co.jp/news/2014/12/12/national/politics-diplomacy/in-fukui-economy-reactors-inseparable-in-election-debate/#.VIsgk3tpQW4

by Eric Johnston
Staff Writer
For most of Japan, especially its major cities, the issues of how effective Prime Minister Shinzo Abe and his ruling coalition's economic policies have been and whether to restart the nation's idled nuclear reactors are generally treated by politicians and the media as separate debates.
In Fukui, home to 13 of Japan's 48 operational reactors, the largest concentration in the nation, the two issues are intimately connected in a prefecture that is one of the most conservative in the country, and one where Abe's ruling Liberal Democratic Party dominates.
Under a redistricting change, this election marks the first time that the prefecture will have only two single-seat districts, down from three. Six candidates are running for a seat in the two districts.
But two local media polls put the LDP incumbents well ahead of challengers from the Democratic Party of Japan, Ishin no To (Japan Innovation Party) and the Japanese Communist Party.
The Fukui Shimbun and the Nikkan Kenmin Fukui Shimbun predict strong victories for the LDP's Tomomi Inada, 55, and Tsuyoshi Takagi, 58.A poll by the latter in early December showed 65.3 percent of respondents felt the overall economy was the most important campaign issue. Social welfare was the most important issue for 31.7 percent of the pollees. Twenty-four percent said nuclear power was most important and 20.2 percent said it was local economic revitalization.
Ultra-right LDP policy chief Inada, a close confidante of Abe, is seeking to keep her seat in the first district, which includes the city of Fukui. In the second district, where Fukui's 13 commercial nuclear reactors and the Monju experimental fast-breeder reactor are located, Takagi is seeking re-election.
Taku Yamamoto, who represented the old Fukui No. 2 district, is standing as an LDP proportional representative candidate. He is the husband of another close, far right-wing Abe friend, internal affairs minister Sanae Takaichi.

Those close connections to Abe and the LDP power structure are especially valued in Fukui, which faces particularly difficult social and economic choices in the years ahead. The central government is predicting that the prefecture's population, currently numbering about 790,000, will drop to 760,000 by 2020 and to only 633,000 by 2040.

"Social welfare policies, economic recovery, and bringing back younger people while taking care of older people are all issues on voters' minds. Compared to urban areas, however, it's probable that Fukui will see a higher voter turnout, due to concerns about these issues and the traditional ties that exist between the LDP and Fukui communities," said Akio Takezawa, a local LDP official. Each year, the prefecture estimates at least 2,000 younger residents leave Fukui for work or school, and in recent years, only about 20 percent of the latter have returned after graduation. Getting more to return has long been recognized as the key to economic recovery, but neither of the front-runners has offered much in the way of detailed strategies to achieve this goal.

Inada has offered only vague proposals to address the issue, urging creation of policies targeting young people that would lure them back to the prefecture in order to work, marry and raise families.

"In order to do this, we need policies to persuade Tokyo-based firms to relocate to Fukui and to bring their workers with them," she told supporters at a rally in early December.

For his part, Takagi is only slightly more specific.

"For example, one way to get younger people back would be to create public works projects designed to reduce or prevent natural disasters," he said in a campaign statement, also in early December.

Whoever represents Fukui in the Diet will be expected to push hard for central government approval and financial help to bring the Hokuriku Shinkansen Line to their prefecture as soon as possible. A new route connecting Kanazawa in neighboring Ishikawa Prefecture with Toyama, and then Nagano and Tokyo is expected to open in March. There are plans to extend the line to Tsuruga, in Fukui, by 2025.

But in recent weeks, discussions in the Diet and within Fukui business circles speculate that bullet trains could be running between Tokyo and Tsuruga as early as 2023 if the technical challenges can be overcome and adequate central government funding can be had.

That, in turn, has raised hope in the city of Fukui, which is closer to Kanazawa, that the Fukui-Tokyo section of the shinkansen line might even be ready by 2020, just in time to shuttle Fukui residents to the Tokyo Olympics.

Then there's nuclear power.

Fukui's pro-nuclear camp is pushing not merely for the restart of idled reactors, including those that are over 40 years old, but also for a national energy policy that spells out roughly what percentage of Japan's future electricity supplies should come from atomic power, instead of just accepting the current position that nuclear energy will be an important "base load" source.

Inada, as LDP policy chief, has signaled the Diet will answer this question by spring, although she wouldn't say if the answer will come before or after nationwide local elections.

Before 3/11, Japan had 54 reactors providing 28.6 percent of the nation's electricity. But Fukui's reactors generated just under half of Kansai Electric Power Co.'s electricity in fiscal 2010. Towns in Takagi's second district in particular have received billions of yen in subsidies for hosting the plants.

There is also the problem of aging reactors. Four of Fukui's 13 reactors are already 40 years old and another four are more than 35 years old. By 2030, only two reactors, the Oi plant's units 3 and 4, will be under 40 years.

Official plans still also call for two new Tsuruga reactors originally slated to start operating in 2017 and 2018, but their future is uncertain.

Both Inada and Takagi are facing pressure from Fukui Gov. Issei Nishikawa and senior prefectural corporate leaders in the pro-nuclear lobby who warn of local economic collapse unless the two candidates and their Diet allies formulate a clear plan of action, including economic assistance from Tokyo, for restarting those reactors that can be restarted and for decommissioning the oldest units.
While voters will be looking to elect candidates they believe will stand the best chance of dealing with these issues in the short term, it's the longer-term future that has most, regardless of political stance, worried.
"It's not clear that things are going to get better without fundamental changes, which I don't think any (one) politician can make," said Atsuko Kamado, a Fukui housewife who says she hasn't decided for whom to vote.

Will decommissioned reactors be replaced?

December 18, 2014

Draft hints at replacing decommissioned nuclear reactors with new ones

http://mainichi.jp/english/english/newsselect/news/20141218p2a00m0na011000c.html
A committee of the Ministry of Economy, Trade and Industry began work on Dec. 17 to include, in a midterm report on energy policy, the replacement of decommissioned nuclear reactors with new ones as an open option for future consideration.
The committee writes in a draft for the report, "If the vision of the future of nuclear power, including the replacement of power supply lost from reactor decommissioning, remains unclear, power companies and municipalities hosting nuclear plants will have a difficult time deciding to go through with decommissioning." The draft notes that "this needs to be kept in mind" in making future nuclear policy.
While avoiding direct language, the draft's mention of "replacement of power supply lost from reactor decommissioning" refers to building new nuclear reactors to replace those lost. Currently, the Nuclear Regulation Authority (NRA) is still evaluating a construction plan for restarting the No. 1 and No. 2 reactors at the Sendai Nuclear Power Plant in Kagoshima Prefecture, and a source says that, "With not a single reactor yet reactivated, the committee couldn't ignore the NRA and start using direct language (about building nuclear reactors)."
Prime Minister Shinzo Abe's administration has stated a goal of lowering Japan's dependence on nuclear power as much as possible. In order to do this, the administration is pushing for early decisions on whether to decommission seven reactors, such as the No. 1 and No. 2 reactors at the Mihama Nuclear Power Plant in Fukui Prefecture, which in July 2016 will pass 40 years since their activation.
Municipalities hosting those reactors, however, called for the construction of replacement reactors or new economic support because removing the reactors would end government funding they have received for hosting the facilities.
Chubu Electric Power Co. has a plan on hold for building a sixth reactor at its Hamaoka Nuclear Power Plant, where it decided in 2008 to decommission the No. 1 and No. 2 reactors. There were also plans to replace the No. 1 reactor at the Mihama Nuclear Power Plant and to build two new reactors at the Tsuruga Nuclear Power Plant that were being considered before the Fukushima nuclear disaster put them on hold.

If the government gives the OK for a policy of replacing decommissioned reactors, these plans are expected to resume.
Furthermore, by suddenly starting talks about replacing nuclear reactors with new ones right after a general election where the Abe administration avoided comment on the nuclear plant issue, the government could face criticism that it hid the issue during the election.
December 18, 2014(Mainichi Japan)

Is Gov't really planning to phase out nukes?

December 17, 2014

Editorial: Gov't should stick to its policy of phasing out nuclear power

http://mainichi.jp/english/english/perspectives/news/20141217p2a00m0na003000c.html

J-Power has filed with the Nuclear Regulation Authority (NRA) for a safety inspection of the Oma Nuclear Power Plant it is building in Oma, Aomori Prefecture, in preparation to begin its operations. The company is aiming to complete the construction of the power station in December 2020.
It is the first time that an application has been filed with the NRA for a safety inspection of a nuclear plant under construction. If approved, it can be operated for up to 40 years under the government's policy. However, if J-Power is to be allowed to operate the plant over such a long period, it would run counter to the government's policy of phasing out atomic power.
The government has promoted the nuclear fuel cycle project, in which all spent nuclear fuel is reprocessed and plutonium extracted from such fuel is used at atomic power stations.
The Oma plant will play a key part in the nuclear fuel cycle project since its reactors are the world's first commercial reactors that only use mixed-oxide (MOX) fuel of uranium and plutonium.
The construction of the plant started in May 2008 when then Prime Minister Yasuo Fukuda was in power. The work was suspended following the outbreak of the crisis at the tsunami-ravaged Fukushima No. 1 Nuclear Power Plant in March 2011, but was resumed in October 2012 under the administration of then Prime Minister Yoshihiko Noda. To meet the new safety standards set by the NRA, J-Power reviewed its estimation of the maximum shaking of a powerful earthquake that could hit the plant and the maximum height of tsunami waves. It will cost the company approximately 130 billion yen to take additional steps to protect the power station from such huge disasters.
However, experts have pointed out some problems involving MOX fuel reactors, such as the control rods function less efficiently in such reactors than conventional reactors.
NRA Chairman Shunichi Tanaka says, "We'll cautiously evaluate the safety of the Oma plant because **its MOX fuel reactors are unprecedented in the world.**" It is only natural for the NRA to strictly inspect the power station.
In the first place, the nuclear fuel cycle project itself faces various challenges from an aspect of technology, safety and costs.
The development of fast-breeder reactors to facilitate the efficient use of plutonium is deadlocked because the prototype reactor "Monju" has developed many problems and there was misconduct including a failure to inspect some of the reactor's devices. Japan Nuclear Fuel Ltd. has repeatedly postponed the start

of operations at its nuclear fuel reprocessing plant in Rokkasho, Aomori Prefecture, and the NRA is still conducting a safety inspection on the plant. It is more difficult to treat spent MOX fuel than conventional uranium fuel. If spent MOX fuel is to be reprocessed, a specialized plant would need to be built apart from the Rokkasho plant. However, little progress has been made on debate on the issue.
The Hakodate Municipal Government in Hokkaido, situated just across the Tsugaru Strait, has filed a lawsuit against J-Power and the national government, demanding that the construction of the plant be banned. Part of Hakodate falls within 30 kilometers from the Oma plant, and is therefore required to work out an evacuation plan to prepare for a serious accident at the power station. The municipal government insists that the ongoing construction of new nuclear power plants and the start of construction of planned atomic power stations be indefinitely suspended in order not to increase the number of nuclear reactors in Japan.
Hakodate's argument is based on reflection of the Fukushima nuclear crisis and is consistent with public opinion that is cautious about restarting idled nuclear reactors.
In the campaign for the Dec. 14 House of Representatives election, the ruling Liberal Democratic Party (LDP) pledged to reduce Japan's dependence on atomic power as much as possible, while its coalition partner Komeito promised to seek to completely eliminate nuclear power plants. Although it is necessary to give consideration to communities hosting atomic power stations that would be affected by a review of the government's plan on nuclear power, approval of the Oma Nuclear Power Plant apparently contradicts the ruling parties' respective pledges. The government's pledge to seek to cut down Japan's reliance on atomic power should not end up being an empty slogan.
December 17, 2014(Mainichi Japan)

Reconstruction of nuclear complex intolerable

December 25, 2014

Editorial: Moves to reconstruct nuclear power plants unacceptable

http://mainichi.jp/english/english/perspectives/news/20141222p2a00m0na013000c.html

An expert panel to the Ministry of Economy, Trade and Industry is poised to include the approval of rebuilding nuclear power plants in an interim file to be compiled later this year as one of the subjects to be considered. The move appears to signify the government's clear declaration that it is not pursuing a zero nuclear power policy.
After the Dec. 14 House of Representatives election, the Nuclear Regulation Authority (NRA) gave a de-facto stamp of approval to reactivation of the Takahama Nuclear Power Plant's No. 3 and No. 4 reactors in a safety screening. This is one of a series of moves leading to dependence on nuclear power. We cannot tolerate any moves that would promote a U-turn to nuclear power without any debate or seeking of public opinion.
The expert panel -- the Nuclear Energy Subcommittee under the ministry's Advisory Committee for Natural Resources and Energy -- is planning to include acceptance of nuclear plant reconstruction in its interim file by underscoring the need to ensure "the supply capacity to make up for the decommissioning of reactors."

It will be the first time for the government to spell out the need to rebuild nuclear plants since the outbreak of the Fukushima No. 1 Nuclear Power Plant disaster. Reconstruction of a nuclear power complex -- in which a new plant will be built while dilapidated reactors are decommissioned -- is essentially the same as building a new nuclear plant.

Legal revisions that came into effect after the Fukushima disaster have put a 40-year cap on the operational life of nuclear reactors. If no extension was allowed, the power generation capacity at nuclear plants across the country will be halved in 2030 before being reduced to zero in 2049. If rebuilding of nuclear plants is given approval, however, they will manage to persist well into the future.

In the basic energy plan approved by the Cabinet in April, Prime Minister Shinzo Abe's administration pledged to "lower the dependence on nuclear power as much as possible," while calling nuclear energy an "important base load power source." The possible move to approve nuclear plant reconstruction indicates that the administration's real intentions lie in a "U-turn to nuclear power dependence."

The existing nuclear plants boast a number of merits including cheaper fuel costs compared to thermal power plants, lower carbon dioxide emissions and stable energy security compared to oil and natural gas, the supply of which relies upon the politically unstable Middle East region. Realistically, it would be difficult to abolish all nuclear reactors immediately.

However, the "safety myth" that surrounded nuclear power before the Fukushima crisis has fallen apart and the danger posed by nuclear energy to people's lives remain. We have yet to find a place to dispose of spent nuclear fuel. The government should seek to abolish nuclear plants saddled with insurmountable problems at the earliest date possible. Approval of nuclear plant reconstruction, which runs counter to that ideal, should never be tolerated.

If nuclear plants are to be allowed to continue existing in the future, the country's efforts heretofore toward a breakaway from nuclear power reliance would be spoiled.

Major utilities including Kyushu Electric Power Co. and Hokkaido Electric Power Co. estimate that production of government-authorized renewable energy will go beyond their acceptance capacity. In order to expand that capacity, it is necessary to increase storage batteries and power transmission networks, but utilities would lose their motivation for taking such measures if reconstruction of nuclear plants is recognized.

After the Dec. 14 general election, Electric Power Development Co. (J-Power) applied for safety screenings at its Oma nuclear power plant, while the NRA approved the safety of the Takahama nuclear plant for its possible reactivation. Then comes the move to accept reconstruction of nuclear plants. This is not fair considering the fact that the ruling Liberal Democratic Party talked little about nuclear power in its campaigns leading up to the Dec. 14 election.

KEPCO's future should not depend on nuclear power

December 26, 2014

EDITORIAL: For a viable future, KEPCO must part with nuclear energy

http://ajw.asahi.com/article/views/editorial/AJ201412260035

Kansai Electric Power Co. on Dec. 24 applied to the industry ministry for permission to raise electricity rates again in April, citing unexpectedly higher fuel costs of thermal power generation.
The electric utility last raised its power charges in May 2013. This time, it plans to raise rates for households by 10 percent and charges for corporate customers by more than 13 percent.
Kansai Electric Power, or KEPCO as it is more commonly known, has expanded its output capacity by burning fossil fuels to compensate for the loss of nuclear power generation following the triple meltdown at the Fukushima No. 1 nuclear power plant in 2011.
Small and midsized companies in the region served by the utility have been screaming that they can't make any more cuts in their power consumption.
Exhaustive efforts for higher operational efficiency on the part of KEPCO are a basic premise for any rate hike.
The utility claims it has been striving to bolster cost efficiency in every aspect of its operations. But critics say KEPCO has fallen short in a number of areas, especially in regard to labor costs.
The government should evaluate rigorously the company's cost-cutting efforts before approving its rate hikes.
The primary factor behind the company's losses is the shutdown of the reactors at its nuclear power plants. Before the catastrophic accident in Fukushima Prefecture, KEPCO depended on nuclear power for about half of the electricity it generated.
When it raised power rates last year, the company was expecting that some of the reactors would be restarted before long. But that has not happened, forcing the company to apply for additional rate hikes.
Still, Makoto Yagi, the president of the power supplier, has repeatedly stated that he intends to seek to restart offline reactors as soon as possible. In our view, he is way too optimistic about the prospects for idled reactors.
The nuclear disaster raised serious doubts in the public's mind about the safety of nuclear power generation. Although it is spending heavily to ensure the safety of its nuclear facilities, KEPCO still faces a formidable challenge in trying to win approval from the Nuclear Regulation Authority and public support for bringing its reactors back online.
Nine of the 11 nuclear reactors operated by the utility will have been in service for more than three decades by the end of next year.
Replacing these aged reactors with new ones or building new reactors will be an enormous challenge.
The company's future will remain bleak as long as it continues to rely heavily on atomic energy for power generation.
Higher electricity bills will prompt businesses and local governments in the Kansai region to purchase power from other suppliers. Already, more than 10,000 workplaces have switched to new power suppliers offering lower rates.
Power consumption by households has been trending down as a result of efforts to save on energy use.
The planned liberalization of the power retail market in 2016 could accelerate the defection of households from KEPCO.
The utility is at a crossroads. It should map out a long-term strategy for crafting for itself a future without having to reply on nuclear energy.
That would be the best way to win support from its consumers for the rate increases.
Since the 1970s, the Kansai region around Osaka has been heavily dependent on electricity generated at regional nuclear power plants, many of which are located in Fukui Prefecture.
But the Fukushima nuclear disaster has raised serious questions about the way cities in the region have been consuming power generated at nuclear plants located far away.

Certain increases in electricity bills will be inevitable in the process of shifting away from nuclear energy to other power sources.
KEPCO's additional rate hikes should serve at least as an opportunity for the region to ponder the region's energy future.
The Union of Kansai Governments, composed of the governments of seven prefectures and four designated cities in the region, adopted a target earlier this year of tripling the amount of power generated with renewable energy sources by fiscal 2020.
But no workable plan to lower the region's dependence on atomic energy has been offered.
There will be no progress toward a future with less nuclear power generation as long as the region continues to count on the central government to lead the way.
The Kansai region should take the initiative in working with KEPCO and Fukui Prefecture to develop a viable vision for its energy future.
--The Asahi Shimbun, Dec. 26

Updating costs of various energy sources

January 2, 2015

Gov't to update estimates of different energy source costs

http://mainichi.jp/english/english/newsselect/news/20150102p2a00m0na008000c.html

The Ministry of Economy, Trade and Industry will begin work in January to update the estimated costs of different types of energy sources, numbers which will factor into the government's planned energy mix for 2030.
The manner in which costs that have accompanied the Fukushima No. 1 Nuclear Power Plant disaster are reflected in the estimates is expected to be a central point of the debate.
The estimates are planned to be put together within this fiscal year by an expert committee set up in an advisory body to the ministry. They will calculate the kilowatt hour cost of different types of energy, based on factors such as plant construction cost, fuel cost and amount of power produced.
The last time these power costs were estimated was in December 2011, under the rule of the Democratic Party of Japan. A committee set up in the Cabinet Secretariat then calculated the costs for 2010, and added in accident response costs for nuclear power after the Fukushima disaster. They concluded that nuclear power costs at least 8.9 yen per kilowatt hour, a jump of around 50 percent from the 5.9 yen estimate of 2004. The new estimate put the cost of nuclear power on par with the costs of coal power -- which was from 9.5 yen to 9.7 yen per kilowatt hour -- and those of liquid natural gas, which was from 10.7 to 11.1 yen per kilowatt hour.
For the 2011 nuclear cost estimate, costs for paying compensation for the Fukushima disaster, removing radiation and decommissioning its reactors were estimated at 5.8 trillion yen, and each jump of a trillion yen in costs was calculated to add 0.1 yen to the kilowatt hour cost. Currently, the actual costs have

ballooned to around 10 trillion yen, which should raise the kilowatt hour cost in the new estimates accordingly.
Major power companies have also invested a total of over 2 trillion yen on construction to meet new safety requirements enacted in July 2013, in an aim to restart their halted nuclear reactors.
The previous estimate put the cost of reprocessing spent nuclear fuel and disposing of high radiation waste from the nation's reactors at around 19 trillion yen. The new estimate for these costs is likely to be a point of contention.
Regarding renewable energy sources, the previous estimate put the cost of land-based wind power at 9.9 to 17.3 yen per kilowatt hour, and the cost of solar panels for houses at 33.4 to 38.3 yen per kilowatt hour. Those estimates do not include the feed-in tariff system for renewable energy introduced in July 2012 and costs for building and strengthening power lines needed for expanding solar and wind power. The new numbers for these power sources are yet another part of the new estimates likely to be the focus of debate.

FIT revision just an excuse for turning nukes back on?

January 2, 2015

Nuclear motive suspected in feed-in tariff reforms

http://www.japantimes.co.jp/news/2015/01/02/national/nuclear-motive-suspected-in-feed-in-tariff-reforms/#.VKbDiXt1Cic

by Eric Johnston
Staff Writer

Recent revisions to the feed-in tariff system have been welcomed by utilities as much-needed government intervention that will ensure safe and stable supply of all forms of electricity by helping to prevent renewable energy from overloading the grid and causing blackouts.
But critics say the move by an agency under the Ministry of Economy, Trade, and Industry does little to solve the basic electricity transmission issues, and hint that the real purpose of the changes is to limit the amount of renewable energy generated so there is enough grid capacity to handle nuclear power once the reactors are turned back on.
The controversy began in September, when Kyushu Electric Power Co. announced it would no longer sign contracts with most companies that were supplying renewable energy. The reason, the utility said, was that its transmission network would be overloaded if it actually purchased electricity from all of the renewable energy suppliers it had signed contracts with.
Since the advent of the July 2012 feed-in tariff system, which obligates Japan's 10 utilities to purchase electricity made from solar, wind, geothermal, mini-hydro and biomass sources from private firms, there had been something of a gold rush mentality. Firms large and small rushed to take advantage of the tariff, which guaranteed a fixed price per kilowatt hour, and the latest figures show the central government had approved nearly 1.5 million different projects.

About half of these were for solar projects generating under 10 kilowatts, and are primarily rooftop solar panels for homes and small businesses. On the other end of the scale, a total of 1,265 projects had been approved for solar projects generating more than 2,000 kilowatts. Many are “megasolar” projects that generate tens of thousands of kilowatts.

But the larger than expected — by officials at least — number of entrants led Kyushu Electric to announce it would suspend applications from renewable energy suppliers. Four others, including Shikoku Electric Power Co., Hokkaido Electric Power Co., Tohoku Electric Power Co., and Okinawa Electric Power Co., quickly followed suit, sending a shock wave through the industry and sparking warnings that Japan’s nascent moves toward renewable energy were in danger.

In response to the panic, METI looked into the issue. In mid-December, the Agency for Natural Resources and Energy, as part of a general review of the feed-in tariff program, issued a new set of rules for both renewable energy suppliers and distributors (the utilities).

Lax standards in terms of project deadlines meant that, as long as approval for a project had been granted under one tariff price over a fixed period, firms could delay construction by waiting for costs to fall, thus widening their profit margin between the guaranteed price per kilowatt hour they would receive (the tariff price) and the actual generation cost per kilowatt hour.

Under the new rules, however, once project approval is granted, firms are given deadlines for completing construction and connecting to the grid. Missing the deadlines could mean losing the right to grid access.

Also, utilities could previously limit output of renewable-generated electricity for up to 30 days annually, under the assumption the time would be calculated on a daily basis. The basic unit has been changed to hours, which means they can now limit the amount of solar project output by 360 hours annually, and wind power output by 720 hours annually.

This is being done to increase the efficient grid use of renewable energy, the government said.

“By controlling output on an hourly basis, the amount of available capacity can be increased,” the agency said in announcing the rule changes.

A METI study found that seven utilities — Hokkaido Electric, Tohoku Electric, Hokuriku Electric, Chugoku Electric, Shikoku Electric, Kyushu Electric and Okinawa Electric — only accept about 58 percent of the total solar power renewable-energy firms can, or plan to, generate due to grid limitations.

However, renewable energy advocates say the latest decision by the energy agency under pro-nuclear METI fails to address a number of concerns and was based on assumptions about the future of nuclear power in Japan that are, to nuclear opponents, optimistic at best.

“In the basic energy plan approved by the government in April, it states that the fundamental goal is to reduce the reliance on nuclear power as much as possible. But (the agency’s) calculations for the new rules are based on the premise that all of Japan’s nuclear reactors, including those that are 40 years old, will be in operation. The result is nuclear power accounting for between 50 and 60 percent of the supply at Hokkaido Electric and Kyushu Electric during minimum load demand times, and the reduction of available renewable energy,” the Japan Renewable Energy Foundation, a think tank set up by billionaire entrepreneur Masayoshi Son, said in a report released just after the agency’s announcement.

Anti-nuclear activists in Kyushu have questioned the timing of Kyushu Electric’s September announcement that it would not purchase most of the renewable energy generated. Only days before, the Nuclear Regulation Authority had given approval for two Kyushu Electric reactors at its Sendai plant in Kagoshima Prefecture to restart.

“Kyushu Electric says they stopped purchasing renewables to maintain a demand and supply balance, but I really wonder if this is the case”, said Yoshitaka Mukohara, a Kagoshima-based anti-nuclear activist.

All of the utilities have agreed to the new rules. Kyushu Electric is expected to resume purchasing renewable energy this month, but under certain conditions.
But given the ardent efforts of pro-nuclear Prime Minister Shinzo Abe and the ruling coalition, as well as a pro-nuclear lobby that consists of most local politicians, utilities and METI, to restart all safe reactors as soon as possible, it's clear that renewable energy faces a bumpy road due not only to technical and financial issues, but also political and bureaucratic hostility that makes overcoming the other issues all the more difficult.

Exporting nukes

January 3, 2015

Toshiba in talks to export nuclear reactors to Kazakhstan

http://ajw.asahi.com/article/business/AJ201501030030

THE ASAHI SHIMBUN
Toshiba Corp. is in negotiations with Kazakhstan's state-run nuclear energy company over the export of nuclear reactors, according to sources.
Westinghouse Electric Co., Toshiba's U.S. subsidiary, will build the reactors for the central Asian nation.
In cooperation with Japan Atomic Power Co. and an affiliate of Marubeni Corp., Toshiba in 2010 started feasibility studies on constructing a nuclear plant in Kazakhstan.
The former Soviet republic is a major producer of uranium and plans to complete the building of a nuclear plant in the 2020s, the sources said.
Although it is now more difficult to build a new nuclear power plant in Japan due to the 2011 Fukushima nuclear disaster, the Japanese government has been promoting the export of nuclear energy technology as part of its economic-growth strategy.
Other than Toshiba, Hitachi Ltd. and Mitsubishi Heavy Industries Ltd. are active players in the nuclear energy sector. Mitsubishi Heavy Industries, which has tied up with Areva SA of France, has reached a basic agreement with Turkey on a contract for four nuclear reactors. Hitachi has been working on a plan to build a nuclear power plant in Lithuania, also in the 2020s.

People's views & decision-making

January 6, 2015

EDITORIAL: Consensus-building process needed for nuclear policy decisions

Nearly four years have passed since the 2011 Great East Japan Earthquake and tsunami triggered the disaster at the Fukushima No. 1 nuclear power plant.
Signs are that 2015 will be remembered as the year when Japan restarted nuclear power generation.

The No. 1 and No. 2 reactors at Kyushu Electric Power Co.'s Sendai nuclear power plant in Kagoshima Prefecture, which have passed the Nuclear Regulation Authority's safety screenings in line with stricter regulations, are expected to resume operation as early as this spring. The nuclear safety watchdog has also given the green light to a plan to restart the No. 3 and No. 4 reactors at Kansai Electric Power Co.'s Takahama plant in Fukui Prefecture.

Applications for the NRA's safety reviews have also been submitted for 17 other reactors at 12 nuclear power stations. These reactors are waiting in the wings for the NRA's approval.

DIVIDED PUBLIC OPINION

To bring an offline reactor on stream again, the operator also needs to win the consent of the prefecture and municipalities where the reactor is located.

In the case of the Sendai plant, the local assemblies of Kagoshima Prefecture and the city of Satsuma-sendai voted last autumn to support the plan to restart the reactors. The Kagoshima governor and the mayor of the city have also decided to approve it. The will of the local communities concerned has been made clear according to formal procedures.

But the will of the nation as a whole concerning the issue is different.

In a survey The Asahi Shimbun conducted in November, 56 percent of the respondents expressed opposition to restarting reactors, against 28 percent who supported the move. We have been asking similar questions since our survey in June 2013, and all the polls showed that a majority of the people were cautious about the idea of bringing reactors back online.

The opinions of the local governments concerned represent the popular will, as do the results of opinion polls.

If the will of the people concerning other reactor restarts is represented in the same way as in the case of the Sendai plant, the desire of many Japanese to see an end to nuclear power generation in this nation could be ignored as the NRA accelerates its safety screenings of the reactors. Is that acceptable?

Since the Fukushima nuclear disaster, public opinion has remained sharply divided over various related issues, such as evacuation plans, damage caused by radiation and hikes in electricity rates.

The situation requires the government to rethink the way it makes nuclear policy decisions.

The nation clearly needs a system to integrate widely different popular views about nuclear power generation into policies.

In many Western nations, systems are designed to allow citizens to take part in policy debate to refine and visualize public opinion.

CITIZENS' PARTICIPATION IS CRUCIAL

Denmark was a pioneer in this area by creating a system to incorporate public opinions into the policymaking process through "consensus conferences."

Since the late 1980s, the system has been actively used to make decisions on key science and technology policy issues, such as the application of genetic engineering.

Under this system, a dozen or so citizens are chosen from among those who have responded to the government's invitations to participate in debate on a certain issue. They spend several days asking experts related questions and studying and discussing the issue as a panel. Then, working on their own, the citizens prepare and publish a written opinion about the issue.

Lawmakers and media are invited to be present when the citizens publish the document.

Similar systems have been used in various ways by countries and areas. They are all designed as "dialogue-oriented" plans to build consensus among the public while respecting different opinions.

In summer 2012, the government led by the Democratic Party of Japan attempted to adopt a similar approach when it initiated "national debate" on nuclear power policy decisions.

In addition to introducing a public comment system and holding public hearings in various parts of the nation, the DPJ-led government conducted what is known as a "deliberative opinion poll" for the first time in Japan.

About 300 citizens, selected randomly from the nearly 7,000 people who had responded to a survey, engaged in a discussion meeting that ran two days with an overnight stay. A total of three surveys, including the ones conducted before and after the meeting, were held to find out changes in their opinions.

The participants were chosen at random to ensure that the sample would represent the entire population demographically and vocationally. It was an attempt to create a more thought-out public opinion regarding nuclear power through in-depth discussions.

As a result of this process, the government concluded that many Japanese wanted to see their society abandon nuclear power generation.

Some problems arose with the survey method and the way the government made its policy decisions accordingly. But it was nevertheless a welcome attempt to accurately grasp the will of the people. Such an approach should be used more for debate on nuclear power policy issues.

MANY ISSUES DEMAND BROAD CONSENSUS

The division of public opinion over nuclear energy is not limited to the one between the will of the nation as a whole versus the will of local governments concerned.

Since the Fukushima disaster, there have been disagreements among local governments over the scope of "local communities" that should be involved in the decision-making process on such issues as whether to approve construction of a nuclear power plant and a restart of an offline reactor.

In April last year, Hakodate, Hokkaido, sued the state and Electric Power Development Co., or J-Power, to halt construction of the Oma nuclear power plant in Oma, Aomori Prefecture, which is located across the Tsugaru Strait.

Hakodate is located within 30 kilometers of the plant, and its citizens would be exposed to serious threats to their health if a severe accident were to occur there.

Hakodate's legal action is based on the notion that its vicinity to the nuclear plant should qualify it for involvement in decisions on whether to approve construction.

A heap of issues related to nuclear power generation should be settled through broad consensus and agreement. They include the program to provide state subsidies to local governments hosting nuclear plants, storage of spent nuclear fuel and disposal of radioactive waste.

Public opinion will be divided in various ways over all these issues. If there is no effective system to build consensus on such contentious issues by overcoming wide disagreements, the government will have to repeat the futile choice of either forcibly executing or postponing its decisions.

The administration of Prime Minister Shinzo Abe is seeking to revive nuclear power generation in this nation.

But the government's new basic energy supply plan, which the Abe Cabinet endorsed in April last year, contains the following passage: "The government will consider attempts to allow diverse parties to engage in discussions on various energy-related challenges and study together to deepen their understanding for the sake of progress in policy efforts."

The government plans to hold policy debate on the future share of nuclear power in Japan's overall power supply with an eye to making the decision by summer.

If the government is concerned that the traditional approach to policymaking may not work with this challenge, it should change the way it makes decisions now.

What is the best way to measure people's views and opinions and integrate them into the decision-making process? The issue of nuclear power generation raises this fundamental question about the way policy decisions are made.
--The Asahi Shimbun, Jan. 6

Convention on Supplementary Compensation (for Nuclear Damage)

January 20, 2015

Japan brings life to nuclear accident fund

Six-nation kitty offers financial help for dealing with disasters

http://www.japantimes.co.jp/news/2015/01/20/national/japan-brings-life-to-nuclear-accident-fund/#.VL4GjS51Cos

Bloomberg, Kyodo
VIENNA – An international pact on nuclear disaster compensation will enter into force April 15 after Japan signed on to the treaty last week, and a fund will be created to help victims of accidents like the one at the Fukushima No. 1 power plant in 2011.
The **Convention on Supplementary Compensation for Nuclear Damage**, which will come into force 90 days after Japan's treaty acceptance, obliges each country to cover at least ¥47 billion in compensation in connection with nuclear disasters within their borders. The other member countries are required to contribute to compensation above that amount with funds set aside by business operators related to nuclear power.
Under the treaty, Japan will contribute up to ¥4 billion to an international fund and could receive up to ¥7 billion to cover compensation in the event of another nuclear accident.
The decision taken by Japan, with the world's third-biggest installed nuclear capacity, ended a 17-year wait for the treaty to become legally binding.
"As a country that experienced an accident, Japan has a responsibility to push forward, not only nuclear safety but also the international convention," Mitsuru Kitano, Japan's ambassador to the International Atomic Energy Agency, said Thursday in Vienna, where he deposited the treaty.
Japan will seek to get more Asian countries to adopt the accord, he said.
The convention will allow countries and companies to offset liability in the event of a nuclear accident.
The U.S., with the world's largest installed nuclear-power base, has championed the convention but struggled to get other leading atomic powers on board. Argentina, Morocco, Romania and the United Arab Emirates are the only other signatories.
"The use of nuclear power looks set to continue to grow throughout the world in the coming decades and it is important to have adequate compensation schemes in place," IAEA Director General Yukiya Amano said at the signing ceremony. Japan's accession is a "valuable additional step toward establishing a global nuclear liability regime."

Even as global nuclear power generation sank last year to its lowest level in more than three decades, IAEA forecasters see installed capacity growing at least 8 percent by 2030. Asian countries, with a combined 47 reactors under construction, are propelling the growth.
Countries have struggled to reassure populations about the safety of nuclear power after the 2011 tsunami caused three reactors at Fukushima No. 1 to melt down and forced 160,000 people to evacuate their homes.
The pact is seen as likely to help promote Japan's exports of nuclear power plants at a time when the administration of Prime Minister Shinzo Abe is seeking such exports and is in talks with India to export nuclear power technology there.
The convention is also likely to make it easier for Japanese nuclear plant manufacturers to export products to member countries because it limits their responsibility in the event of a disaster.
The pact may also make it easier for foreign firms to offer technology to help decommission the Fukushima reactors and clean up the fallout.
While the new compensation fund is intended to encourage nuclear trade between companies located in countries adhering to the pact, it will not come without costs for U.S. manufacturers. Nuclear suppliers will be on the hook to pay at least $70 million in compensation in the event of an accident, according to the U.S. Department of Energy, which asked the industry for comments last month.
"Initial great expectations for the CSC have been tempered by the long road to its entry into force," James Glasgow, a partner at Washington-based Pillsbury Winthrop Shaw LLP, wrote last month. There are still "doubts that the CSC will gain sufficient members to constitute a global regime."

20 percent by 2030?

January 26, 2015
METI considers 20% ratio for nuclear power

http://www3.nhk.or.jp/nhkworld/english/news/20150126_17.html

Jan. 26, 2015 - Updated 02:50 UTC+1
Japan's industry ministry wants to have nuclear energy account for 20 percent or more of the country's electricity supply by 2030.

The ministry has asked a panel of experts to start talks this week on the nation's optimal energy mix.

The government's basic energy policy calls for reducing dependence on nuclear power as much as possible, but still calls it an "important base load power source."

Before the Fukushima nuclear accident in 2011, nuclear energy provided 28 percent of Japan's electricity.

All the nation's nuclear reactors are currently offline. The 20-percent figure assumes restarting some, while scrapping other aging reactors by 2030.

The industry ministry also hopes to raise the aggregate share of nuclear and renewable energy to a maximum of 50 percent of total supplies.

The aim is to reduce Japan's emissions of greenhouse gases.

It's unclear what the expert panel will recommend. Some of the members apparently favor keeping the ratio of nuclear power as low as possible.

Nukes & Taiwan

January 26, 2015
Taiwan's Ma won't rule out nuclear energy option

http://www3.nhk.or.jp/nhkworld/english/news/20150126_34.html

Jan. 26, 2015 - Updated 12:12 UTC+1

Taiwan's President Ma Ying-jeou has stressed that the option of using nuclear power should not be ruled out if Taiwan wants to avoid experiencing energy shortages.

Public opposition to atomic energy has been increasing in Taiwan since the 2011 Fukushima Daiichi nuclear power plant accident in Japan. Authorities froze construction of Taiwan's fourth nuclear power plant near Taipei in April last year.

Speaking at a national energy conference on Monday, Ma reiterated his pledge to slowly reduce dependency on nuclear power, with the aim of zero nuclear energy in Taiwan.

But he stressed that renewable energies are not stable and the construction halt on nuclear power plants may force Taiwan to suffer power shortages in several years.

He said Taiwan cannot afford to abandon any energy options.

Following Ma's remarks, some conference participants loudly expressed concerns about the safety of nuclear plants. A civic group also held a rally outside the venue to oppose nuclear power.

Japan Nuclear Power eyes restructuration

January 28, 2015

Japan Atomic Power, reeling from nuke shutdown, eyes major restructuring

http://www.japantimes.co.jp/news/2015/01/28/business/corporate-business/japan-atomic-power-reeling-from-nuke-shutdown-eyes-major-restructuring/#.VMielS51Cos

Kyodo

Japan Atomic Power Co. is considering spinning off its mainstay nuclear power operations into two companies to boost its technical capacity covering two types of reactors, according to sources close to the matter.

The utility, which deals only with nuclear power, is mulling setting up a holding company and reorganize its operations into two companies, one based in east Japan for boiling water reactors (BWRs) and the other in west Japan for pressurized water reactors (PWRs) to obtain human resources separately for each type, the sources said Tuesday.

The move is aimed at **creating an organization suited to supporting major power utilities in decommissioning their reactors in an effort to rebuild the company's struggling business.**

The plan was proposed by Tokyo Electric Power Co., the company's leading shareholder, according to the sources. The plan presumably reflects the government's intention, as it holds a majority stake in Tepco.

Major utilities mainly have BWRs in eastern Japan and PWRs in western Japan.

Established in 1957, Japan Atomic Power is the only Japanese utility with a track record of operating both reactor types. It currently has one reactor in Ibaraki Prefecture and two in Fukui Prefecture.

The suspension of nuclear power plants nationwide following the 2011 Fukushima crisis has reduced the company's revenue source mainly to just fees paid by Tepco and four other utilities for maintaining facilities.

The five utilities, which pay more than ¥100 billion annually, are calling on Japan Atomic Power to reform its management.

"Gimmicks" for an "unrealistic reliance" on nukes

January 31, 2015

COMMENTARY: Utilities running a shell game in relying on nuclear power over renewable energy

http://ajw.asahi.com/article/views/column/AJ201501310022

By TOSHIHIDE UEDA/ Senior Staff Writer

When regional utilities calculated how much electricity generated with renewable energy sources they can purchase from businesses and individuals, they resorted to gimmicks to continue to place an unrealistic reliance on nuclear power.

Seven companies--Hokkaido Electric Power Co., Tohoku Electric Power Co., Hokuriku Electric Power Co., Chugoku Electric Power Co., Shikoku Electric Power Co., Kyushu Electric Power Co. and Okinawa Electric

Power Co.--announced those “maximum acceptable quotas” at a meeting of an industry ministry working group on Dec. 16.

At six of the utilities, except for Chugoku Electric, the allotments for solar power were smaller than the combined output capacities that the government authorized for businesses and individuals, from which they are required to buy solar power at fixed rates under the feed-in-tariff system.

The maximum acceptable quotas are calculated by assigning part of the power demand to established types of power plants, such as nuclear, thermal, hydro and pumped storage, and the rest to relatively new renewable energy sources, such as solar and wind.

Allocating more to established energy sources removes an equal amount off the quotas for the new energy sources.

Under the feed-in-tariff system, many businesses have acquired the right to sell renewable energy--while the purchase price is high--but have yet to start plant construction.

The practice, known as paper-only slot reservations, is hampering the introduction of more green energy.

The industry ministry working group is tasked with reviewing how much renewable energy the utilities can purchase from businesses and individuals.

When I listened to its discussions on Dec. 16, I thought, “This is nothing but a new twist on slots being reserved on paper only.” This time around, regional utilities are reserving slots for nuclear power.

UNCERTAINTIES ABOUND

How one of their gimmicks works can be seen in the case of the Oma nuclear power plant, being built by Electric Power Development Co. (J-Power) in Oma, Aomori Prefecture. Construction was halted after the Great East Japan Earthquake and tsunami triggered the Fukushima nuclear disaster in March 2011, only to be resumed in October 2012.

By coincidence, it was on the day of the working group meeting that J-Power applied to the Nuclear Regulation Authority for safety screenings of the Oma plant based on Japan’s tightened regulation standards, marking a major step toward full-fledged construction work.

Tohoku Electric presupposes, in accepting the supply of renewable energy, that it will receive 280 megawatts of power from the Oma nuclear plant.

But construction of the Oma plant is only 37.6 percent complete. J-Power says it hopes to have the plant operational in fiscal 2021, which means the plant will only begin generating power seven years from now even if everything goes as planned.

And it remains to be seen how long it will take the NRA to complete its screenings.

The Oma plant is designed to use mixed-oxide (MOX) fuel, which contains both uranium and plutonium extracted from reprocessed spent nuclear fuel. The use of MOX fuel in a regular nuclear reactor is called a “pluthermal” program.

While it is customary to use MOX fuel in only about one-third of all fuel, the Oma plant is aimed at full-MOX operations, which involve exclusive use of MOX fuel. Such operations are unprecedented in the world.

Regular pluthermal operations have a track record of more than four decades in Western countries. Japan also implemented pluthermal programs at four nuclear reactors from 2009, so records that are essential for safety screenings are reasonably available.

But full-MOX operations would require screenings to be conducted from scratch.

Kenji Sumita, who served as deputy chairman of the Nuclear Safety Commission of Japan, one of the predecessors of the NRA, is a proponent of nuclear power but is skeptical of a full-MOX pluthermal program.

“Germany attempted to do full-MOX operations in the past, but didn’t do so in the end,” said Sumita, a professor emeritus of nuclear engineering with Osaka University. “The practice involves so many unknown factors, including the status of the reactor core during operation. The plan should be cautiously screened.”

The Oma nuclear plant is also under court proceedings.

The city government of Hakodate, Hokkaido, part of which lies within 30 kilometers of the Oma plant, filed a lawsuit with the Tokyo District Court in April 2014 against J-Power and the central government to demand a halt to the construction. The trial could affect the entry into service of the plant.

Tohoku Electric has nevertheless reserved a slot for the Oma plant. The reservation will remain on paper only until the Oma plant is operational.

“We have taken into account the long-term nature of our purchases of renewable energy,” said Hideto Takahashi, who heads the equipment planning division of Tohoku Electric’s Fukushima branch office.

The Oma plant is not the exception.

Tohoku Electric’s calculations include a prospective power supply from the No. 1 through No. 3 reactors of its Onagawa nuclear plant, the No. 1 reactor of its Higashidori nuclear plant, the No. 1 reactor of Tokyo Electric Power Co.’s Kashiwazaki-Kariwa nuclear plant and Japan Atomic Power Co.’s Tokai No. 2 nuclear plant.

The situation is much the same with five other regional utilities that possess nuclear plants. They have reserved maximum slots for power from nuclear reactors, including two that are so aged that there is talk of decommissioning them--the No. 1 reactor of JAPC’s Tsuruga nuclear plant and the No. 1 reactor of Chugoku Electric’s Shimane nuclear plant.

Of course, no nuclear reactor in Japan is up and running now. And the calculations assume that all nuclear reactors will be restarted.

TRICKERY OF THE MATH

The assumption of constant nuclear reactor utilization rates, used in the calculations, is also very questionable.

The utilization rates were averaged over a 30-year period preceding the Fukushima nuclear disaster.

Tohoku Electric assumes, for example, that nuclear reactors will be generating a constant power supply of 2.35 gigawatts because “that is how the calculations are done in the working group,” in the words of a Tohoku Electric official.

But I doubt that nuclear reactors have actually been utilized to that extent.

Demand in Tohoku Electric’s service area bottoms out at 7.91 gigawatts on May 12. Nuclear power accounts for 30 percent, or 2.35 gigawatts.

Nuclear reactors are obligated to undergo routine inspections at regular intervals. Tohoku Electric’s four reactors underwent a total of 38 regular checks before the Fukushima nuclear disaster. Twenty-one of them were conducted during a period including May 12, the day of the lowest power demand.

It is all too natural for utilities to carry out inspections when the demand for power is low. In the case of Hokkaido Electric, too, 40 percent of its pre-disaster periodic inspections came during a period including May 26, the date of its minimum demand.

The average utilization rate is 69.8 percent for Tohoku Electric and 84.8 percent for Hokkaido Electric. It is unnatural to assume the utilization rates will reach those levels when demand is low.

The central government and regional utilities have nevertheless calculated how much renewable energy can be bought only after setting aside maximum amounts for nuclear power. Their primary concern appears to be about reserving slots for nuclear energy.

We have to be on guard against trickery aimed at putting a priority on nuclear power.

In an emergency recommendation in November, the Fukushima prefectural government called on the central government, Tohoku Electric and other parties to take prompt action to eliminate stalled renewable energy projects. However, there have been no signs of improvement.
“Paper-only slot reservations could be eliminated if only rules were to be set and utilities were to respond properly,” said Shuzo Sasaki, director of the energy division of the Fukushima prefectural government. “But utilities won’t tell you what is taking place. So, if you want to start a renewable energy project, all you can do is make daily visits to the utility office in charge and keep submitting application forms.”
* * *
The author, based in Fukushima, wrote on other issues.
Fukushima battling utilities' 'no more green energy' decision
In age of LEDs, utilities thinking in incandescent-bulb mode
Fukushima's micro-hydropower ambitions face challenges
Fukushima alive with seeds of industrial innovation
Radioactive pollution endangers cultures of Tohoku mountain communities
Abnormal changes in small birds and the role of science
Disaster-hit Tohoku communities search for a renewable way
January 31, 2015

15 to 25%

January 31, 2015

Gov't advisory panel mulls setting nuclear power dependence at 15-25%

http://mainichi.jp/english/english/newsselect/news/20150131p2a00m0na016000c.html

An Economy, Trade and Industry Ministry panel began discussions on the country's future energy mix on Jan. 30, considering establishment of the dependence rate on nuclear power at 15 to 25 percent, and renewable energy at 20-plus percent in 2030.
The long-term energy supply and demand subcommittee to the economy ministry's Advisory Committee for Natural Resources and Energy is looking to finalize a report on Japan's future power mix by this summer, which will be reflected in the greenhouse gas reduction goal for beyond 2020.
In the basic energy plan approved at a Cabinet meeting in April 2014, nuclear power is regarded as the country's important baseload energy, which is able to provide stable electric power around-the-clock at low cost. Following the Fukushima nuclear plant crisis, the government proposed a reduction of dependence on nuclear energy as much as possible from the pre-disaster levels of around 30 percent -- but the concrete figures to which such energy was to be reduced was left unspecified. While the economy ministry and corporations want to keep nuclear power dependence at around 20 percent in order to hold down the price of electricity and ensure a stable supply of power, opinion polls show that the public supports the move to scrap nuclear energy.
The government's basic energy plan sets the goal for the use of renewable energy sources at more than 20 percent. However, the cost of renewable power generation, which is relatively high, has been added to

electricity bills -- leaving issues such as how to balance renewable energy promotion and control financial burdens squarely on consumers' shoulders. The economy ministry plans to calculate the cost of power generation based upon different types of energy sources at another expert panel, and it will take into consideration during its discussions on the forthcoming energy mix.
The country's future power mix will serve as the premise of the greenhouse gas reduction goal, which Japan aims to present at the 21st conference of parties to the United Nations Framework Convention on Climate Change at the end of the year. The Japanese government is seeking to finalize the reduction goal at an early stage, in order to present the figure at a G7 summit meeting in June.

Energy mix: What do Japanese people want?

February 9, 2015

EDITORIAL: Policy debate on energy sources needs viewpoint of consumers

http://ajw.asahi.com/article/views/editorial/AJ201502090028
A working group of the Ministry of Economy, Trade and Industry has started discussing Japan's future energy mix. The group will debate which power sources should provide how much of the energy the nation will consume in 2030, with plans to reach its conclusion by around June this year.
Their debate should focus on two central issues: how to reduce nuclear power generation and how large the share of renewable energy sources like solar, wind and geothermal power should be in the overall energy supply.
The group's work is an attempt to map out the future of this nation, which has suffered severely from the harrowing accident at the Fukushima No. 1 nuclear power plant.
IS 15 PERCENT THE LOWEST POSSIBLE LIMIT?
In the basic energy plan approved by the Cabinet in April last year, Prime Minister Shinzo Abe's administration opted for continued power generation at nuclear plants that have met the new safety standards of the Nuclear Regulation Authority (NRA). But the blueprint also called for lowering the ratio of nuclear power as much as possible.
Before the Fukushima nuclear disaster, atomic energy accounted for 28.6 percent of Japan's total electricity production. Currently, there are 48 nuclear reactors across Japan. The NRA has received applications for its safety screenings for 21 reactors, including some under construction. Four reactors are now almost certain to be restarted.
Assuming that all reactors that have passed the NRA's safety assessments will be brought back on stream and that the government-set limit of 40 years for the operational life of reactors is observed, the share of nuclear power generation in the nation's total power output will become around 15 percent by 2030. If the lifetimes of certain reactors are extended and plans to build new nuclear plants or expand existing facilities are approved, the ratio will be around 20 to 25 percent.
In either case, the share of nuclear energy in Japan's power production will be lower than the figure before the Fukushima accident. That means, the government contends, nuclear power generation in this country will diminish.
No member of the industry ministry's working group is arguing for phasing out nuclear power generation by 2030. It is widely expected that the panel's debate concerning the share of nuclear power will revolve around the range between 15 and 25 percent.

But is 15 percent acceptable as the lowest possible share of nuclear power in Japan's overall energy supply in 2030?

At this moment, Japan is producing no electricity from nuclear energy. After the triple meltdown at the Fukushima plant, two reactors at the Oi nuclear power plant in Fukui Prefecture temporarily resumed operations. But the two reactors were shut down again in September 2013 for regular inspections, and no reactor has since been restarted.

PLAN SHOULD REFLECT REALITY OF NO NUCLEAR POWER

The lack of nuclear power generation, however, did not cause a major power outage last summer thanks to steady electricity saving efforts by consumers, wider use of energy efficient equipment, and arrangements among established utilities for mutual supply of electricity beyond the borders of the regions they serve. No serious problem has occurred this winter, either, at least to date.

Given the large risk that quake-prone Japan takes on by depending on nuclear power, it is vital to phase out nuclear power generation as soon as possible. It is not unreasonable to set a target of terminating nuclear power generation completely by 2030.

Japanese people have a strong will to avoid using nuclear power as much as possible. In various opinion polls, a majority of the respondents expressed opposition to plans to restart idled reactors. A growing number of Japanese are also voicing their desire to see an increase in production of electricity by using renewable energy sources.

It is true that some aged thermal power plants have been dusted off to plug the hole left by the loss of nuclear power generation. The situation has also caused some other serious problems, including hikes in electricity rates made necessary by increased imports of fossil fuels.

Even so, any vision for the future of Japan's energy supply that is based on the assumption that the ratio of nuclear power generation will rise to 15 percent from the current zero would be divorced from public opinion.

CHANGING ROLE OF GOVERNMENT

The electric power market will be deregulated further in the coming years. The government plans to submit to the current Diet session a legal revision to complete the process of power deregulation.

Under the plan, electricity rates will be fully liberalized by 2020. The long-running system of regional monopolies by established electric utilities will be scrapped, and power transmission operations will be separated from the power generation business.

The scheduled market liberalization will allow consumers to freely choose the utilities and power sources they use.

It will even be possible for consumers to buy power from a combination of multiple suppliers using different power sources from the viewpoints of prices and environmental impact. There will be competition among electric utilities.

The deregulation will also prompt consumers to review their choices of power sources and switch suppliers accordingly, thereby making it necessary to reduce electricity production from certain sources while increasing power output from others.

That will be a dramatic change from the era when the energy mix was basically determined only by the supply side.

Despite all these changes, there will still be room for government involvement. It will be impossible to leave market forces to deal with all necessary energy policy decisions.

The government needs to show leadership in responding to international challenges like how to stem global warming. As for the feed-in tariff system, in which utilities are required to buy electricity produced

with renewable energy at fixed rates, it is the government's responsibility to determine the purchase prices.
Considering that electricity is vital for people's lives, we can safely assume that the government will have to continue playing a key role in securing a stable power supply. The government, for instance, needs to provide policy support to ensure that power is also supplied to underpopulated, rural areas and make policy responses to such emergencies as sudden and sharp rises in the prices of resources.
Still, the ratios of the components of the energy mix will assume different implications. They will become more like policy targets and may eventually be replaced by "guideline ranges."
The last time the composition of power sources was determined was in 2010, by the administration of Prime Minister Yukio Hatoyama of the Democratic Party of Japan.
At that time, the government's focus in making the decision was on the fight against global warming. The energy plan called for building at least 14 new nuclear reactors by 2030.
Then, the unprecedented nuclear accident at the Fukushima plant, which was triggered by the 2011 earthquake and tsunami, forced the administration of Hatoyama's successor, Naoto Kan, to scrap the energy supply blueprint. And now, power deregulation is making progress.
Over the past five years, the environment surrounding energy supply has changed drastically. More than anything else, Japanese people's perceptions about power consumption have changed radically.
That makes it all the more important for policymakers to pay sufficient attention to the needs of consumers in pondering the future of the nation.
We want the government to make discussions that can obtain the understanding of the people.
--The Asahi Shimbun, Feb. 8

"Politically motivated resistance"

February 10, 2015
10.02.2015_No32 / News

Failure Of Swiss Safety Initiative Blamed on 'Politically Motivated Resistance'

http://www.nucnet.org/all-the-news/2015/02/10/failure-of-swiss-safety-initiative-blamed-on-politically-motivated-resistance

10 Feb (NucNet): A Swiss-led initiative to further strengthen global nuclear safety by amending an international treaty has failed because of "politically motivated resistance" by some nations, Switzerland's chief nuclear regulator has said.
Representatives from 77 countries adopted the **non-binding** 'Vienna Declaration on Nuclear Safety' at a conference in Vienna yesterday, rather than voting on a proposed Swiss amendment aimed at imposing stricter rules under the Convention on Nuclear Safety (CNS).

"Without the readiness of major nuclear energy producing countries to support our initiative, the goal of improving nuclear safety worldwide wasn't achieved," said Hans Wanner of the Swiss Nuclear Safety Inspectorate (ENSI) in an online statement. "The resistance was mainly politically motivated."

The French nuclear safety authority ASN (Autorité de Sûreté Nucléaire) also issued a strongly worded statement, saying the conclusions of the conference were limited to "a non-binding political statement

which does not strengthen the legal obligations of the signatory states".

"The general objectives [approved yesterday] remain below the legally-binding dispositions of the European Directive on Nuclear Safety revised in 2014," ASN said. "This situation might lead to a two-tier nuclear safety system in the world, which would eventually be detrimental to all countries.

"The outcome of the negotiations does not live up to the issues at stake, recalled by the Fukushima-Daiichi accident."

But ENSI also said the adopted principles differ little from Switzerland's original amendment. "The result is a success for Switzerland and for the world," Mr Wanner said. "The international community has committed to continuously improving the safety of nuclear power plants around the world," ENSI said.

ENSI said all participating countries agreed on a statement and the statement has security principles resulting from Switzerland's initial proposal.

ENSI said key principles had been agreed including that new nuclear stations should be designed and constructed according to most recent safety standards and the latest technologies with the aim of avoiding accidents. However, if an accident were to occur, its consequences must be mitigated and significant releases of radioactive material must be prevented at an early stage.

The safety of existing nuclear facilities must be systematically and regularly reassessed. These reassessments should be used as a reference value "for the timely implementation of safety improvements achievable in a reasonable manner".

Yesterday's conference was initially called to consider the proposal by Switzerland to amend Article 18 of the CNS, related to the design and construction of nuclear installations.

The proposal was to add a paragraph that said: "Nuclear power plants shall be designed and constructed with the objectives of preventing accidents and, should an accident occur, mitigating its effects and avoiding releases of radionuclides causing long-term off-site contamination. In order to identify and implement appropriate safety improvements, these objectives shall also be applied to existing plants."

The IAEA said the contracting parties had thoroughly considered the Swiss proposal and concluded it would not be possible to reach consensus on the amendment. Instead, in order to reach the same objective as the proposed amendment, parties unanimously recommended for adoption the Vienna Declaration on Nuclear Safety including principles for the implementation of the convention to prevent accidents and mitigate radiological consequences.

The declaration contains a series of principles to guide countries in the implementation of the objectives of the CNS.

While the declaration says that "reasonably practicable or achievable safety improvements are to be implemented in a timely manner," it falls short of the original Swiss goal of requiring operators to implement back-up systems to contain radioactive contamination in the event of an accident.

The objective of the CNS, which entered into force on 24 October 1996, is to achieve and maintain a high level of nuclear safety worldwide through the improvement of national measures and international cooperation.

The IAEA said obligations for the 77 contracting parties under the CNS include submitting national reports on the implementation of their obligations under the CNS for peer review in meetings held every three years. The last review meeting took place in Vienna from 24 March to 4 April 2014, with more than 800 participants from 69 contracting parties attending.
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Kansai Electric still ignoring calls for reducing dependence on nukes

February 10, 2015

EDITORIAL: Kansai Electric out of step with vision of reduced dependence on nuclear power

http://ajw.asahi.com/article/views/editorial/AJ201502100039

Kansai Electric Power Co. has announced its intention to restart nine of the 11 nuclear reactors it owns in southern Fukui Prefecture.
The utility that serves the Kansai region focusing on the Osaka area has made clear that it will depend on nuclear power to generate electricity in spite of the catastrophic accident at the Fukushima No. 1 nuclear power plant in March 2011.
The nine reactors the company plans to reactivate include the No. 1 and No. 2 reactors at the Takahama nuclear power plant and the No. 3 reactor at the Mihama plant, which have been in service for 38 to 40 years.
In the aftermath of the Fukushima disaster, the central government set a basic upper limit of 40 years on the life of nuclear reactors, with a possible extension of up to 20 years in certain circumstances. But only one extension is permitted as an exception, on condition that the reactor passes a special safety assessment by the Nuclear Regulation Authority to check the degree of equipment deterioration.
Kansai Electric, which generated half of its total power output with atomic energy before the Fukushima accident, is under intense pressure to fall in step with the government's policy of lowering Japan's dependence on nuclear power generation as much as possible.
Under these circumstances, the utility's decision to continue operating nine of its 11 reactors is hard to understand.
The Osaka-based company is expected to post losses for the fourth consecutive year, mainly on the back of increased thermal power generation after the accident that has driven up fuel costs.
At the end of last year, the utility applied for government permission to raise its electricity rates again. If the raises are approved, the company's power charges will be the second highest in Japan.
Kansai Electric's decision apparently reflects its desire to lower electricity rates by bringing offline reactors back on stream.

This is precisely the kind of thinking that prevailed in the industry before March 11, 2011.
The triple meltdown at the Fukushima plant created many formidable challenges for nuclear power generation.
Fukui Prefecture is home to 14 nuclear reactors, including those operated by other organizations. An emergency situation involving multiple reactors simultaneously would be extremely difficult to deal with, as dramatically demonstrated by the crisis that unfolded at the Fukushima plant.
The accident highlighted the immense safety risk of a total power outage at a nuclear power plant and showed that utilities need to take more rigorous measures to protect their facilities from terrorist attacks.
To keep operating reactors that have been in service for over 40 years, many special safety measures need to be taken. For example, power cables should be made flame resistant. These measures would cost hundreds of billions of yen, according to one estimate.
It is said that the spent fuel pools of Kansai Electric's nuclear power plants will reach their storage capacity within several years if the utility restarts the reactors.
Fukui prefectural authorities have called for the construction of a facility for interim storage of spent nuclear fuel outside the prefecture. But the prospects of that happening are close to zero.
In the four years since the 2011 nuclear disaster, Kansai Electric has yet to show a convincing solution to any of these tough challenges it will immediately face if it restarts reactors.
When the power retail market is fully liberalized, as planned, the utility, which has been effectively monopolizing the Kansai region's market, will have to compete with other electricity suppliers for customers.
Securing diverse power sources should be part of its management efforts to ensure its long-term viability.
Established electric power companies have been ignoring calls for reduced dependence on nuclear power under the pretext of ensuring a stable power supply.
Kansai Electric, which has the largest number of operative reactors among Japanese utilities, has been leading this trend.
But the Kansai region did without nuclear power last summer and is managing to deal with the situation this winter as well.
We urge Kansai Electric's management team to start making serious efforts to hatch a new business strategy based on the assumption that it will not produce electricity with atomic power.
--The Asahi Shimbun, Feb. 10

China plans to resume construction of nuclear plants

February 12, 2015

Despite safety concerns, China resuming construction of nuclear plants

http://ajw.asahi.com/article/asia/china/AJ201502120074

THE ASAHI SHIMBUN
BEIJING--Facing growing energy demands and struggling against air pollution, China this year plans to resume full-scale construction of nuclear power plants for the first time since the Fukushima nuclear disaster in March 2011.

The country's target is to triple the electricity generation capacity of its nuclear power plants to 58 gigawatts by 2020. That figure would approach the level of France, whose current nuclear generation capacity is second only to that of the United States.

But the variety of reactors that China wants to fire up has raised concerns that workers and engineers will be ill-prepared if a disaster strikes.

One type is a high-temperature, gas-cooled "fourth-generation" reactor. Work is under way to assemble the world's first demonstration reactor of that kind at a nuclear power plant in a coastal area of Shidao Bay at the tip of the Shandong Peninsula.

Practical use of fourth-generation reactors, said to be highly efficient and safe, is expected in the 2030s at the earliest.

In January, many huge cranes were operating at the site of the plant about 600 kilometers southeast of Beijing.

"Construction work, which had been suspended due to the Fukushima accident, has finally begun," a guard said.

China also plans to build several "third-generation" reactors for practical use at the same plant. Third-generation reactors, which were developed in the latter half of the 1990s, are the most advanced reactors currently in operation.

In November 2014, China's National Development and Reform Commission applied to the Standing Committee of the State Council for permission to build six nuclear reactors in the coastal area of Shidao Bay and other regions. The six include China's first domestically produced third-generation reactors and new-type reactors with little actual operating experience.

Some government officials are cautious about approving the application.

However, a senior official of the Nuclear and Radiation Safety Center of the Environmental Protection Ministry said, "The application will be approved sooner or later."

Approval would fall in line with the policy of Chinese President Xi Jinping. His government needs to secure energy sources for the country's growing economy while tackling environmental problems caused mainly by coal-fired plants.

At a Chinese Communist Party meeting held in 2014, Xi declared, "We will promptly start construction of new nuclear power plants in coastal areas by adopting the world's highest safety standards."

After tripling its nuclear electricity generation capacity by 2020, China plans to construct more than 200 reactors, including those in the conception stage.

Some experts estimate that total capacity will increase to a range between 400 gigawatts and 500 gigawatts by 2050.

On March 16, 2011, five days after the Great East Japan Earthquake and tsunami caused the accident at the Fukushima No. 1 nuclear plant, the Chinese government froze work at nuclear power plants whose construction had not yet started and suspended screenings of applications to build new nuclear plants.

Amid growing calls from Chinese officials to review nuclear safety standards, the government conducted stress tests at nuclear plants in various parts of the country. It also reviewed measures to deal with tsunami and secure electricity sources during emergencies.

In October 2012, Beijing worked out its "safety plan of the nuclear power generation," and then began granting permission for the construction of nuclear power plants.

However, the reactors that were given the green light were mainly those where construction work had started before the Fukushima nuclear accident. Very few reactors where ground had not been broken obtained approval.

But the challenges of meeting energy demands while reducing environmental problems became increasingly serious for the Chinese government.
In autumn 2014 in Beijing, President Xi promised in his meeting with U.S. President Barack Obama that China would raise its ratio of non-fossil fuels to about 20 percent by around 2030. But keeping that promise would be difficult without nuclear power generation.
In China, three major state-run operators of nuclear power plants have adopted separate technologies from the United States, France and Russia. The various types of reactors and technologies used in China have sparked concerns about safety at the nuclear plants.
In addition, workers at nuclear plants in China have had little experience in dealing with emergencies. Critics also say that the nurturing of nuclear engineers in the country is not keeping pace with the rapid increase in the number of nuclear reactors.
(This article was written by Nozomu Hayashi and Tokuhiko Saito.)

Australia to go nuclear?

February 13, 2015

Uranium-rich Australia puts its nuclear taboo under review

http://www.bloomberg.com/news/articles/2015-02-12/nuclear-taboo-under-review-in-uranium-rich-australia-energy
by James Paton
Bloomberg
While Australia is home to the world's largest uranium reserves, it has never had a nuclear power plant. Now, amid growing concerns over climate change, the government is weighing whether to reverse its long-held ban.
The state of South Australia, where BHP Billiton Ltd. operates the Olympic Dam mine, is setting up a royal commission to evaluate nuclear power's impact on both the region's economy and its carbon emissions. At the same time, the federal government is set to release within months an extensive report on energy that will explore the issue further.
Those reports will follow Prime Minister Tony Abbott's comments in December that **global warming has made the issue worth revisiting.** It's a significant shift in a nation where grassroots resistance to nuclear energy dates back to the 1960s. Still, any push to introduce nuclear power would face legal and political hurdles from community groups.
"This is going to open the door to a proper informed debate and a comparison of nuclear against other low emissions technologies," said Tony Irwin, director of SMR Nuclear Technology Pty, a Sydney-based company that's developing technology for small reactors.
The Fukushima nuclear disaster in 2011 tilted global public opinion against nuclear power, and Japan and Germany shuttered nuclear facilities.
Four years later, interest in nuclear power has been revived, in part because it has no greenhouse gas emissions. Kyushu Electric Power Co. has received approval to restart two reactors in Japan, while China is renewing its atomic ambitions with five reactors set to start construction this year.

Coal and Gas

While Australia exports uranium to nations including the U.S. and Japan, abundant coal and natural gas have precluded any pressing economic need in the past for nuclear power.

Coal, though, is now under fire because it's the biggest man-made source of greenhouse gases. Abbott said in December that nuclear power should be considered to help reduce carbon emissions, calling it the "one, absolutely proven way of generating emissions-free baseload power." Abbott is a member of the Liberal Party, part of the ruling coalition with the National Party.

Envoys from 190 nations -- including Australia -- will meet at United Nations-sponsored talks in Paris in December to draw up carbon-dioxide emission limits. The current goal calls for policy makers to keep global warming increases to 2 degrees Celsius (3.6 degrees Fahrenheit) by the end of the century.

"The world has a CO2 problem," said Alan Finkel, president of the Australian Academy of Technological Sciences and Engineering, a group with more than 800 scientists and engineers. "We need large-scale solutions. There is some awareness that nuclear, if well managed and well regulated, can significantly contribute at scale to reducing CO2 emissions."

'Open Mind'

South Australia Premier Jay Weatherill also cited climate change when he announced the creation of a commission to study all aspects of the nuclear fuel cycle on Feb. 8.

"I have in the past been opposed to nuclear power -- all elements of it," Weatherill told reporters. "I now have an open mind about these issues." The involvement of Weatherill, a member of the Labor Party, means both sides of Australia's political scene are examining this issue.

A domestic nuclear-energy industry would boost demand for uranium, which has surged 36 percent to $38.20 a pound from a low of $28 in May, according to data compiled by Bloomberg. Australia has 31 percent of the known reserves, according to the World Nuclear Association, and is the third-biggest producer, behind Kazakhstan and Canada.

Uranium traded at $67.50 a pound before the earthquake and tsunami that crippled Tokyo Electric Power Co.'s Fukushima nuclear power plant and triggered the worst atomic disaster since Chernobyl in 1986.

'Probably Valid'

Creating the South Australian commission is "probably valid, given we are a supplier of uranium to the global market," Andrea Sutton, chief executive officer of Energy Resources of Australia Ltd., said by phone. The Darwin, Australia-based company is controlled by Rio Tinto Group, and produces uranium at the Ranger mine in the Northern Territory.

The Australian government believes all energy options, including nuclear, should be part of any discussion about the country's future energy mix, Industry Minister Ian Macfarlane said in an e-mailed response to questions.

There are significant hurdles to introducing nuclear power in Australia, said SMR Nuclear's Irwin, who once operated eight reactors for British Energy Group Plc and also teaches at the Australian National University. Perhaps most significantly, there are **federal prohibitions against the technology.**

Conservation Council

A move toward nuclear energy would also face opposition from environmental and community groups. The Conservation Council of South Australia criticized the South Australia review, saying the state should focus on renewable energy instead.

The nuclear debate in Australia isn't new, and it's easy to look at history and come to the conclusion that there's "very little likelihood that anything is going to happen," according to the Australian Academy's Finkel.
"The confluence of big environmental considerations, economic opportunity and new technology coming down the line might invigorate the debate," he said.
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Germany's determination

February 16, 2015

Japan Political Pulse: Germany's rock-hard commitment to nuclear phase-out

http://mainichi.jp/english/english/perspectives/news/20150216p2a00m0na002000c.html
Germany's nuclear power phase-out has reached a point of no return.
On a Japan National Press Club tour of Europe earlier this month, I had the opportunity to speak extensively with energy transition experts in Berlin. There, the head of the economics and environment department at left-leaning daily newspaper Die Tageszeitung asked me how Germany's energy transition was being received in Japan.
I showed him copies of articles from monthly and weekly Japanese magazines declaring Germany's nuclear phase-out a massive failure. He immediately asked me why the effort was being characterized as a mistake. The articles said that electricity prices would rise, preventing significant progress in the energy shift, I told him.
The argument was a boilerplate used by those opposed to energy transition, he asserted, explaining that Germany had, in fact, seen an increase in renewable energy that has helped bring electricity costs down for major corporations. Plus, home electricity costs constitute just a small portion of household expenditures, he said.
But the Japanese articles said the energy transition was a policy that benefitted the wealthy with the means to purchase renewable energy equipment, while placing a great burden on the poor, I continued.
He countered that energy transition was not to blame for poverty. To say so would be like saying that a public transportation system was faulty just because bus fares went up. According to him, **there's an understanding among those involved in the energy transition that no one's ever done it before, but it has to be done.** He explained that Germany is a wealthy country with excellent technology, and has a sense of duty to go a step ahead of other countries to change. We need to understand that the transition is based on this consensus before we bring up electricity prices, he said.
I also interviewed a state secretary of the Federal Ministry for Economic Affairs and Energy, industry associations, and major utility experts, but I got no sense that underneath all the pro-phase-out rhetoric, they actually wanted to revert to nuclear power. I also found no conservative newspapers trying to promote a return to atomic power.
Germany's push to withdraw from nuclear power originated with the 1986 Chernobyl disaster, which helped the anti-nuclear movement gain momentum. A center-left governing coalition decided in 2000 on a

nuclear power phase-out, but in late 2010, the center-right coalition administration of Chancellor Angela Merkel reversed course to prolong Germany's nuclear power use.
The Fukushima nuclear disaster broke out in March 2011, and soon after Germany returned to its phase-out policy under Merkel's leadership. Whether to interpret the move as a wise decision made by a physicist or the instinct of a leader intent on preserving her administration is up to the individual.
With the exception of a few countries, European states accommodate each other's power needs through a network of transmission operators. At the moment, members of the North Atlantic Treaty Organization (NATO) are not particularly concerned about the possibility of a nuclear war.
Meanwhile, however, there is tension between the island nation of Japan and neighboring nuclear states. This means there's a realistic concern in the argument that Japan must protect its nuclear power plants to maintain a latent nuclear weapons capability. It lacks, however, the historical and global outlook to recognize that the Earth will not survive unless we eliminate our reliance on nuclear power and fossil fuels in light of the sudden development of emerging countries.
I asked a German government official whether the country finds itself isolated from the rest of the world, and received the response that half of Europe did not have nuclear reactors, and that France was in the process of reducing its nuclear reactors by half -- and at a faster pace than Germany.
Every country runs into bumps in the road. France's efforts toward halving its nuclear reactors may be stalled if the administration changes. As for Germany, however, its commitment to nuclear phase-out looks unwavering.
Germany has seen a boost in wind and biomass power generation, but **still faces challenges in areas such as the expansion of transmission networks and thermal power generation as a back-up power source**. There's no need to idealize Germany's transition efforts, but there is also no need to buy into the mocking dismissals voiced by Japan's proponents of nuclear power. (By Takao Yamada, Expert Senior Writer)

No dark side to German "Energiewende"

Nuclear future
Source : REneweconomy
http://reneweconomy.com.au/2015/the-myth-of-the-dark-side-of-germanys-energiewende-94542

The myth of the dark side of Germany’s Energiewende

By Conrad Kunze and Paul Lehmann on 18 February 2015
Energy Post
Critics of renewable energy have mocked the Energiewende, claiming that it has led to an increase in coal power and related CO2 emissions in Germany. But Conrad Kunze and Paul Lehmann of the Helmholtz Centre for Environmental Research – UFZ show that this is a myth. German coal generation and CO2 emissions rose not because of but in spite of the Energiewende. They would have been even higher if Germany had not phased out its nuclear power and embarked on its remarkable renewable energy path. “There is no dark side to the Energiewende”.
The *Energiewende* has come in for a good share of mockery in the international media, especially in the Anglo-Saxon and French press. It was widely reported that CO2 emissions in Germany, famous for its anti-

nuclear stance and multibillion-euro renewable energy programme, increased in 2013 (and 2012). True enough, in 2013 German emissions – although still well below the levels of 1990 and 2000 – did rise by 1.5% (see Figure 1). And the reason for this was the growth in Germany's coal-fired power generation (see Figure 2).

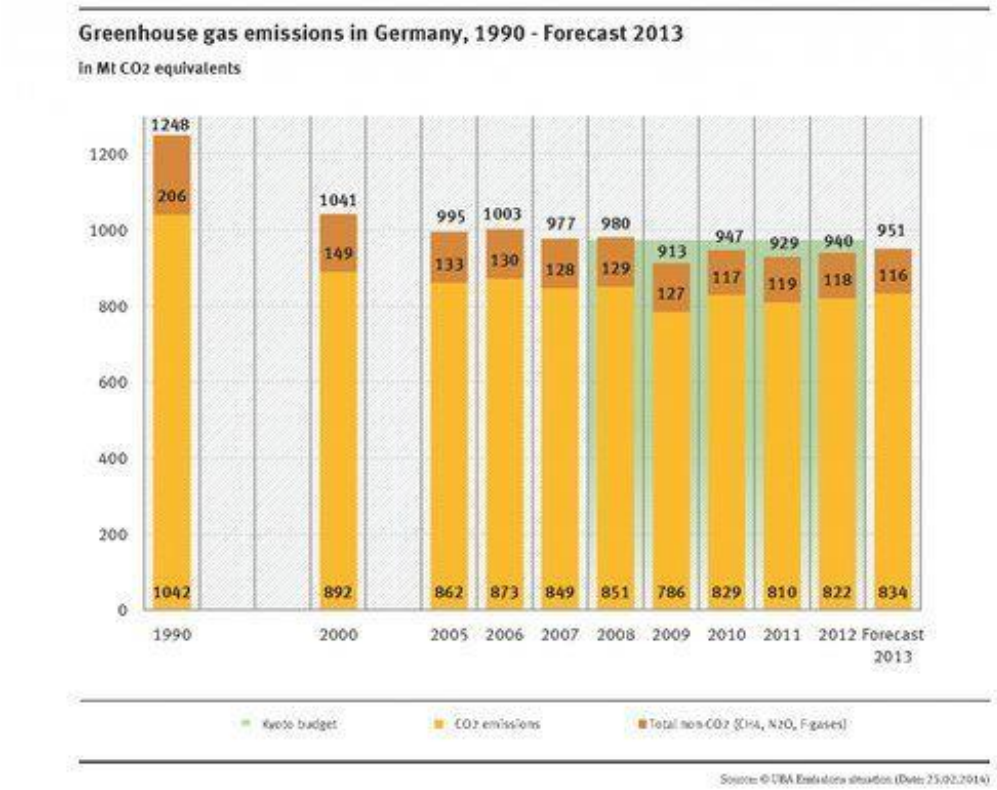


Figure 1: Historic CO2 Emissions in Germany

Source: Umweltbundesamt 2014

Most commentators swiftly linked this trend – increases in CO2emissions and coal-fired power generation – to Germany's energy transition. National Geographic wrote in February 2014: "Some blame the return of coal on the imminent end of Germany's nuclear power industry".[1] In the same month, the New York Times agreed: "But Germany's sudden hunger for coal has emerged as the dirty side of Ms. Merkel's ambitions to shut down the country's nuclear power plants by 2022 and eventually move Germans mostly to renewable energy."[2]And the Guardian repeated the story in August, embellishing the claim by specifically making a nuclear-lignite connection: "Lignite (…) consumption in Europe has remained stable since the late 1990s, but grew slightly over the past few years on the back of high gas prices and the scaling back of nuclear power in Germany."[3]

Is this narrative true? Has the *Energiewende* really caused a coal binge in Germany?

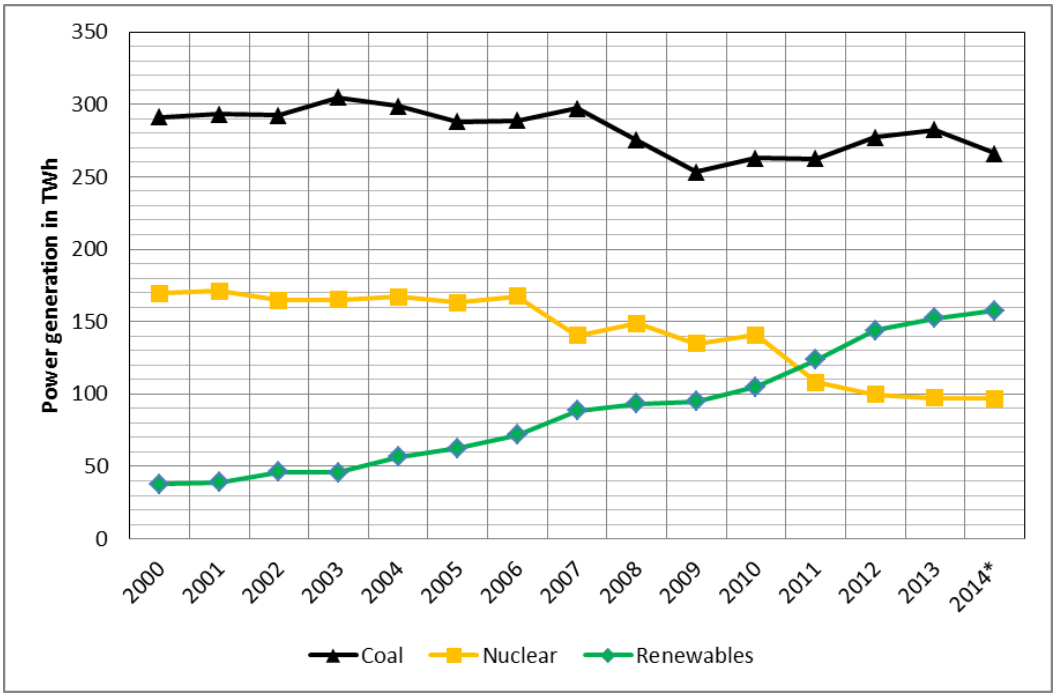


Figure 2: Development of power generation from coal (lignite and hard coal), nuclear and renewable energy sources (in terrawatt-hours, 2014 data partly estimated)
Source: Based on data from AG Energiebilanzen e.V., 2014

Renewables closed the nuclear gap

The narrative of Germany's dirty Energiewende rests on the idea that renewables could not live up to their promise to fill the gap of retiring nuclear reactors. Consequently, that gap needed to be closed by power generation from coal.

But if we look at the figures we get quite a different picture. The yellow line in Figure 2 above depicts how the amount of electricity from nuclear declined from 2000 to 2014. Due to the decommissioning of old plants, nuclear power had been declining steadily. When the German government decided on the phase-out, in 2011, some nuclear power stations were shut down immediately and the output went down more quickly. Afterwards, the steady decline continued once more.

The green line shows the steady rise of renewable energy in the same period. In 2011, more electric energy was provided from renewable sources than from all nuclear facilities. In 2014, renewables achieved a share of approximately 29% in total electricity generation. So renewables have substituted the falling nuclear production in terms of total annual power generation and are very likely to continue doing so until 2022 when the last nuclear plant will be shut down.

Certainly, this observation needs to be interpreted with care. Due to the intermittency of wind and solar energies, power generation from renewables does not always correspond to that of nuclear. Even if renewables can compensate for the reduction in nuclear power generation on an annual basis, there may be shortages throughout the year when the wind is not blowing and the sun is not shining. Such gaps need to be closed by power generation from other sources.

Yet, it is not necessarily coal-fired power plants that fill this breach nor nuclear reactors, which are too inflexible. Natural-gas fired power plants are more suitable since they can be ramped up more quickly than coal-fired power plants – and may therefore be better suited to respond to sudden changes in

renewables supply. So there is no proof that it was coal power which was expanded when renewable energies were not available.

Firing coal for exported electricity

But we know that coal generation did increase in 2012 and 2013. Why was that if not to make up for renewable shortfalls? There is in fact a ready explanation. As renewables and coal increased, and nuclear dropped, overall power generation in Germany increased from 613 to 633 terrawatt-hours (TWh) from 2011 to 2013. Did Germans use that much more energy then? No! In fact, domestic power consumption declined during the same period!

Figure 3, which shows power exports and imports, throws light on the question. The blue line in the graph depicts the amount of imported electricity in TWh. From 2000 to 2007 imports stayed level, despite a brief increase. The red line stands for the amount of exported energy. In 2002 exports started to rise steeply and stayed well above the blue line. In other words, since 2002 Germany has been an electricity exporting country. It also imports, but exports exceed imports.

There is a drop in power exports in 2011, the year in which the decision to phase out nuclear was taken. But even with that reduced production capacity in 2011, Germany still exported more than 50 TWh. The country has never become an electricity importer again, despite the nuclear phase-out.

More importantly, since 2012, exports have been thriving! We may deduce, then, that the German coal binge is related to the increase in overall power generation and exports, not to the *Energiewende* as such.

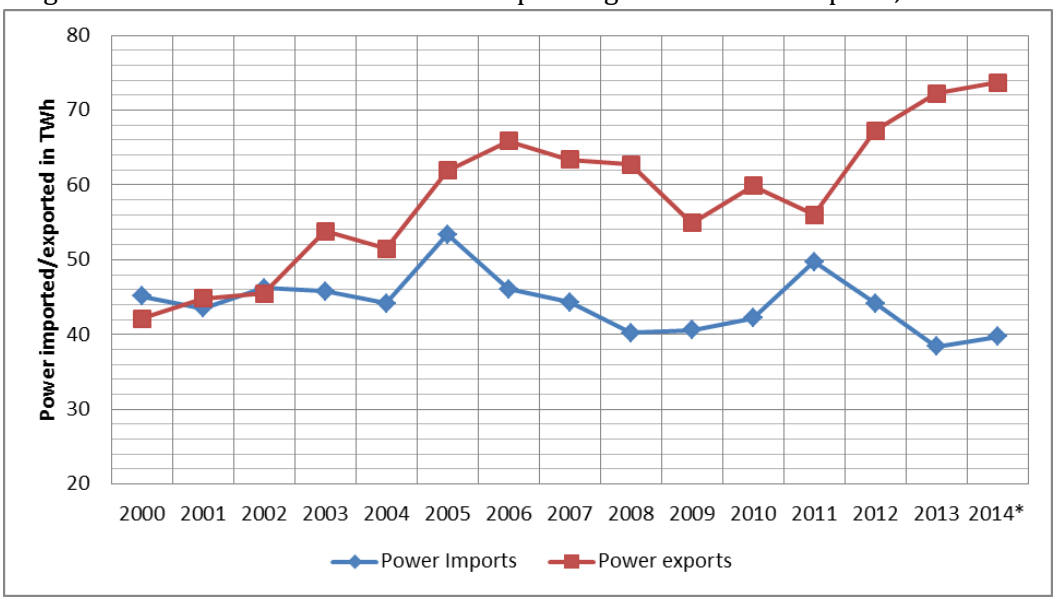


Figure 3: Power imported to and exported from Germany (in terrawatt-hours, 2014 data partly estimated)

Source: Based on data from AG Energiebilanzen e.V., 2014

The coal binge is global, not German

So why has coal generation been thriving? The actual story has got little to do with the German *Energiewende*, and a lot with international markets. In fact, the cost of generating power from coal has declined over the past years. World market coal prices have dropped significantly by more than 30% since 2011 (see Figure 4). As the International Energy Agency points out in its recent Medium-Term Coal Market Report, prices have been driven down by a large oversupply of coal, partly as a result of the shale gas boom in the United States, but also thanks to increasing production capacities in Asia.

What is more, the prices of CO2 allowances, which need to be held by the operators of fossil-fuelled power plants, have collapsed – from 15-17 Euro per tonne of CO2 in 2011 to 5-7 Euro in 2014.
Both effects – the drop in coal and CO2 allowance prices – have made coal an extremely profitable fuel for power generation. Notably, both developments happened in 2011, the year of the nuclear phase-out.
Given Germany's large stock of existing coal-fired power plants, it is no surprise that coal-fired power generation and exports have increased significantly since then. It is thus obvious that the German coal binge has been primarily driven by the developments in international fuel and carbon markets – and hardly, if at all, by Germany's energy transition. Most likely, it would have occurred in the same way if Germany had not phased out nuclear and promoted renewables.

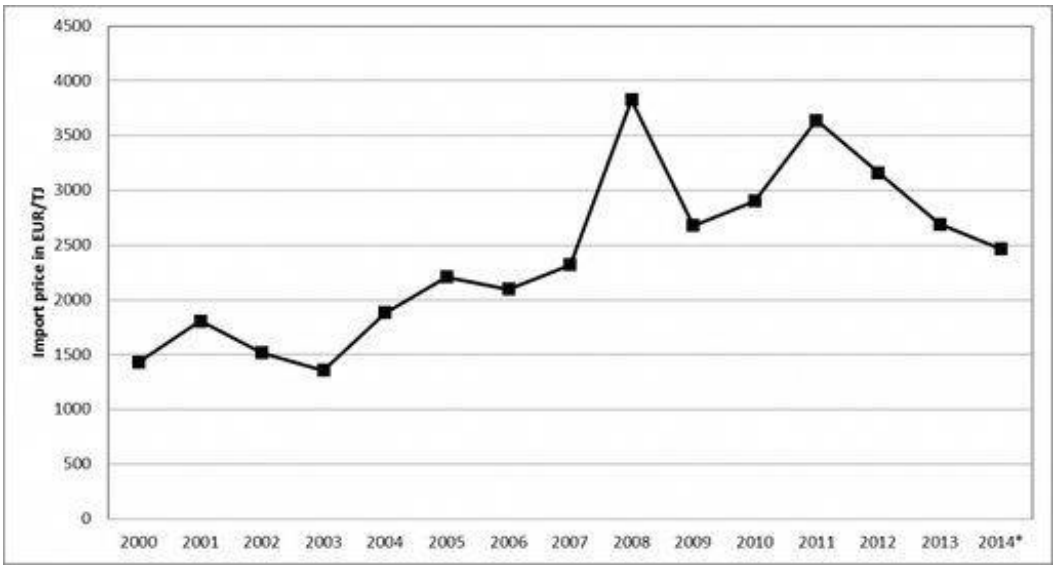


Figure 4: German import price for hard coal (in Euro/terrajoule, 2014 data estimated)
Source: Based on data from BAFA, 2014.

Promoting the *Energiewende* by phasing out coal

Many observers simply don't believe that it's possible for a modern industrial nation to phase out both nuclear and fossil power plants, as the Energiewende is aiming to do. In that sense the Energiewende has become a great test case for the possibility of a post-fossil *and* post-nuclear energy economy. Is it passing that test?
If the German *Energiewende* rests on these two pillars – getting rid of the old nuclear-fossil power plants and setting up new, renewable capacity – the second one is certainly holding up. Renewables rose to an all-time high of 27.7% of electricity production in October 2014 and for the first time beat lignite (26.2%) as the main source for electricity generation.[4]
The other pillar, however, is only half-standing. Nuclear plants are gradually shutting down, but what is missing is a mechanism to retire the coal industry. The most effective and efficient means to do so would be the tightening of the European Emissions Trading Scheme (ETS), e.g. by reducing the overall emissions cap or by implementing a price floor. Admittedly, this option may be limited due to political objections from some Member States, notably Poland. Additional measures, such as a politically mandated phase-out of coal were already considered and rejected in the political discourse.
Economy Minister Sigmar Gabriel, responsible for the *Energiewende,* still emphasises the necessity of coal as a bridging technology, to prevent what he has called a "de-industrialisation of Germany". But the energy industry itself seems to go the other way. In 2014, coal giant RWE was still in financial trouble, the main lignite producer Vattenfall announced its withdrawal from lignite as early as 2015 and Eon has announced

its divestment from all coal and nuclear facilities. It is now up to German (and European) policymakers to fully internalise environmental costs in power prices and advance the phasing out of coal.

A temporary coal binge *despite* the Energiewende

The French-German TV station Arte commented on the expansion of one open cast lignite mine as "the dark side of the *Energiewende*".[5] But this is fundamentally wrong: coal generation and related CO2 emissions have risen despite of, not because of, the *Energiewende* – and presumably would have been even higher without the promotion of renewables.

Recent figures support this argument: Germany's coal-fired power generation and CO2 emissions from power generation have started to decline again in 2014, even if the seasonal effect of the relatively warm winter is excluded (AG Energiebilanzen 2014).

Moreover, it is important to emphasize that the *Energiewende* is not only about climate change mitigation. It also pursues the overall objective of making power generation more sustainable. It is meant to address quite diverse issues next to climate change, such as nuclear hazards, local environmental problems, fuel import dependency and even a democratisation of the energy economy (Kunze/Becker 2014, Gawel et al. 2014). Consequently, an assessment of the *Energiewende*must not be based on CO2 reduction only, but on all relevant societal benefits.

In Germany it took a long time for renewable energy not to be portrayed anymore as a niche activity, unable to provide large-scale power. In international debates this notion still seems commonplace. Mistakenly, as we have tried show.

Concluding that the *Energiewende* has taken the right direction is not to say that it has overcome all major challenges. Important issues still need to be solved, such as safeguarding security of supply with high shares of volatile renewables or mitigating social and ecological conflicts associated with renewables. These are the real challenges that should be spotlighted when discussing the future of the German energy transition, which continues to unfold despite what seems to have been a coal intermezzo.

Source: Energy Transition*. Reproduced with permission*

Iran wants to buy Japanese reactors

March 3, 2015

We want to buy Japanese nuclear reactors': Iran atomic energy official

http://mainichi.jp/english/english/newsselect/news/20150303p2a00m0na013000c.html

TEHRAN -- In multiple interviews with the Mainichi Shimbun, the Deputy Head and Spokesman of the Atomic Energy Organization of Iran (AEOI) Behrouz Kamalvandi said his country would be happy to buy Japanese nuclear reactor technology in the future.

"We look forward to nuclear power plants becoming an area where we cooperate with Japan," he said.

Japan is currently cooperating with economic sanctions imposed on Iran by the U.S. and Europe, and Kamalvandi's comments appear to be envisioning a period after the lifting of such sanctions. Iran and six nations including the United States and European nations are working to reach a framework agreement regarding Iran's nuclear program by the end of this month, with a final agreement to be reached in June.

Currently, the only operating commercial nuclear reactor in Iran is a Russian-made reactor in Bushehr, along the Persian Gulf coast. In November last year, Iran and Russia agreed to the construction of two new reactors. According to Kamalvandi, these three reactors combined will have an output of 3,100 megawatts. Iran has also reached a broad agreement with Russia for the construction of six other nuclear reactors.
Kamalvandi said that assuming new reactors are of the same power output scale as the Bushehr reactor, which outputs 1,000 megawatts, "We will need nine reactors' worth of power, in addition to the three reactors (that will exist after the two new ones are built)."
"In 10 years, Iran's power demand is predicted to be 120,000 megawatts (which is over twice the current power demand.) In every analysis, we end up covering 8 to 12 percent of this with nuclear power. If we assume 10 percent, not counting the three Russian-made reactors, we will need 9,000 megawatts of nuclear power," he said.
He added, "We have been on good terms with Japan for a long time, and if the matter of constructing nuclear power plants here comes up, we will be glad to accept. Japan has technology and knowhow for large-scale nuclear power plants."
Currently, due to its participation in the economic sanctions, Japan is not in a position to conduct nuclear technology exchange with Iran. Kamalvandi expressed understanding of Japan's situation, and said, "If circumstances change, and Japan gets in a position where it can sell us nuclear reactors, we would like to buy."
Kamalvandi is a close aide to the head of the AEOI, Ali Akbar Salehi. When Salehi was foreign minister, Kamalvandi was chosen to act as his deputy foreign minister. Kamalvandi has also served as ambassador to Zimbabwe and Indonesia. He has held his current post since August 2013, when Salehi became head of the AEOI. At the AEOI, in addition to being spokesman, Kamalvandi handles dealings with the Iranian parliament and the AEOI's foreign affairs. He was a participant in nuclear talks held in Geneva in late February this year. (Interviewed by Ryuji Tanaka, Tehran Bureau)
March 03, 2015(Mainichi Japan)

China: Construction of reactors approved

04.03.2015_No47 / News

China ‘Approves Construction’ Of First Reactors Since Fukushima

http://www.nucnet.org/all-the-news/2015/03/04/china-approves-construction-of-first-units-reactors-fukushima

Plans & Construction
4 Mar (NucNet): China has approved construction of its first nuclear power project since the Fukushima-Daiichi accident in Japan almost four years ago brought the programme to a standstill while safety checks were carried out, media reports have said.
China’s State Council gave the go-ahead on 17 February 2015 for two new reactors at China General Nuclear Power Group’s Hongyanhe plant in the country’s northeast, the National Business Daily newspaper reported.

The China Nuclear Energy Association (CNEA) said in August 2014 that the two units, to be named

Hongyanhe-5 and Hongyanhe-6, were expected to be of the CAP-1400 Generation III domestic design, which is based on the Westinghouse AP1000 design.

Hongyanhe already has two commercially operational units and two under construction, all of the domestic Generation II CPR-1000 design.

Hongyanhe-1 and -2 entered commercial operation in June and October 2013. Construction of Hongyanhe-3 began in March 2009 and of Hongyanhe-4 in August 2009.

In June 2014, Chinese authorities said approval for 12 new nuclear reactors would be accelerated, among them the two new units at Hongyanhe.

According to the International Atomic Energy Agency's (IAEA) Power Reactor Information System (Pris) database, China has 16.900 gigawatts of nuclear capacity in commercial operation and 27.756 GW under construction, a total of 44.656 GW (net).

CNEA said a total of 14 GW of nuclear power generation is expected to become operational in 2015 and 2016.

China plans to expand its nuclear capacity to as much as 58 GW by 2020, National Business Daily said.

According to the IAEA, China has 24 operational nuclear units delivering electrical power to the grid, accounting in 2014 for 2.39 percent of China's total electricity production.

There are 25 nuclear reactors under construction in China. The Chinese Nuclear Society said in January 2015 that construction of five more units will begin this year.

Japan nuke exports to Vietnam

March 2, 2015

Illuminations bathe Ho Chi Minh in light, but nuclear project looms on horizon

http://ajw.asahi.com/article/forum/politics_and_economy/southeast_asia/AJ201503020060

Michiko Yoshii
Professor at the Department of International Communication of Okinawa University
Michiko Yoshii is a professor at the Department of International Communication of Okinawa University. She was a professor at the Center for International Education and Research of Mie University. She did her postgraduate work at Paris VII University and the University of Tokyo and earned her Ph.D. Her areas of expertise are Vietnamese anti-war songs, the plight of street children and civil society.

For Christmas and New Year's, I visited Ho Chi Minh City, Vietnam, where I lived for 12 years until 2005. It was my first time in a decade in the city during the holiday season.

"What the heck is this?!" I thought to myself in astonishment, as I ventured downtown at night. Every street was decked with lights ... lights ... and more lights!

Taking a closer look, I found that the illuminations on the central street leading to Reunification Palace were not for Christmas or New Year's, but rather to commemorate the 40th anniversary of Saigon's liberation in 1975.

Does this mean they will keep the lights on every night until the actual anniversary date on April 30? The sight of rows of brilliantly colored illuminations does not compare to Tokyo, or where I live in Naha, Okinawa. I became worried, thinking, "Maybe they're not using LEDs. In that case, they'll eat up electricity."

On a Sunday morning I went to a neighborhood in the outskirts, where regular people live. In one part where foreigners rarely step foot, there was a narrow market road that seemed to go on forever, where migrants from the countryside reside in tenement houses. They work at a nearby industrial park.

LACK OF AWARENESS OF NUCLEAR PLANT PROJECT

I asked Duc, a 38-year-old worker who handles cargo at a factory, if he was aware of the nuclear crisis at the Fukushima No. 1 nuclear power plant in March 2011.

"I recall hearing the name," he replied. "But I don't know what it is."

When he was younger, Duc migrated from his home in Ninh Thuan province.

I then asked, "Do you know about the nuclear power plant they're going to build soon in the area you are from?" He answered: "I've never heard about that. I just watch soccer on TV."

Duc returns to his family, who live within 20 kilometers of the site for the nuclear reactor Japan will export, each year.

He was not the only person I met who was unfamiliar with the Fukushima incident. Mai, a 30-year-old sewing plant worker, said, "I saw the earthquake and tsunami on TV, but I don't know about Fukushima." When I told her about the planned nuclear facility, she said: "Wow, they're going to build a nuclear power plant in Thai An? That's the first I've heard of it. I only watch dramas on TV." She added: "That village is close to a water supply, so radioactive contamination would be terrible. We have to do something."

Mai was born within 20 kilometers of the plant's planned site and still has parents and siblings living there.

I went with the intention of asking Ninh Thuan natives for their opinions about the nuclear power plant, but my effort came to no avail. I felt like I only ended up publicizing the nuclear power project. I wanted to ask them what they think about the impoverished countryside of Ninh Thuan supplying the electricity used in those glittering illuminations.

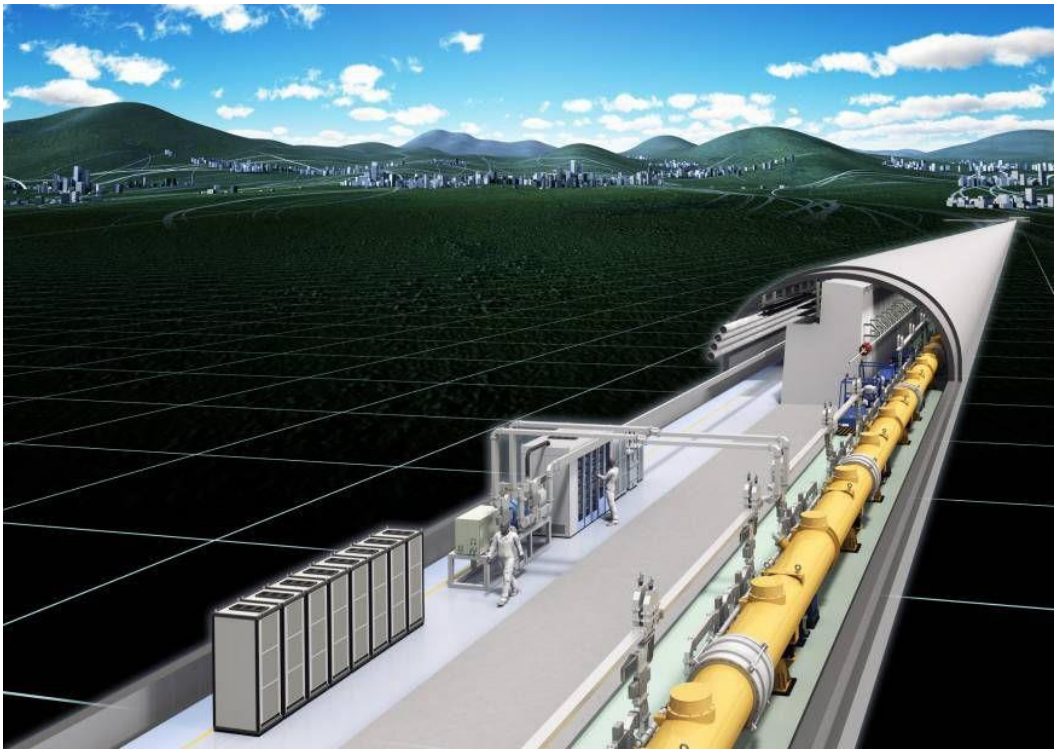
I happened to notice there were numerous mini lights (also used as Christmas lights) suspended just above head level on the narrow tenement-lined road. Then I saw bulbs over the market road as well. When I asked what they were for someone told me, "They're Christmas and New Year's lights."

I asked in response, "Well, who pays for the electricity?" I was told, "The lines run from the homes of relatively wealthy people around here." It seems to be part of a social contribution by people of distinction.

Electricity is consumed like water here, from downtown Ho Chi Minh City to where the masses live. Meanwhile, people migrate from Ninh Thuan because they can't survive there. And the folks from the planned site seem for the most part unaware of the nuclear power plant project.

I felt a great sense of responsibility as a Japanese, the country exporting the nuclear technology. During the big countdown on New Year's Eve, I felt ill at ease and ended up going to bed without watching the fireworks downtown. This year, I decided I must do something to stop Japan from exporting nuclear reactors to Vietnam.

Is this the future?



INTERNATIONAL LINEAR COLLIDER

Tohoku pins rebound hopes to atom smasher

by Tomohiro Osaki
Staff Writer

As the disaster-hit Tohoku region struggles to recover from the deadly tsunami four years ago, many residents have hopes for what is considered a once-in-a-lifetime opportunity to galvanize the area's resurrection.

Chances are the region may host the International Linear Collider, a state-of-the-art research facility physicists worldwide hope will shed light on the secrets of the universe.

We look into the situation both at home and abroad surrounding the ILC and its potential impact on Japanese society.

What is the ILC?

The ILC is an unprecedented particle accelerator that must be built in an underground tunnel 30 to 50 km long. It is the brainchild of the Linear Collider Collaboration, a group of physicists from around the world. The much-anticipated international project calls for the accelerator to catapult two ultra-small particles — electrons and positrons — into each other head-on at close to the speed of light. The process will be repeated numerous times a second, around the clock.

Each successful collision will unleash a significant amount of energy for a split second and re-create the extremely high-energy state of the Big Bang that purportedly spawned the universe.
Construction of the facility is expected to cost about ¥830 billion.

What's the significance of the ILC experiment?

The high-energy reaction is expected to spark an array of particles considered relevant to the birth of the universe, including the recently discovered Higgs boson.
Scientists hope this Big Bang simulation will help explain some of the most profound mysteries in the universe, including its makeup and how it works. An estimated 95 percent of matter existing in the universe remains scientifically unaccounted for.
One chief objective of the ILC project is to delve into the mechanism of the Higgs boson, the "God particle" detected for the first time by scientists in the European Organization for Nuclear Research (CERN) during an experiment conducted at the Large Hadron Collider in 2012.
The Higgs boson is thought to impart mass to other particles, meaning that without it, every single particle, for example those in a human body, would disperse at the speed of light.
The ILC, if built, will be the longest particle accelerator in the world, dethroning the LHC, which lies deep beneath the Franco-Swiss border near Geneva.
While the LHC smashes particles using a 27 km-long circular path — roughly equivalent to Tokyo's Yamanote Line — the ILC will be straight. A linear collision is considered more powerful than a circular one because curves reduce the speed of the particles.

What would be the potential societal impact if Japan hosts the ILC?

If the ILC is built in Japan, it will be the first international research institute Japan has hosted, according to Satoru Yamashita, an associate professor at the International Center for Elementary Particle Physics at the University of Tokyo.
It will be a major breakthrough in a country that has long suffered from a brain drain of local talent and help Japan regain global visibility in science and technology, Yamashita said.
But perhaps more significantly, the ILC would attract a swarm of foreign physicists and their families, creating a global community.
Nomura Research Institute estimates the facility will create 250,000 jobs over a 30-year period covering its construction (10 years) and operation (20 years), with the economic benefits over the same period likely to reach ¥4.3 trillion, according to the Tohoku Conference for the Promotion of the ILC, a regional group seeking to promote Japan's bid.

What are the chances of the ILC coming to Japan?

It seems the chances are quite high.
According to Yamashita, a consensus has been formed among physicists in the United States and Europe that it should be built in Japan.
The Particle Physics Project Prioritization Panel (P5), part of the U.S Department of Energy's high-energy physics advisory group, said in its report last May that Japan's fledgling ILC initiative is an "exciting development," and recommended the U.S. "play a world-leading role in the ILC experimental program" should "this exciting scientific opportunity be realized in Japan."

Is there a nationwide movement to host the ILC?

So far, the domestic interest has largely been municipal, because the central government hasn't officially declared Japan's candidacy.
A panel of outside experts set up by the Education, Culture, Sports, Science and Technology Ministry is scrutinizing Japan's potential to host the facility and is likely to conclude the discussion by the end of the next fiscal year.

Japan will then discuss the panel's assessment with global leaders, and decide on its ILC acceptance and other details, Yamashita said.

Where in Japan would the ILC most likely be built?

A group of scholars and researchers determined in summer 2013 that the Kitakami mountains, which straddle three Tohoku prefectures — Aomori, Iwate and Miyagi — would be the best ILC location in Japan, ruling out the Sefuri mountains in Kyushu.

The Kitakami mountains, a large part of which lie in Iwate Prefecture, were judged ideal because their ground consists of layers of solid granite 50 km wide, long enough to accommodate the ILC.

An investigation by the group into geological conditions also confirmed there is no active fault running underneath that would trigger an earthquake.

What's the local response like?

Iwate Prefecture, for one, has strenuously campaigned for the ILC. It characterizes the project as a "once-in-a-lifetime" opportunity for the future of Tohoku, which is struggling to recover from the devastating quake and tsunami four years ago that killed nearly 19,000 people.

"We believe the ILC will not only enable us to regain what was lost in the disaster but to gain something new and make the Tohoku region something akin to an international hub of scientists," said Masataka Miya, chief of a team set up by the prefectural government for the hosting bid.

Miya said the project will boost science education for local children and provide new business opportunities to local manufacturing industries.

The prefecture set up a task force in 2013 to discuss how to make its communities more amenable to incoming foreign scientists and their families.

Among the topics under discussion are how to address the serious lack of full-time medical interpreters in local hospitals and where to school foreign children who accompany their parents, Miya said.

Any concerns?

Miya acknowledged that some residents are worried about the ILC's link to radiation.

The ILC accelerator releases radiation while it operates and the tunnel as a whole will be designated a radiation-controlled area.

The Advanced Accelerator Association Promoting Science & Technology (AAA), which campaigns for the ILC initiative in Japan, claims on its website the possibility of a radioactive substance leaking outside the facility is nearly zero, citing its watertight safety measures and full-time surveillance system.

However, in 2013, a proton accelerator facility called Japan Proton Accelerator Research Complex (J-PARC) in Ibaraki Prefecture malfunctioned and exposed 34 workers and researchers inside to radiation.

Yamashita from the University of Tokyo said the likelihood is low that a similar accident will befall the ILC, noting that electrons and positrons require only a thousandth of the radiation necessary to collide protons. Still, he added: "Radiation is such a fearful thing for many people that even the tiniest amount of it leaking is enough to frighten them. The fact that the facility needs only a limited amount of radiation does not make unnecessary robust safety precautions."

Renewables goals for 2030 rather low

March 11, 2015

FOUR YEARS AFTER: Ministry forecasts 20% green power by 2030; experts criticize goal as too low

March 11, 2015
http://ajw.asahi.com/article/business/AJ201503110053

By KUNIAKI NISHIO/ Staff Writer

Twenty percent of the electricity produced in Japan 15 years from now will be renewable energy, according to the economy ministry, but some industry experts said the figure needs to be higher.

The ministry announced the estimate on March 10 during a Subcommittee on Long-term Energy Supply-demand Outlook meeting to discuss the nation's future energy plans.

Of an estimated 1 million gigawatt-hours to be produced in fiscal 2030, renewable energy will account for around 200,000 GWh, according to the ministry.

The 20 percent total falls short of the goal the government set in April 2014 in its basic energy plan, in which it anticipated "a standard outpacing the previous goal," which had been set at 20 percent for fiscal 2030.

Some subcommittee members pointed out that the new estimate at just 20 percent doesn't "outpace" this goal.

"We should strive for 30 percent," said Takeo Kikkawa, professor of economics at Hitotsubashi University's Graduate School of Commerce and Management.

Kikkawa proposed such policies as utilizing power lines that would be out of service after the decommissioning of nuclear power plants.

Power generated through renewable energy sources in fiscal 2013 totaled 100,400 GWh, accounting for about 10 percent of all the electricity produced that year.

According to the government's new estimate, solar power produced in fiscal 2030 will total 70,000 GWh.

The figures were estimated by combining the “maximum acceptable quotas” set by the 10 main electric power utilities of Japan.

Maximum acceptable quotas are calculated by assigning part of the power demand to established types of power plants, such as nuclear, thermal and pumped-storage hydroelectric, and the rest to relatively new renewable energy sources, such as solar and wind power.

The estimate does not include the effects of new regulations set by the ministry, such as the requirement to temporarily reduce power generation to introduce more solar energy.

Eyeing the establishment of wind power facilities currently being assessed on their environmental impact, the government estimates that at least 10,000 GWh will be produced through wind power in fiscal 2030.

Costing relatively little to set up, wind power plants have been spreading across the globe, but power lines to bring the electricity made by wind turbines to urban areas often need costly upgrades.

According to the ministry, introducing an additional 10,300 GWh of wind power in Hokkaido and the Tohoku region will require an additional 1.17 trillion yen ($9.65 billion).

Estimates on geothermal energy and hydropower, along with biomass power from such sources as wood chips, were made in consideration of such factors as eased restrictions on these power sources in the future.

At the March 10 meeting, some experts were concerned over possible increases in electricity bills after the spread of renewable energy.

The ministry will continue reviewing such issues as introducing more solar and wind power projects, and the costs of reinforcing power lines.

Don't put renewables on the back burner

March 12, 2015

Editorial: Japan must not miss the renewable energy bandwagon

http://mainichi.jp/english/english/perspectives/news/20150312p2a00m0na009000c.html

The disaster at the Fukushima No. 1 Nuclear Power Plant has shattered the "safety myth" of nuclear power, attesting to the difficulty quake-prone Japan has in coexisting with nuclear plants. It has also sparked within many a desire to create a society that does not rely on nuclear power by boosting renewable energy and promoting energy conservation.

Four years have passed since the outbreak of the Fukushima nuclear crisis. While the public's wish remains unchanged, the government seems to have forgotten about the disaster. In discussion about the country's future energy mix that started in January, it has attached priority to maintaining nuclear power. This will not lead to any energy reforms that satisfy public expectations.

The expansion of renewables is a global trend. Renewable energy is growing not only in Europe but also in China. Alas, Japan is ranked only 19th in the world in the amount of wind power generated. While solar power initially grew rapidly in Japan, momentum has been dampened by revisions to the feed-in tariff system, after utilities suspended purchases of renewable energy.

At this rate, Japan will be left behind and lose sight of business opportunities. It's about time for the country to change its mindset with its eyes set on a new era, and to drastically review its infrastructure and old systems centering on nuclear and thermal power generation.

From a short-term perspective, it is important to ensure that the feed-in tariff system does not lose momentum. Rules have been changed for solar energy purchases under the pretext of preventing oversupply, but the move is based on the unrealistic premise that most of the existing nuclear reactors will go online.

Under the current system, energy interchange among power companies is designed to put renewable energy on the back burner. If the government is to review the policy of prioritizing nuclear power and the current system, there should be sufficient room for accommodating renewable energy.

In the meantime, we must also encourage the growth of wind and geothermal power instead of relying solely upon solar energy, while keeping an eye on potential electricity rate hikes. It is important to review the prices for purchasing renewables in an appropriate manner.

In the medium and long run, we will need to give attention to the effect of liberalization of electricity retailing and the separation of power generation and transmission. Under these reforms, utilities will no longer be able to monopolize power transmission networks. This will help spur renewable energy. Electricity deregulation is believed to have played a role in promoting the introduction of renewables in European countries.

Some point to the potential risk of power outages due to a surplus of solar and wind power destabilizing the power grid. In Europe, renewable energy supplies can be adjusted across different countries as their transmission networks are interconnected, but that's not the case in Japan. However, such problems are

realistic only after the renewable energy sources increase. We must boost renewables first and foremost. If we connect divided transmission networks over a wider area, we may benefit from the same kind of effect as in Europe.
The public might need to shoulder heavier costs as a result of an increased renewable energy supply. In order to come up with solutions to this and other issues, it is imperative to draw a concrete image of energy reform based on the premise of less reliance on nuclear power. In no way have we time to be racking our brains about how to maintain nuclear power.
March 12, 2015(Mainichi Japan)

Abe and Merkel don't see eye to eye on nukes

March 10, 2015

On nuclear energy, Abe and Merkel remain far apart

http://ajw.asahi.com/article/behind_news/politics/AJ201503100068

THE ASAHI SHIMBUN
German Chancellor Angela Merkel agreed on a number of things during her talks with Prime Minister Shinzo Abe, but where the two leaders parted company was on the issue of nuclear energy.
Merkel explained her decision to cancel Germany's dependence on nuclear power plants was a direct result of the Fukushima disaster in Japan four years ago.
Abe, on the other hand, was at pains to state that Japan must continue to rely on nuclear energy as a cheap and stable source of power.
At a joint news conference following their March 9 meeting, Abe was asked by a German reporter why Japan was still thinking about resuming operations at nuclear power plants when Germany had decided to move away from nuclear energy by 2022 following the triple meltdown at the Fukushima No. 1 nuclear power plant in 2011.
"Japan depends on nuclear plants for one-third of its energy source," Abe said. "Suspension of operations at those plants has forced us to depend more on fossil fuels, such as petroleum. We have to fulfill our responsibility of providing an inexpensive and stable supply of energy. We hope to resume operations at nuclear plants that have been judged by the Nuclear Regulation Authority to have passed safety standards."
The Abe administration has made clear its intention to resume operations at nuclear plants. Moves are already under way to resume operations at the No. 3 and No. 4 reactors of the Takahama nuclear plant in Fukui Prefecture operated by Kansai Electric Power Co. and the No. 1 and No. 2 reactors of the Sendai nuclear plant in Kagoshima Prefecture, operated by Kyushu Electric Power Co.
Those reactors could come back online before the end of 2015.
For her part, Merkel staked out an energy policy that is sharply at odds with the direction Japan is taking.
In a video message released shortly before her arrival, Merkel said she Japan should join Germany in promoting renewable energy sources as a way of moving away from a dependence on nuclear energy.

Trained as a physicist, Merkel gave a detailed explanation of her decision to move away from nuclear energy during a lecture she gave prior to her meeting with Abe.
Saying that the Fukushima nuclear accident had played a major role in affecting the change in her thinking, Merkel said: "One reason is because the accident occurred in a nation like Japan, which has a high level of technology. It clearly showed that even in such a nation, there are risks such accidents can happen. I came to realize there are risks for events which we thought would never happen."
She went on to explain that for many years she had supported the peaceful use of nuclear energy, but added: "The era of the peaceful use of nuclear energy in Germany is ending. Now we have to construct our energy structures based on the decision."
With courage and the political will, Merkel suggested that any nation could follow Germany's example in moving away from a dependence on nuclear energy.
Because of their obvious differences on energy policy, Abe and Merkel did not discuss nuclear energy during their talks, according to Japanese government officials who briefed reporters.
Merkel also toned down her rhetoric at the joint news conference. She did not directly mention nuclear energy, but only said that Germany and Japan "are working closely on energy efficiency and the stable supply of energy."
(This article was written by Toru Tamakawa and Shinya Sugizaki.)

But what is Gov't s energy policy?

March 17, 2015

Suga comments on utilities' decision

http://www3.nhk.or.jp/nhkworld/english/news/20150317_33.html

Mar. 17, 2015 - Updated 11:11 UTC+1
Japan's top government spokesman says power companies may have decided to scrap some reactors due to the government's policy of lowering the country's dependence on nuclear energy.

Chief Cabinet Secretary Yoshihide Suga spoke to reporters on Tuesday, after 2 nuclear plant operators announced they would decommission 3 aging reactors.

Suga said the government aims to realize an energy-efficient society and introduce reusable energy as much as possible.

Regarding the radioactive waste that will be generated from decommissioned reactors, he said plant operators are responsible for the waste, and need to secure disposal sites.

Lessons from Fukushima?

March 12, 2015
Source : Huffington Post
http://www.huffingtonpost.in/sunanda-mehta/four-years-after-fukushim_b_6854216.html?utm_hp_ref=india

Four Years After Fukushima, India Still None The Wiser

Posted: 12/03/2015 18:27 IST Updated: 12/03/2015 18:27 IST

On March 11, four years ago, the great east Japan earthquake rocked the north-eastern coast of Japan leading to a triple reactor core meltdown in the Fukushima Daiichi nuclear plant. The explosion that followed spewed radiation to as far as Fukushima City, 60 km from the plant site. Around 160,000 citizens were relocated to temporary housing and other places in Japan to avoid contamination. The estimated bill for the damage is believed to be at least USD 250 Billion, all of which will be footed using public money by the operator, Tokyo Electric Power Corporation (TEPCO) and the Japanese government.

Four years hence, the damaged plant continues to eject large quantities of radiation into the surrounding air and water. The operator has not made much progress in stemming the flow of radiation. Most monitoring locations within the 60km radius of the plant continue to report high values of contamination. With no permanent storage location, the mountains of waste generated are being haphazardly stored in various locations, including backyards of houses, parking lots and parks. Untreated contaminated water from the site has also leaked into the Pacific Ocean. The majority of the affected population continues to be displaced, living in cramped one-room apartments. Most of them have given up hope of ever returning to their old lives.

"While the 10m-high tsunami wave was the trigger, what ensued at the plant was clearly the product of human error and gross malpractice on behalf of both the operator and the then nuclear regulator "

A Tsunami And A Man-Made Disaster

While the 10m-high tsunami wave was the trigger, what ensued at the plant was clearly the product of human error and gross malpractice on behalf of both the operator and the then nuclear regulator, the Nuclear and Industrial Safety Agency (NISA).

NISA was a semi-autonomous organisation under the Ministry of Economy Trade and Industry (METI). METI's primary purpose was the promotion of nuclear energy. METI members were also a part of the NISA staff, along with "technically trained experts" from the industry. In practice, NISA was what is known as a captured regulator--a regulator that had been effectively captured and defanged by interested parties such as the industry and the bureaucrats that oversee it. It caters instead to the needs of the industry by formulating and enforcing weak regulations and standards.

This is exactly the kind of clash of interest that led to the regulator accepting falsified reports from TEPCO, hiding critical cracks in the reactor vessel. This reactor vessel was found to be so flawed that its designers from General Electric resigned in protest, certain of an inevitable disaster if the reactor were out to use. Even in the aftermath of the disaster, the regulator continued to fail miserably at its duties by not releasing crucial data on the radiation spread to the public. This in turn led to a completely unplanned and unguided evacuation with residents flying straight into high-radiation areas.

Lessons From Fukushima

Since the disaster, both the regulator and the operator issued multiple apologies. NISA for its lax attitude towards ensuring the safety of the plants and TEPCO for its unpreparedness in crisis management.

NISA was finally replaced by the Nuclear Regulatory Authority (NRA) on 19 September, 2012. The NRA is an Article 3 authority under Japan's National Government Organization Law. This guarantees it "independent exercise of authority, without control and supervision from a senior agency (e.g. the minister of a relevant government ministry)". It also places the safety agency outside the government system, wherein it is not required to practice rotation of personnel from agency to agency within the ministry, as was the case with NISA and the METI.

It is a part of, and not under, the Ministry of Environment (MOE) and its staff consists primarily of civil servants from the MOE. If nothing else, through this action, Japan at least showed that it had learnt its lesson of keeping the regulator separate from the ministries that have an interest to promote nuclear power. This is a valuable lesson which the Indian government has still not picked up.

"The strength of an actual autonomous regulator cannot be replaced by however many bodies affiliated in some way to the government and other parties with vested interest."

Why India Needs To Take Notice

The Indian regulatory system is riddled with conflicting interest. The Indian regulator, the Atomic Energy Regulatory Board (AERB) is located under the government unit of the Department of Atomic Energy (DAE) - just as the NISA was under the METI. The chairman of AERB reports to the Secretary of DAE. The DAE promotes nuclear technology in the country. India's sole nuclear operator, the Nuclear Power Corporation of India Limited, also comes under the administrative control of the DAE and is regulated by the AERB. This set up has effectively stripped the regulator of what freedom it could have had in framing rules and overseeing the working of the operator.

Post Fukushima, the Indian government introduced the NSRA Bill in the Lok Sabha in September 2011. NSRA was to be a truly autonomous body. Unlike AERB which reported to DAE, it would submit is report to the Parliament. And while AERB was created following a government order, the NSRA would be established by an Act of Parliament, making it much stronger.

But on the other hand, the members of the NSRA will be picked by a Council consisting of the Prime Minister and other government minsters, essentially paving way for another government-controlled regulator. Certain "nuclear material, radioactive material, facilities, premises and activities" can be exempted from the jurisdiction of the regulator in the name of national defence by the central government. The Regulator will also be exempted from the purview of the RTI Act, reducing the need for it to be transparent.

The recommendations made by the Parliamentary Standing Committee in 2012 addressed some of these glaring shortfalls. After its lapse with the change in government, the Bill was to be considered again in the Winter Parliament Session of 2014. But the Session has come and gone and the Bill remains unaddressed. But passing the Bill along with the recommendations alone will not grant absolute autonomy to the regulator. The NSRA will still not have complete financial, administrative and institutional independence from the government. No ideal solution can be found until the Indian government acknowledges the fact that the strength of an actual autonomous regulator cannot be replaced by however many bodies affiliated in some way to the government and other parties with vested interest. A disaster like Fukushima is too high a price to pay for overlooking this simple fact.

Sunanda Mehta
Researcher, Greenpeace

At least 20% nukes, says business lobby

March 25, 2015

Business leaders says 20% nuclear power needed

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Mar. 25, 2015 - Updated 06:12 UTC+1
A group of business leaders in Japan is proposing that nuclear power supply at least 20 percent of the country's energy needs by 2030.

The nuclear accident at Fukushima four years ago has prompted Japan to reconsider how it produces electricity.

Government officials, politicians and business leaders, as well as academics and civic groups, are working on the problem. They are trying to figure out what mix of energy sources could meet the country's needs.

Officials with the Japan Association of Corporate Executives say nuclear power will be needed as a base-load energy source for some time to come.

They say it's unlikely that renewable resources such as wind and solar power will supply more than 30 percent of energy needs by 2030.

They say Japan will probably have to rely on nuclear power for 20 percent or more of its energy needs.

Before the 2011 accident, nuclear power supplied 28 percent.

All of Japan's nuclear power plants are currently off line.

Business lobby calls for minimum 20% dependence on nuclear energy

http://ajw.asahi.com/article/business/AJ201503250024

By KIYOHIDE INADA/ Staff Writer
An influential business organization called on the central government to maintain at least a 20-percent dependence on nuclear energy, citing expected limits on expanding the use of renewable energy sources.
Keizai Doyukai (Japan Association of Corporate Executives) also proposed extending the operating life of nuclear reactors beyond the 40-year period set by the central government.
The organization’s recommendations on energy policy released on March 24 came as the government is discussing Japan’s “energy mix” for power generation. A key element of that mix is having nuclear energy account for between 15 and 25 percent of the nation’s electricity in 2030.
Keizai Doyukai urged the government “to set a minimum level of about 20 percent” as a “realistic” target for that year.

The proposal foresees continuing to use nuclear reactors beyond 2030 and calls on the central government to consider rebuilding reactors or constructing new ones.
The business group cited the limits of renewable energy sources and the benefits of nuclear energy for consumers and the economy.
Reflecting on the suspension of operations at nuclear power plants following the 2011 accident at the Fukushima No. 1 nuclear power plant, the proposal said, “We should not forget the serious effects on the daily lives of the people and economic activity brought about by increasing electricity rates.”
In 2011, Keizai Doyukai issued a proposal to reduce dependence on nuclear energy in the medium to long term by seeking out alternative renewable energy sources.
Teruo Asada, chairman of trading company Marubeni Corp. who also serves as chairman of Keizai Doyukai’s Committee for Environment and Energy, denied the business organization has switched its policy.
“We never said that the ultimate goal should be zero nuclear plants,” Asada said at a March 24 news conference. “The latest recommendations do not represent any change in our thinking.”

Miyama Govt. establishes power-producing company

March 27, 2015

City challenges Kyushu Electric, sets up company to sell power to households

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201503270005

The city-supported solar power plant in Miyama, Fukuoka Prefecture, has a capacity of 5 megawatts. (Masanobu Higashiyama)

THE ASAHI SHIMBUN

MIYAMA, Fukuoka Prefecture--Miyama has become the first local government in Japan to establish a company that will sell electricity to households--and at rates cheaper than regional monopoly Kyushu Electric Power Co.

City officials said March 25 that the company, Miyama Smart Energy, set up in collaboration with the private sector, will start operations next month. It will initially supply power to public entities such as city government offices, schools and libraries, and begin targeting ordinary households in April 2016.

Miyama Smart Energy was founded in February with capital of 5 million yen ($42,000). The capital is expected to increase to 20 million yen.

The company expects to employ 25 workers and post sales of 1.3 billion yen four years later.

The main goal of the initiative is to bolster the local economy by consuming locally produced power.

"We have set out to achieve self-sufficiency in the energy field by locally generating and consuming power with renewables and create jobs for the local communities," Miyama Mayor Chikashi Nishihara said at a ceremony marking the start of the project on March 25.

In spring next year, Japan will deregulate the power industry by allowing households to buy their electricity from suppliers other than regional utilities.

Miyama Smart Energy envisages purchasing electricity from the 5-megawatt, city-supported solar power plant in Miyama as well as from surplus solar power generated at ordinary households at a price 1 yen higher per kilowatt hour than buying from Fukuoka-based Kyushu Electric.

It plans to sell the electricity to households at rates cheaper than Kyushu Electric's.

Tatsushi Isobe, a director of Epco, a Panasonic Corp.-affiliated energy consultancy in Tokyo that has invested in Miyama Smart Energy, expressed confidence in the initiative.

"Even if the new company buys power at a rate higher than Kyushu Electric and sells it cheaper, it will pay off since its investment and payroll costs are low," he said.

According to the industry ministry, Nakanojo, a town in Gunma Prefecture, and Izumisano, a city in Osaka Prefecture, have already established power-supplying companies.

But their services are geared for public entities and do not include ordinary households. Miyama Smart Energy is the first to plan serving households from the outset.

The company will not follow Kyushu Electric's policy of reining in purchases of solar power from generators on sunny days, when the energy output is higher.

Miyama Smart Energy, which has concluded a deal with another solar power generator in Miyama, should be able to cover all the electricity needs for the city of 40,000 people during daytime on sunny days, according to the municipal government's estimate.

One challenge for the company is luring users away from Kyushu Electric. Currently, the residents are all paying the utility for electricity.

If they switch to Miyama Smart Energy, their fees will be recirculated within the city, helping to bolster Miyama's economy.

To pitch the company, the city since last fall has provided devices to about 2,000 households in the city on a trial basis that enable them to see their electricity consumption levels at any time of the day on their tablet computers.

Consumers say Kyushu Electric's bills do not have such a detailed breakdown.

(This article was written by Masanobu Higashiyama and Kenichiro Sakai.)

Obstacles to energy autonomy mainly political

March 28, 2015

Political obstacles stymie energy autonomy

by Philip Brasor
Special To The Japan Times

When German Chancellor Angela Merkel was in Japan earlier this month, local coverage focused on a joint German-Japanese statement about the Ukraine crisis and her comment that Japan should forthrightly address its actions during World War II. She said nothing about how Japan and Germany have diverged on nuclear energy, and reportedly she and Prime Minister Shinzo Abe didn't discuss it with each other.

Germany decided to abandon nuclear power in 2011 as a direct result of the Fukushima No. 1 reactor disaster. The chancellor, a trained physicist, has said that her thinking was affected by the realization that such an accident occurred in Japan, which has a "high level of technology." Asked by a German reporter during a joint news conference why Japan continues down the atomic path, Abe replied that with all of Japan's nuclear plants idle the country has had to rely on imported fossil fuels for its energy needs. There is no way to provide an "inexpensive, stable" supply of energy except nuclear power generation, so once the safety of the nation's reactors has been "assured," they will go back online.

Later, when a Japanese reporter asked him why Japan didn't follow Germany's lead, Abe said that Germany can easily buy electricity from neighbors, whereas Japan cannot. By then, however, Merkel was gone, so her opinion couldn't be solicited. By remarking on European energy interdependence, Abe meant to imply that despite its non-nuclear policy, Germany still gets power from nuclear-dependent France. What neither he nor the Japanese press mentioned is that Germany also has a concerted policy for promoting renewable energy.

There are varying opinions as to whether or not this policy is successful, but in Japan right now the story in the media is that renewables are not viable, if for no other reason than that the government has decided nuclear energy is more efficient for Japan's long-term needs.

That much was made obvious on March 10, when the Ministry of Economy, Trade and Industry revealed that a subcommittee of experts had estimated that renewables such as solar and wind power would supply Japan with 20 percent of its energy needs by 2030. This figure has remained the same since the country's Basic Energy Plan was formulated in 2001 by a group of politicians with close ties to the power industry, although later the government said it would endeavor to increase the portion. Now, METI has decided that renewables are too inconvenient, since facilities for transmitting electricity produced by renewable power structures would have to be built. According to the Asahi Shimbun, some members of the subcommittee "demanded" a greater effort to develop renewables. As one professor said, it wouldn't be difficult to boost the portion to 30 percent, especially since some transmission capability will be freed up by the planned decommission of older reactors.

METI cited the cost to consumers as being another problem with renewables. Because of a law passed by the Democratic Party of Japan before its brief stint as ruling party ended in 2012, power companies are compelled to buy energy from anyone who generates it through renewable resources, and at an artificially high rate that is passed on to users. Starting last fall, power companies cut back on purchases of renewable energy, claiming they don't have the capacity to handle it all, especially in Kyushu, where a number of businesses have built large solar energy farms.

What the government seems to be saying is that the plan to promote renewables was successful, but too much energy is being produced and the public still has to pay for it. Then there was a backlash and METI introduced measures to check power plant output in order to allow more solar energy to enter the grid. In any case, in accordance with sōkatsu genka regulations, large regional power companies are guaranteed a "rate of return" on their investment.

The monolithic nature of power utilities is the subtext of the 2010 German documentary "The Fourth Revolution," which has been screened by civic groups throughout Japan in recent months. The film explains how **"energy autonomy"** is the next step in the evolution of industrial development. It is less concerned with renewables as the savior of the environment than with promoting solar and wind power as rational means of energy provision for everyone in the world.

Because private concerns control the finite resources that produce most electricity at present, energy is a commodity. The goal of the film's subjects is local control of energy generation using renewable resources that aren't owned by anyone. Private companies will do anything they can to prevent such a goal from being realized, but governments, which are supposed to guarantee the welfare of their people, should pursue energy autonomy with a sense of purpose, so the only obstacles are political, even if the gatekeepers of the energy market insist they are economic, that renewable energy is not yet and never will be viable enough to run factories and heat homes. The film shows how technology has advanced in Denmark and Germany to the point where whole towns can address their energy needs with renewables.

The movie's message is especially relevant in light of next year's liberalization of the Japanese energy market, something the power industry has resisted since it was first proposed by METI in the '90s. According to a recent survey conducted by advertising firm Hakuhodo, 80 percent of the public are aware they can choose a provider next April, but aren't sure what that entails. Neither the media nor the government has effectively explained the process, so consumers may end up defaulting to the big regional power companies, especially if they're seen as being cheaper. What's important to remember is that it's not about nuclear versus non-nuclear — it's about breaking free of entities that make those decisions for you.

A larger role for nuclear power?

April 2, 2015

LDP urges base load source ratio raised to 60%

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Apr. 2, 2015 - Updated 03:26 UTC+2

A panel advising Japan's governing Liberal Democratic Party wants nuclear power and other stable energy sources to play a larger role in the country's energy supply to lower electricity costs.

The government plans by June to determine Japan's energy mix as of 2030.

The proposal by the LDP panel on nuclear policy, supply and demand says Japan must overcome energy

restrictions to achieve full-scale economic growth. It said power costs must be lowered as much as possible.

The panel advises raising the ratio of base load power sources, meaning coal, nuclear, hydro and geothermal power, from 40 percent to around 60 percent. That is the level before the 2011 nuclear accident.

Base load sources ensure stable supply throughout the day. Power companies consider these sources to be cost-effective.

The panel also wants Japan's energy self-sufficiency rate raised to around 25 percent. The rate is now 6 percent as all nuclear reactors are offline.

The panel plans to submit its proposal to Prime Minister Shinzo Abe next week.

March 31, 2015

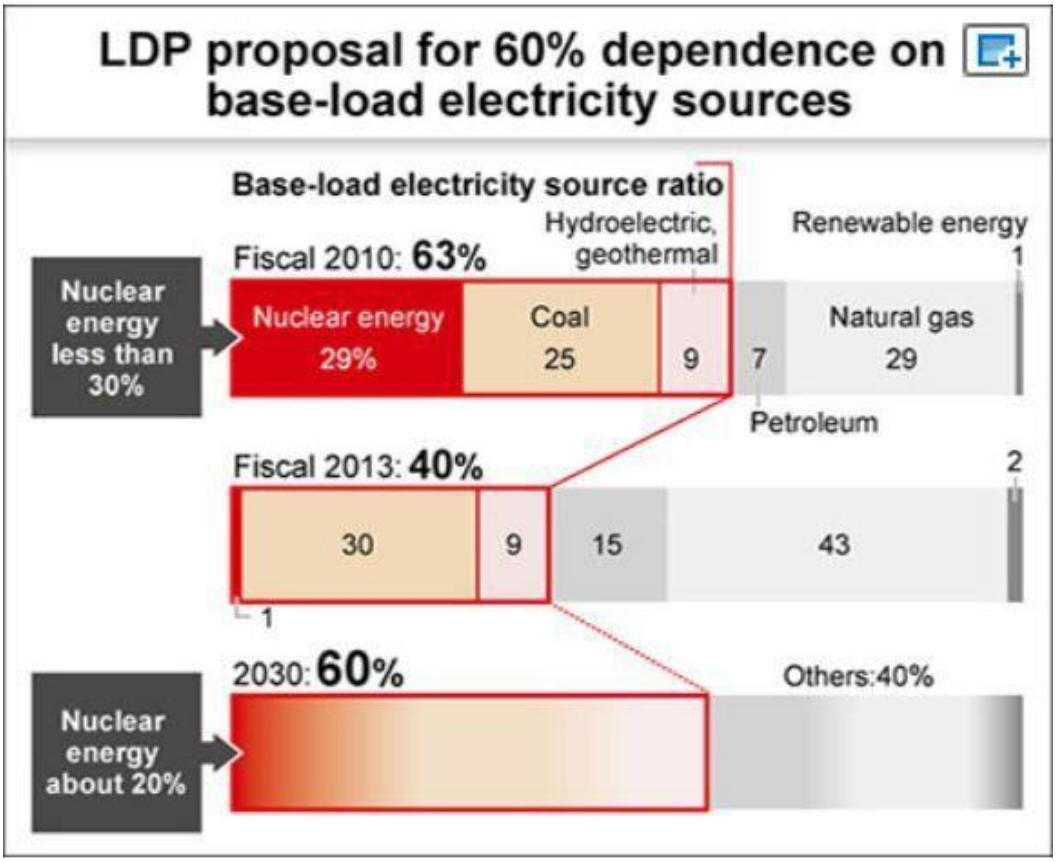
Gov't wants ratio of nuclear power to total output to exceed 20% in 2030

http://mainichi.jp/english/english/newsselect/news/20150331p2a00m0na019000c.html

The Ministry of Economy, Trade and Industry told a panel of experts on March 30 that the ratio of nuclear power generation to the country's total electricity production will exceed 20 percent in 2030.
The government takes the position that the ratio of so-called "base load power sources" such as nuclear, hydraulic, coal-fired and other power plants that can ensure stable supply throughout the day should be secured at around 60 percent. But according to preliminary calculations made by the industry ministry, the ratio of base load power sources other than nuclear power is presumed to fall below 40 percent at the most.
The industry ministry stressed that nuclear power can help reduce greenhouse gas emissions and lower utility bills. But at the March 30 expert panel meeting, there was a flurry of opinion that Japan should not return to nuclear power easily, with some experts saying that the government was discussing the issue based on the same idea as that adopted before the 2011 nuclear disaster.
Base load power sources are power sources that can supply certain levels of electricity consistently throughout the day with low fuel costs. Under the basic energy plan worked out last year, the government positioned nuclear, hydraulic, coal-fired, and geothermal power as base load power sources, stating that it is important to secure energy on a level that is "not inferior" to those of other countries.
The ratio of Japan's base load power sources had hovered at around 60 percent since the latter half of the 1990s, but it fell below 40 percent after the country's nuclear plants went offline in the wake of the Fukushima nuclear disaster. As for base load power sources other than nuclear power, the industry ministry assumed the ratio of the coal-fired power source at 28.6 percent if its power generating capacity remained at the current level. The ministry had already said the ratio of the hydraulic power source would likely be 9.5 percent at the most and the geothermal power source at up to 1 percent. In light of measures to be taken against global warming in the future, it is hard to expect coal-fired power generation to be increased.

Therefore, the ratio of base load power sources other than nuclear power becomes 39 percent at most in 2030, and in order to secure the ratio of overall base load power sources at 60 percent, nuclear power has to account for at least 21 percent.
March 31, 2015(Mainichi Japan)

Increase Japan's dependence on nukes



The Asahi Shimbun

April 3, 2015

LDP stealthily seeking to raise nuclear energy dependence

http://ajw.asahi.com/article/behind_news/politics/AJ201504030042

THE ASAHI SHIMBUN
The ruling Liberal Democratic Party is pushing a policy of heightening Japan's dependence on nuclear energy but has buried this stance under a calculation trick.
An LDP research commission on energy issues on April 2 called on the central government to ensure that base-load electricity sources--nuclear energy, coal-fired thermal plants, hydroelectric and geothermal plants--account for about 60 percent of Japan's energy needs in 2030.

The proposal does not mention any specific ratio for nuclear energy. But considering the difficulties in increasing the supply from the other base-load electricity sources, the dependence on nuclear power would have to rise to about 20 percent.
The proposal is expected to be presented to Prime Minister Shinzo Abe as early as next week as the formal recommendation of the LDP. The central government wants to decide on the energy mix for Japan in 2030 and beyond by June.
The government's designation of the base-load electricity sources means their costs for power generation are comparatively low and electricity can be produced around the clock.
In fiscal 2013, Japan depended on base-load electricity sources for about 40 percent of its power: 1 percent for nuclear energy; 30 percent for coal-fired thermal plants; and a combined 9 percent for hydroelectric and geothermal plants.
However, coal-fired thermal plants emit huge volumes of carbon dioxide that go against measures to deal with global warming, so raising the ratio of energy from such plants would be difficult. Increasing dependence on hydroelectric plants would also be tough because huge dams would have to be planned. Geothermal plant projects are also time-consuming because of the need for environmental assessment studies.
If the government cannot raise the ratio for these three base-load electricity sources, the nation's dependence on nuclear power would have to rise to 20 percent to meet the 60-percent goal in the proposal.
The LDP panel's proposal said, "Energy policy must serve to strengthen Abenomics."
It pointed out that electricity rates increased after nuclear power plants went offline following the Fukushima nuclear crisis triggered by the 2011 Great East Japan Earthquake and tsunami.
But to achieve that level of dependence on nuclear energy, nuclear plants would have to be operated beyond the current 40-year operating life set by the government or the government would have to approve the reconstruction or new construction of nuclear plants.
An experts' panel under the Ministry of Economy, Trade and Industry is discussing the energy mix. At the end of March, the ministry recommended that base-load electricity sources account for about 60 percent of total energy supply, about the same level as found in Western nations.
The LDP panel's proposal also referred to the fact that many Western nations depend for at least 60 percent of their energy needs on base-load electricity sources.
(This article was written by Ryo Aibara and Tomoyoshi Otsu.)

April 3, 2015

Japan looks to generate 20% of electricity by nuclear in 2030

http://mainichi.jp/english/english/newsselect/news/20150403p2g00m0dm026000c.html

TOKYO (Kyodo) -- Japan looks to generate at least 20 percent of its electricity by nuclear power in 2030, government officials and ruling party lawmakers said Thursday.
The government of Prime Minister Shinzo Abe seeks to retain nuclear power as a key energy source despite persistent antinuclear sentiment among the public following the March 2011 Fukushima nuclear disaster.

But some experts in a panel under the industry ministry, which is currently discussing the country's future energy mix, have voiced concerns that Japan is returning to nuclear power too easily after the world's worst nuclear accident since the 1986 Chernobyl disaster.
During a recent panel meeting, the industry ministry proposed a plan to increase the percentage of electricity generated by so-called base-load power sources, which can provide electricity day and night, to 60 percent from the current 40 percent.
The government includes nuclear, coal-fired thermal, hydro and geothermal power in the base-load electricity sources. But it is not willing to drastically boost thermal power that emits greenhouse gases, while it takes a long time to introduce necessary installations for hydro and geothermal power generation.
Before the 2011 nuclear catastrophe triggered by a huge earthquake and tsunami, atomic power accounted for around 30 percent of Japan's total energy production. In fiscal 2013, nuclear power accounted for only 1 percent as reactors were gradually taken offline due to safety concerns.
This year the government is expected to restart several nuclear reactors cleared by the safety regulator.
In its basic energy policy adopted last April, the government of the Liberal Democratic Party pledged to reduce the country's dependence on nuclear power and introduce renewable energy as much as possible. But at the same time, it defined nuclear power as an "important base-load power source."
April 03, 2015(Mainichi Japan)

April 3, 2015

Reliance on atomic power urged to exceed 20% by 2030 http://www.japantimes.co.jp/news/2015/04/03/national/japans-reliance-atomic-power-may-top-20-2030/#.VR6hH-Hwmos

JIJI

There is a growing possibility that Japan will rely on nuclear energy for more than 20 percent of its total power output in 2030, compared with about 30 percent before the Fukushima nuclear disaster started in March 2011, sources said.
Following the triple reactor core meltdown at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear plant, the government initially looked to reduce the nation's dependence on nuclear energy as much as possible, issuing incentives that led to a glut in solar energy.
The Ministry of Economy, Trade and Industry meanwhile plans to secure the nation's base load output from such stable sources as atomic power, coal-fired power plants and hydroelectric power, at the international standard of about 60 percent.
In fiscal 2013, coal-fired and hydroelectric power plants accounted for 30 percent and 9 percent, respectively, of the nation's total power output.
If the base load is to be raised to the envisioned level, Japan's dependence on nuclear energy will have to exceed 20 percent, because of difficulties in substantially boosting the output from thermal and hydroelectric power generation, the sources said Thursday.
All of the nation's nuclear power plants have remained offline since the Fukushima disaster triggered a rethink of nuclear safety throughout the country.
In a related development Thursday, the ruling Liberal Democratic Party adopted a proposal to achieve the 60 percent base load share at a nuclear power policy panel meeting.

An increasing number of LDP members are leaning in favor of reviving the use of nuclear energy to curb climbing electricity bills.
But other members are criticizing the base load expansion plan as a scheme solely designed to sustain the use of nuclear power, which the government has heavily invested in for decades to offset Japan's dependence on energy imports.
An industry ministry panel is expected to come up with a specific proposal on the "best energy source mix" for the country by the end of this month, at the earliest.

Large potential for renewables

April 4, 2015

Renewable energy could account for 35 percent of 2030 power supply: ministry

http://mainichi.jp/english/english/newsselect/news/20150404p2a00m0na013000c.html

Renewable energy sources could be expanded to account for 24 to 35 percent of Japan's power supply in 2030, according to estimates released by the Ministry of the Environment on April 3.
"The potential for the introduction of renewable energy is large. There are also large policy problems to tackle, however, such as handling the cost of reinforcing the power line network," a ministry official commented.
An expert committee for the Ministry of Economy, Trade and Industry is considering how much higher the country can go than the goal of at least 20 percent for renewable energy sources put forth by the nation's basic energy plan, and the new estimates could influence the committee's conclusions.
Out of the national power output of 939.7 billion kilowatt-hours for fiscal 2013, renewable energy sources including hydroelectric power accounted for only 10.7 percent. According to the newly released estimates, if the full extent of possible preparations were made -- such as reinforcing power lines to allow power exchange across wide areas, and setting up batteries to store charge -- as much as 356.6 billion kilowatt-hours of renewable energy generation would be possible by 2030.
Even if these preparations are not made, however, renewable energy is still predicted to rise to 241.4 billion kilowatt-hours. By these calculations, assuming demand of 1 trillion kilowatt-hours, at least 24 percent should be possible to provide with renewable energy.
The estimates predict that the financial burden on the country's citizens caused by the government buying up renewable energy will be between 1.78 to 2.56 trillion yen. It also predicted between 1.1 to 2.3 trillion yen in average annual economic ripple effects, however, from factors such as construction and infrastructure investment, as well as between 93,000 and 187,000 new jobs per year.
Furthermore, due to less import of fossil fuels, the estimates show that between 15 and 29 trillion yen of funds could be kept from leaving the country through 2030. Annual carbon dioxide emissions could drop by between 86.06 million and 172.8 million tons, while a goal of cutting carbon dioxide emissions by around 10 percent compared to 1990 levels would also be possible.
These estimates were put together by the Mitsubishi Research Institute at the request of the environmental ministry. They were originally planned to be released around June, but members of both

the ruling and opposition parties requested that they be released before the expert committee makes its conclusions, which could come as soon as mid-April.
April 04, 2015(Mainichi Japan)

What about a nuclear-free Japan?

April 5, 2015

INSIGHT: Why not talk more about a nuclear-free future for Japan?

http://ajw.asahi.com/article/views/column/AJ201504050005

By NAOHITO MAEDA/ Senior Staff Writer
While German Chancellor Angela Merkel, who is moving to pull the plug on nuclear power in her nation, was visiting Japan on March 9, I met with a former Lower House member.
"In my view, Japan does have energy politics but has no energy policy," Satoshi Shima, 56, emphatically told me.
Shima currently serves as an adviser to Softbank Corp., a telecommunications company led by Chairman and CEO Masayoshi Son, a high-profile entrepreneur. Having served eight years as head of the CEO's office at the company, Shima, a stalwart champion of a nuclear phase-out, has been working behind the scenes to link policy with politics with regard to renewable energy sources.
In Shima's opinion, "politics" is about making arrangements as to who will gain profits, whereas "policy" is about deciding the best choice from an overall perspective.
"Germany has chosen to go nuclear-free after properly studying energy policy," he said. "But Japan, as it stands now, has nothing more than a sum of stakeholders' lobbyism. Nuclear opponents are no match for pro-nuclear lobbies, which are so influential."
The Fukushima nuclear disaster of 2011 prompted Shima and Son to call for pulling the plug on nuclear energy and using more renewable energy sources.
Shima backed Morihiro Hosokawa and Junichiro Koizumi, an alliance of former prime ministers, who campaigned under the banner of "zero nuclear power" during the February 2014 gubernatorial election in Tokyo. But Hosokawa failed to win the governor's seat, and nuclear opponents have barely made any headway since. They have now come to a grinding halt.
Japan is headed, without serious debate, toward a continued reliance on nuclear power. It is a foregone conclusion for the administration of Prime Minister Shinzo Abe that the country's nuclear reactors, all of which are idled now, will eventually be restarted. No in-depth debate is being made in the Diet over what to do with nuclear power.
The adversity notwithstanding, Shima is still pinning his hopes on elections. He showed me a paper that outlined a policy timeline related to renewable energy sources, and pointed to an entry that said 2016.
"This is the year when the electricity retail market will be fully liberalized," he said. "And there will be an Upper House election in the summer of that year. To begin with, we need a political force that will fight those who will move to obstruct new entries into the market at that stage."
The crucial moment, in Shima's view, will be the process of "unbundling," scheduled for 2020, whereby the power transmission and distribution operations within major utilities will be spun off from their

power generation operations and will be turned into separate entities. That policy process is believed to hold the key to spreading the use of renewable energy sources.
"That process could be emasculated if we go on like this," Shima said. "To prevent that from happening, we need to develop politicians who will put up a fight during the Upper House election in the summer of next year. Upper House members have a term of six years, so they can afford to work in a longer perspective. They are not quite like Lower House members, who are intimidated into silence under the overwhelming power of lobbyists."
The Democratic Party of Japan, which Shima belonged to as a Diet member, has set the goal of pulling the plug on nuclear power by the end of the 2030s. But the party is hard-pressed to come up with a clear-cut stance on whether nuclear reactors should be restarted, split as it is between the pros and cons of such a measure. In fact, the DPJ once made a decision to temporarily restart nuclear reactors when the party was at the helm of the government.
When Akira Nagatsuma, then acting DPJ president, ran unsuccessfully for the party's presidency in January, he was the most cautious of all candidates about restarting nuclear reactors. He was visibly exasperated by the current situation, wherein calls for a nuclear phase-out are gaining little traction.
"There are three conceivable crises that can put a state's survival at stake: war, nuclear disaster and financial collapse," Nagatsuma said. "Why not eliminate nuclear disaster, which is the easiest risk to eliminate? The Diet is full of what I cannot figure out, but this one is among the hardest to comprehend."
It would be too early to forget the nightmare of the Fukushima nuclear disaster, which has yet to be brought under control. I believe that from the perspectives of both policy and politics, we need to talk a lot more about a phase-out of nuclear power and about Japan's future.

Japanese-French consortium to build nuclear plant in Turkey

April 4, 2015
Source : Balkans
http://www.balkans.com/open-news.php?uniquenumber=202484

Turkish Parliament approved the construction of second nuclear plant from Japan

Balkans.com Correspondent - 02.04.2015
Parliament's General Assembly accepted in the early hours of April 1 an international agreement between Turkey and Japan for the construction of Turkey's second planned nuclear plant. With the approval, the legal framework for the construction of the plant has been laid.
Turkey's second planned nuclear plant was awarded to a **Japanese-French consortium** in May 2013, to be constructed in the northern province of Sinop.
Japan's Mitsubishi Heavy Industries Ltd (MHE) and Itochu Corporation, with France's GDF Suez, will build the **4,800 MW plant at an estimated cost of $22 billion**. The plant will be operative with **ATMEA1** reactors developed by MHE and the French company of **Areva**.
Turkey's first nuclear power plant will be built by the Russian Rosatom in the southern province of Mersin. hurriyetdailynews

More than 25% nukes

April 7, 2015

Keidanren says over 25% ratio for nuclear power

http://www3.nhk.or.jp/nhkworld/english/news/20150407_14.html

Apr. 7, 2015 - Updated 03:01 UTC+2
Japan's largest business federation is proposing that nuclear power supply should be more than 25 percent of the country's energy needs in 2030.

Officials at Japan Business Federation, or Keidanren, have compiled the proposal to be presented to the government for its energy mix discussions.

They say the ratio of renewable sources, such as solar power, should be about 15 percent, and thermal power should cover the remaining 60 percent or so.

The officials also say in addition to restarting nuclear reactors at power plants where their safety is confirmed, rebuilding of such facilities should also be considered.

The government has been working to decide on its energy mix plan which would impact greenhouse gas emissions. It must present its target for cutting greenhouse gas emissions at a UN climate change conference COP 21 at the end of this year.

Keidanren Chairman Sadayuki Sakakibara told reporters on Monday keeping a certain level of nuclear power plants is necessary for Japan's energy policy and for global measures to fight the climate change.

April 5, 2015

METI reviewing Japan's energy mix

http://www3.nhk.or.jp/nhkworld/english/news/20150405_15.html

Apr. 5, 2015 - Updated 10:09 UTC+2
The Ministry of Economy, Trade and Industry is reviewing Japan's energy mix. It aims to increase the use of renewable energy sources while reducing the country's dependence on nuclear power.

The ministry has been holding meetings of experts since January to come up with an optimal energy mix for 2030. The Cabinet adopted a basic plan last April.

The ministry plans to lower the target for nuclear power from 28 percent, which was approved before the

2011 Fukushima accident.

However, the ministry intends to keep the ratio in the lower 20-percent range to reduce greenhouse gas emissions and to contain the cost of generating electricity.

The new target assumes the resumption of existing nuclear plants as well as the decommissioning of some reactors, including the 5 whose closure was decided last month.

The target for renewable sources, on the other hand, will be raised from the original 21 percent to exceed the ratio for nuclear power.

The ministry will present a draft energy mix proposal to the ruling parties by the end of this month. It intends to finalize the plan before the G7 summit in June, when measures against global warming will be discussed.

Renewables: METI vs Environment Ministry

April 7, 2015

Miyazawa doubts estimate of renewable energy use

Apr. 7, 2015 - Updated 08:49 UTC+2

http://www3.nhk.or.jp/nhkworld/english/news/20150407_21.html

Japan's Economy, Trade and Industry Minister Yoichi Miyazawa has doubts about the feasibility of the Environment Ministry's plan regarding the nation's energy mix.

The Environment Ministry said earlier this month that energy from renewable sources can supply up to 35 percent of the country's total energy demand in the future. The Industry Ministry also plans on boosting the ratio of renewable energy from the current goal of 21 percent, but has not set a specific target.

Miyazawa told reporters on Tuesday that he has no idea how the Environment Ministry's estimate is viewed by insiders. He said the estimate does not fully take into account a possible increase in costs that would occur as a result of the increase in renewable energy.

Miyazawa said it is difficult to use the estimate to work out Japan's energy mix.

Also on Tuesday, Environment Minister Yoshio Mochizuki said his ministry's estimate is different from those of other ministries because it has yet to calculate the necessary technology.

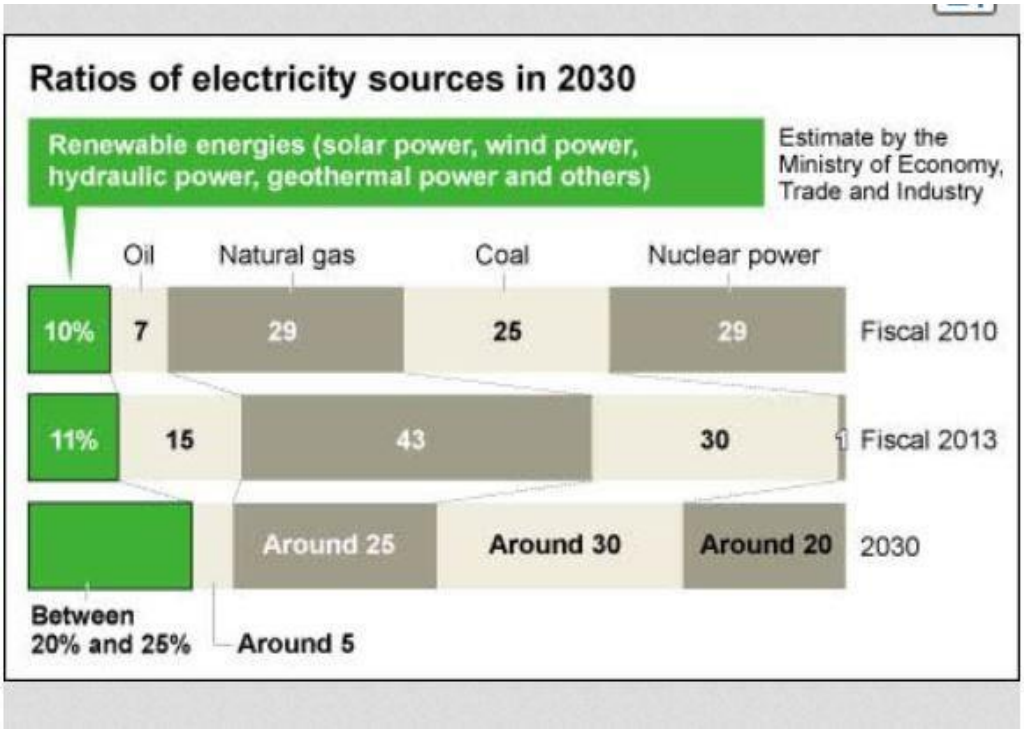
Mochizuki said it is obvious that the figure cannot be achieved through hope alone, but that his ministry would like to increase power from renewable sources as much as possible.

What electricity mix for 2030?

April 8, 2015

Industry ministry seeks renewable energy ratio of 20% to 25% in 2030

http://ajw.asahi.com/article/behind_news/politics/AJ201504080030



By TOMOYOSHI OTSU/ Staff Writer

The industry ministry rejected a proposal by the Environment Ministry and is calling for renewable energy sources to supply "between 20 and 25 percent" of Japan's electricity in 2030, sources said April 7.

The Environment Ministry on April 3 had called for a range between 24 percent and 35 percent.

However, the Ministry of Economy, Trade and Industry said that plan was unrealistic, and it proposed a lower range to avoid increases in electricity charges and to curb the costs for corporate activities.

Prime Minister Shinzo Abe on April 7 received a report from a ruling Liberal Democratic Party task force on the nation's "energy mix" for 2030. The contents are almost identical to the proposals of the industry ministry.

"Based on the ideas described in the report, I want to proceed (with the energy mix plan)," Abe said.

Renewable energies include not only solar power, wind power and geothermal power but also hydraulic power.

In fiscal 2013, renewable energies, centering on hydraulic power, accounted for 11 percent of Japan's electricity supply.

The industry ministry plans to double the ratio by 2030. During the period, the combined ratio of solar power and wind power is expected to increase from 2 percent to 10 percent.
The ratios of hydraulic power and geothermal power will likely remain unchanged because it is difficult to construct large-scale dams and environmental assessments for constructing geothermal power plants requires much time.
The ratio of nuclear power will be around 20 percent in 2030, according to the ministry's plan. The proposal does not mention replacing old nuclear reactors or building new ones. It assumes that current nuclear reactors will continue operating even after they have reached their lifespan of 40 years.
The industry ministry plans to coordinate its opinions with the LDP, junior coalition partner Komeito and the Environment Ministry about the energy mix plan for 2030.
The industry ministry will submit a draft of the plan to its experts' council at the end of this month. The proposal is expected to be completed by the end of May.
The ministry calculated the power generation capacities of renewable energy sources and the costs for 2030 based on several factors, including the amount of electricity that can be accepted on the current power grid and construction plans for wind farms.
It calculated that a ratio of renewable energies much higher than 20 percent would require more than 1 trillion yen (about $8.3 billion) for expansion of the power grid and other measures, resulting in sky-high electricity charges, the sources said.
The Environment Ministry's calculations showed that the ratio of renewable energies could be raised to between 24 percent and 35 percent.
But industry minister Yoichi Miyazawa refused to use that result, saying, "It does not pay sufficient consideration to feasibility."
The industry ministry places importance on nuclear power, coal-fired thermal power, hydraulic power and geothermal power as "base-load electric sources," which indicate their power generation costs are low and their facilities can be operated around the clock.
The ministry wants to raise the combined ratio of those base-load electric sources to more than 60 percent, matching the ratios in the United States and some European countries.
It is difficult for Japan to raise the ratio of coal-fired thermal power because of concerns about the large quantities of greenhouse gas emissions.
But the ministry also does not want to depend on solar power or wind power, citing their high operational costs and unstable power supplies.

Energy choices depend on how you look at safety

April 12, 2015

Reactor closures to test Abe's green energy pledges

http://www.japantimes.co.jp/news/2015/04/12/national/reactor-closures-to-test-abes-green-energy-pledges/#.VSqdTpPwlLM

by Chisaki Watanabe **and** Emi Urabe
Bloomberg

Japan's plan to mothball at least five aging nuclear reactors highlights the challenge Prime Minister Shinzo Abe faces as his administration debates how to replace lost electricity generation with power sources that are cheap, clean and safe.

The decision announced by the reactors' operators last month to decommission the plants, all dating from the 1970s, will eliminate output equivalent to about 65 percent of the power produced by all the solar panels currently installed nationwide. That's even after solar use has surged, making Japan the second-biggest solar market in the world for two years running.

The policies are under a microscope as Abe's ruling Liberal Democratic Party indicated earlier this month it wants to see nuclear energy play a prominent role in generating the nation's electricity, a plan opposed by most voters following the 2011 meltdowns in Fukushima. In the meantime, policymakers are wrestling with how to mix in renewables with traditional forms of energy and determining what scale of greenhouse gas cuts it can promise for a United Nations deal on global warming this year.

"It is possible to partially replace nuclear with clean energy, but we need to turn to coal at the moment," said Keigo Akimoto, chief researcher at Kyoto-based Research Institute of Innovative Technology for the Earth. "I support increasing renewables. We should not be misguided about the scale."

The implications are global, since countries such as the United States and Germany face the question of what to do with their own aging atomic plants. In Germany, Chancellor Angela Merkel has announced that her country would gradually turn off all nuclear. The reactor fleet in the U.S. is one of the oldest in the world, and a wave of retirements is expected beginning in the 2030s, the International Energy Agency estimates.

Environmentalists in Japan, mindful of the Fukushima No. 1 nuclear disaster, say the country has shown it can do without nuclear through efficiency gains and renewables.

Utilities, meanwhile, say they're having difficulty accommodating all the new electricity from clean sources such as solar that is testing their grids.

Japan's biggest business lobbies argue industry can't do without nuclear power and the steady supply of reliable power it produces. The nation's 48 viable reactors are shuttered pending new safety checks by the nation's regulator.

"The most important thing is to optimize different power sources such as nuclear, thermal and renewables," Hajimu Yamana, a professor at Kyoto University Research Reactor Institute, said at a meeting at the Ministry of Economy, Trade and Industry on March 30. The ministry oversees the nuclear sector.

For all the concerns about the safety of nuclear energy, one fact is unassailable: Since the triple meltdown, the nation's utilities are getting the bulk of their electricity from fossil fuels, despite a government-backed push to expand sources of renewable energy such as solar.

The five reactors that the utilities said in March they planned to decommission, among the smallest and oldest in Japan, annually produced about 13 terawatt-hours on average before the 2011 disaster, according to Bloomberg calculations using data supplied by the plant operators. Compare that with contributions from solar, which totaled 19.9 terawatt-hours in the year to March 31, based on estimates by Bloomberg New Energy Finance.

"We are at a crossroads, and yet we are still evaluating power sources in the same way we did before the earthquake," said Yasuko Kono, secretary-general of Shodanren, a union of consumer groups urging policymakers to consider the potential of renewables and energy savings. **"The choices we will make will depend greatly on how we look at safety."**

The Abe government is under increasing pressure to set a long-term plan for how much electricity should come from what sources. Divided views on nuclear's role are preventing the nation's policymakers from making international pledges on greenhouse gas emissions ahead of climate talks in December.
"Our discussions on nuclear power have been focusing too much on negative aspects," Kyoto University's Yamana said. "Four years have passed and we need to look at nuclear calmly," he said, adding that atomic power helps Japan cut greenhouse gas emissions.
Nuclear's share of the electricity mix is at the center of the policy debate. In fiscal 2010, the nation derived nearly 30 percent of its power from nuclear while renewables provided almost 10 percent, with the majority of that coming from hydropower.
Four years after the triple core meltdown at the Fukushima No. 1 plant, the public remains cautious about nuclear.
According to a March poll by the Nikkei newspaper and TV Tokyo, 62 percent of respondents said reactors shouldn't be restarted, while 27 percent supported the resumption of nuclear power.
Meanwhile, power rates have risen 20 percent for homes and 30 percent for industry use since the nuclear crisis began in March 2011, according to date from the Ministry of Economy, Trade and Industry.
Keidanren, the nation's top business lobby, said April 6 that nuclear power should supply more than 25 percent of electricity by 2030, while renewables should be around 15 percent.
The panel of LDP lawmakers that presented their findings to Abe on Tuesday recommended the nation get its electricity from base-load sources on a par with other developed countries, which is currently above 60 percent.
"For utilities, there is no economic incentive to add clean energy," said Ali Izadi-Najafabadi, a Bloomberg energy finance analyst in Tokyo. He said Japan's current approach may benefit utilities in the short term.
"In the long term, it hurts the country including manufacturers," as domestic companies may miss out on opportunities to compete in fully liberalized markets abroad because they lack such experience at home, he said.
If all of the nation's reactors are to be decommissioned after the 40 years considered the operational age limit by Japanese regulators, only 20 will be in working condition by 2030, accounting for about 15 percent of power supply, according to an analysis by Keizai Doyukai. To keep nuclear capacity at 20 percent, utilities would need to seek government approval to extend operations, the group said in a report.
"Renewable energy has to be more stable and cheaper, and energy storage needs to develop further," Teruo Asada, who heads the group and also serves as the chairman of major trading company Marubeni Corp., told reporters in March.

IAEA's unabated support for nukes

April 13, 2015

IAEA chief stresses nuclear power

http://www.japantimes.co.jp/news/2015/04/13/business/iaea-chief-stresses-nuclear-power/#.VSvOKpPwlLM

Kyodo

International Atomic Energy Agency Director-General Yukiya Amano on Monday underscored the importance of nuclear power generation, saying it contributes to stable electricity supply and economic growth.
"Nuclear power supports the economy as it ensures stable energy supply, and bolsters a nation's competitiveness," Amano said in a speech during an annual event in Tokyo organized by the Japan Atomic Industrial Forum, which promotes nuclear power.
The chief of the U.N. nuclear watchdog also said: "It is a misunderstanding that (international society) is pressed to choose either nuclear power or renewable energy" as they are "complementary to each other."
Following the Fukushima No. 1 nuclear disaster triggered by a huge earthquake and tsunami in March 2011, the majority of the public in Japan remain opposed to restarting nuclear reactors amid safety concerns.

Nukes under 20% in 2030

April 14, 2015

Nuclear power to be less than 20% of Japan's energy mix in 2030: sources

http://www.japantimes.co.jp/news/2015/04/14/national/nuclear-power-less-20-japans-energy-mix-2030-sources/#.VS1d3pPwlLN

Kyodo
The Japanese government is planning to set the target for the ratio of nuclear power generation to the country's total electricity production in 2030 a little below 20 percent, compared with 28.6 percent in fiscal 2010, when the Fukushima nuclear crisis occurred, sources said Monday.
The Ministry of Economy, Trade and Industry, which is close to major manufacturers, had been aiming to set a goal of 20 percent or more, viewing promoting renewable energy as costly.
But Prime Minister Shinzo Abe's government has leaned toward the view it would be difficult to win public support in its energy policy if the target ratio of nuclear power is set at the 20 percent level as seen before the crisis. As a result, the sources said, the target could be set at 18 to 19 percent.
Some lawmakers in the ruling bloc led by Abe's Liberal Democratic Party, however, remain cautious about lowering the ratio below 20 percent, so preparations for creating the country's new future energy mix may not go smoothly.
The cautiousness is partly due to the necessity for Japan to cut greenhouse gas emissions to fight global warming, which means the country would burn less fuel for thermal power generation, and instead seek to restart nuclear reactors confirmed safe by regulators.
All of Japan's nuclear reactors have remained offline amid safety concerns following the March 2011 disaster in Fukushima.
The industry ministry is planning to have a panel of experts make a proposal for the 2030 energy mix by the end of this month, while aiming to have the proposal approved by the ruling coalition in May.

The plan will also see Japan present its numerical goal for reducing greenhouse gas emissions based on the energy mix plan before a summit of the Group of Seven industrialized nations is held in June in Germany.

JAIF on the future of nukes

16.04.2015_No74 / News in Brief

Nuclear Can Still Have A Role To Play In Japan, Says Jaif President

http://www.nucnet.org/all-the-news/2015/04/16/nuclear-can-still-have-a-role-to-play-in-japan-says-jaif-president

16 Apr (NucNet): Nuclear can still have a key role to play in Japan's energy policy, but the restart process for the country's offline reactor fleet is strict and time-consuming, Japan Atomic Industrial Forum president Takuya Hattori told NucNet. Mr Hattori said Japan has no indigenous energy resources with the exception of hydropower, which supplies less than 10 percent, and renewables are "very limited". He said: "We need power and nuclear is one of the most reliable sources." Out of the 48 commercial reactors in Japan, none have been in operation since September 2013, Mr Hattori said. "Considering the serious impact on the Japanese economy, especially on industry and local economies, there is a desire to restart reactors as soon as possible." The interview is online for subscribers: http://bit.ly/1b5EeoN

METI: Enough electricity this summer even without nukes

April 17, 2015

Current nonnuclear power capacity should suffice for summer: METI

http://www.japantimes.co.jp/news/2015/04/17/business/current-nonnuclear-power-capacity-suffice-summer-meti/#.VTEjkpPwlLM

Kyodo

Japan is expected to secure the minimum required power supply capacity this summer, the industry ministry said Thursday, meaning electricity supply will be sufficient during the high-demand season even if none of the country's nuclear reactors resumes operation by then.

Although the government is expected to call on companies and the general public to help save power, for the third consecutive year it is unlikely to set numerical power-saving targets to address supply concerns that have emerged since the onset of the 2011 Fukushima No. 1 nuclear power plant crisis.

All of Japan's 48 nuclear reactors have been offline since September 2013, meaning the world's third-largest economy is getting by without a power source that generated almost a third of its electricity at the time the Fukushima disaster struck.

Prime Minister Shinzo Abe's government hopes to revive nuclear power generation in part to cope with the risk of a possible shortage of power supply caused by a malfunction by thermal power plants — currently the main power generators — or other incidents.

The latest power supply outlook could deepen doubts over the government's logic for restarting the nation's idled fleet of reactors, some observers said.
Nine regional utilities calculated their extra power supply capacity this summer on the assumption that Japan will see extremely high temperatures like in 2010, and the Ministry of Economy, Trade and Industry presented the estimates at a meeting with experts mulling electricity issues.
According to the estimates, the nine regional utilities expect their electricity supply capacity to exceed demand by levels ranging from 3 percent to 12.1 percent — all above the minimum required level of 3 percent.
While utilities serving eastern Japan generally reported a solid level of supply capacity, two utilities in western Japan — Kansai Electric Power Co. and Kyushu Electric Power Co., which had been particularly dependent on nuclear power before the Fukushima disaster — met the minimum 3 percent level only by contracting for electricity, if needed, from other utilities.
To facilitate power transmission between eastern and western Japan, the industry ministry announced a plan the same day to raise the nation's East-West transmission capacity from 1.2 million kW now to 3 million kW by the late 2020s.
By installing new transmission lines and frequency converters, the government aims to build enough capacity so that utilities can exchange power to prevent shortages if major disasters occur.

20-22% for nukes

April 23, 2015

Industry ministry eyes 20-22% for nuclear power

http://www3.nhk.or.jp/nhkworld/english/news/20150423_35.html
Apr. 23, 2015 - Updated 12:44 UTC+2
Officials of Japan's industry ministry plan to reduce the nation's reliance on nuclear power in 15 years.

A ministry draft plan says nuclear power should meet 20 to 22 percent of the nation's energy needs in 2030. The figure was around 28 percent before the 2011 Fukushima nuclear crisis.

The target for renewable energy is 22 to 24 percent, up from slightly over 10 percent in fiscal 2013.

That means the ministry expects more energy to come from sources such as solar and wind power than nuclear in 2030.

Officials say they see a need for some nuclear power to curb greenhouse gas emissions and fuel costs.
Japan's reliance on thermal power rose after the Fukushima accident. Increased use of fossil fuel led to more carbon dioxide emissions and fuel imports.

The officials took into consideration utilities' decision in March to scrap 5 aging reactors. They say more reactors could be decommissioned.

The ministry has discussed the 2030 targets at expert panel meetings since January.

Officials plan to present the draft plan to the panel next Tuesday and draw up a final plan before a Group of Seven summit in June. Measures against global warming are expected to be on the meeting agenda.

Industry ministry eyes 20% to 22% of electricity from nuclear by 2030

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http://www.japantimes.co.jp/news/2015/04/23/business/economy-business/industry-ministry-eyes-20-to-22-of-electricity-from-nuclear-by-2030/#.VTkS3ZPwmos

Kyodo
The industry ministry is looking to set the target for the ratio of nuclear power generation to Japan's total electricity production in 2030 between 20 percent to 22 percent, compared with 28.6 percent in fiscal 2010 before the Fukushima nuclear crisis, sources close to the matter said Thursday.
Miyazawa, head of the ministry overseeing the power sector, presented the plan to other Cabinet ministries during a meeting at the prime minister's office on Thursday. He also suggested that the country generate 22 percent to 24 percent of the total electricity by renewable sources in 2030, according to the sources.
Miyazawa, however, told reporters after the meeting that nothing has been decided on the country's future energy mix.
The ministry is expected to present the targets at next Tuesday's meeting of a panel discussing the country's energy mix, with a view to reaching a conclusion by the end of next month.
In the wake of the triple meltdown at Tepco's Fukushima No. 1 plant, the government of Prime Minister Shinzo Abe has pledged to lower the country's dependence on nuclear power and promote clean energy such as solar and wind. But it is also aiming to restart many of the country's idled nuclear reactors in spite of public opposition.
Many members of the public are opposed to restarting nuclear reactors that have remained offline amid heightened safety concerns since the Fukushima crisis began. In light of persistent anti-nuclear sentiment, the government initially sought to set the target for nuclear power generation at less than 20 percent of the total.
But the industry ministry now says it would like to boost the nuclear power target to cut greenhouse gas emissions. Tokyo is striving to present its numerical goal for reducing greenhouse gas emissions based on the energy mix plan before a summit of the Group of Seven industrialized nations to be held in June in Germany.
In a related move, a panel of the ruling Liberal Democratic Party compiled a proposal Thursday that the country generate more than 30 percent of the nation's electricity supply from renewable sources by 2030.

Japan must stop using Fukushima as an "excuse"

April 21, 2015

Editorial: Japan must set anti-climate change goal without using nuke disaster as excuse

http://mainichi.jp/english/english/perspectives/news/20150421p2a00m0na010000c.html

The government is said to be in the final stages of setting a new target for reducing greenhouse gas emissions at about 25 percent of current levels by 2030. This translates into a reduction rate from 1990 -- the base year set by the Kyoto Protocol -- of about 10 percent, which is much lower than the reduction goals submitted already by other industrialized nations.

At this rate, it is unclear whether Japan will be able to reach its Cabinet-approved, long-term target of an 80-percent reduction in greenhouse gas emissions by 2050.

The next international negotiations on climate change will be at the United Nations Climate Change Conference (COP 21) in Paris at the end of this year, during which participating states hope to establish a new framework on the reduction of greenhouse gas emissions from the year 2020 onward.

The European Union has already submitted its goal for 2030 of at least a 40 percent reduction from 1990 levels; the United States has also submitted its goal for 2025 as a reduction of 26 to 28 percent compared to 2005 levels. Both these targets are aligned with international goals for industrialized countries to reduce emissions by 80 percent by 2050. The International Energy Agency (IEA) has run analyses on possible gas reduction volumes for various countries based on reduction measures that are currently implemented, but the targets set by both the E.U. and the U.S. are more ambitious than those figures.

Meanwhile, the reduction rate being finalized by Japan is about the same level as the figure predicted through IEA's analyses. It will be incredibly difficult to reach Japan's long-term targets at this pace, meaning future generations will be forced to bear a greater burden. Indeed, we cannot ignore the disadvantages we face in our anti-climate change efforts partly as a result of our nuclear reactors being stopped. But Japan is the world's fifth-biggest greenhouse-gas emitter. It is our responsibility to set an ambitious reduction target and contribute to global anti-climate change efforts.

We cannot fulfill that responsibility without stepping up efforts to conserve energy and to expand the use of renewable energy.

Exporting Japanese technology to reduce emissions overseas can help on a global scale, but we must not neglect measures within Japan.

Japan's energy-saving measures are world class, but efforts have plateaued. Today, emissions per GDP are lower in Britain and Italy than in Japan. Last month, the Japan Climate Leaders' Partnership (Japan-CLP) -- comprising corporations passionate about anti-climate change efforts -- recommended the implementation of an emission trading scheme based on the thinking that creating an economic structure that focuses on energy and resource conservation would help improve Japan's competitive edge. It's a mindset that responds to the demands of the times in which we live.

Expanding the use of renewable energy can result in the rise of electricity prices, but it can also reduce the cost of procuring fossil fuels. Locally generating and locally consuming renewable energy can help create jobs in regional communities, contributing to the goal of "vitalizing local economies" emphasized by Prime Minister Shinzo Abe.

According to the Federation of Electric Power Companies of Japan (FEPC), the use of one nuclear reactor reduces carbon dioxide emissions by approximately 3.2 million tons annually. However, since Japan generates a total of 1.4 billion tons of greenhouse gases per year, the proportion that nuclear power contributes toward achieving Japan's long-term goals is not that great.

Japan stands at a point now, where it can no longer hide behind the Fukushima nuclear disaster for its passive stance toward anti-climate change measures.
April 21, 2015(Mainichi Japan)

Chernobyl 29

April 26, 2015

Chernobyl marks 29 years since disaster

http://www3.nhk.or.jp/nhkworld/english/news/20150426_25.html

Apr. 26, 2015 - Updated 14:26 UTC+2
Hundreds of people gathered in a town in Ukraine on Sunday morning to pray for the victims of the Chernobyl nuclear accident 29 years ago.

The gathering took place at a monument for the victims in the town of Slavutych, home to many former plant workers.

One of the reactors at the Chernobyl plant exploded during a test run on April 26th, 1986, sending a huge amount of radioactive substances into the air.

Around 130,000 residents were evacuated from areas within a 30-kilometer radius of the plant.

About 30 plant workers and firefighters died after being exposed to high levels of radiation.

Medical experts say a growing number of former residents and people who worked at the plant after the accident are dying from cancer, including leukemia.

The building of the reactor is now called a sarcophagus after being covered with concrete and metal to prevent further contamination.

Now a giant arch is being built to cover the aging sarcophagus. The structure, which will stand 108 meters tall, is due to be completed in 2 years.

Chernobyl: Missing 265 million dollars

Chernobyl arch faces €265m funding gap ahead of disaster's 29th anniversary

http://www.theguardian.com/environment/2015/apr/24/chernobyl-arch-faces-265m-funding-gap-ahead-of-disasters-29th-anniversary

See also : http://www.theguardian.com/environment/ng-interactive/2015/apr/24/containing-chernobyls-deadly-legacy

World must plug funding gap for massive 100-metre steel arch being built to contain remaining radioactive waste at the site

_old and new construction called sarcophagus covering the nuclear reactor no. 4 in Chernobyl Nuclear Power Plant, Ukraine, 2nd October 2014 Photograph: Alamy

Arthur Neslen
Friday 24 April 2015 11.28 BST Last modified on Friday 24 April 2015 12.21 BST

A massive engineering project to make the Chernobyl nuclear power plant safe is facing a €265m (£190m) funding shortfall.

Next week a conference held by Germany in London will call on countries to make up the gap, but the European Bank for Reconstruction and Development (EBRD) has said it may have to ask its shareholders to make up the shortfall if donations dry up.

This Sunday marks the 29th anniversary of the world's worst nuclear disaster, when a power surge blew the roof off a reactor, spewing radioactive clouds across Russia, and eastern Europe.

A makeshift sarcophagus built in the explosion's aftermath was supposed to protect the environment from radiation for at least 30 years. But it has since developed cracks.

The project to build a new radiation container had been due for completion this year but the deadline slipped to November 2017, as costs mushroomed from an initial estimate of €800m (£572m) to more than €2.15bn today.

Over 40 governments and the European commission have committed to help a Chernobyl Shelter Fund tasked with sealing off the 100 tonnes of uranium and one tonne of plutonium that remain within the site.
"If countries recognise the nature of the problem in Chernobyl and its importance for human security in Ukraine and ecological security in Europe, there is a hope that the gap could be closed at the donor conference on April 29," Anton Usov, an EBRD spokesman told the Guardian. "Verbally the donors are committed to contribute more funds."
The bank believes there is a broad understanding among nations of the threat that radioactive dust on the site still poses to Kiev, around 70km away.
But "if there is a shortfall, then we will speak to the bank's management and shareholders and it may be funded by EBRD reserves," Usov added. "Theoretically, that is something we could do."
The 31,000 tonne protective steel arch is an engineering project of staggering dimensions – 100m high, 165m long, with a span of 260m. When finished, it will be slid across teflon pads to entomb the burned out reactor, and is intended to remain effective for a century.
"The are no parallels in the history of world engineering," Usov said. "No-one has even undertaken a project like this before."
Construction of the stainless steel arch has been hampered by factors ranging from optimistic early architectural designs to heavy snows in the winter of 2013/14, which caved in part of a roof near the stricken Unit 4 reactor shelter. Workers were evacuated from nearby sites, as radiation levels surged.
The reactor itself is still too contaminated for workers to approach. Removal of radioactive materials there will only begin once the new confinement structure has been finished.

What future for nuclear reactors?

May 2, 2015

Number of nuclear plants in the world

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

May 2, 2015 - Updated 04:04 UTC+2
Global distribution of nuclear power plants fell in western nations last year, but rose in emerging economies.

Officials at the Japan Atomic Industrial Forum say 5 new nuclear reactors in China and one in India started operating in 2014. One facility in the United States shut down.

The total number of operable nuclear reactors worldwide was 431 in 31 countries and regions. The figure is 5 up from the previous year.

China has 26 reactors under construction and plans to build an additional 30. Eleven reactors are under construction in Russia and 6 in India.

No new reactor has gone online in the US or any EU member country for 7 consecutive years.
The US has closed 5 plants over the last 2 years, reducing its total number of reactors to 99. The figure fell

below 100 for the first time in 28 years.

The closures come at a time when increased production of shale gas is pushing down electricity prices. This is making nuclear power generation unprofitable.

Anti-nuclear sentiment has also contributed, with Germany and Switzerland deciding to withdraw from the nuclear industry due to public pressure.

JAIF officials say eastern European and Middle East countries, as well as other emerging economies, are moving to build more nuclear reactors in an effort to cut their greenhouse gas emissions.

So what's changed since 3/11?

May 3, 2015

The same old energy mix

http://www.japantimes.co.jp/opinion/2015/05/03/editorials/the-same-old-energy-mix/#.VUccpZPwmic

The government's draft for Japan's energy mix in 2030, which was endorsed by a panel of experts at the Economy, Trade and Industry Ministry last week, makes it clearer that the Abe administration is pursuing a return to the nation's energy landscape that existed before the 2011 Fukushima nuclear disaster and contradicts Prime Minister Shinzo Abe's repeated words that the government is seeking to reduce the nation's dependency on nuclear power as much as possible by maximizing introduction of renewable energy and greater energy efficiency.

According to the medium-term targets set in the draft, nuclear power will account for 20-22 percent of the nation's electricity supply as of 2030, while the share of renewable energy such as solar and wind power will rise to 22-24 percent.

True, the target for renewable sources was set just slightly higher than the share of nuclear energy, which is forecast to fall from the levels before the 2011 triple meltdowns at Tokyo Electric Power Co's Fukushima No.1 plant. It is questionable, however, whether all possible measures were explored to increase the future share of renewable energy before such targets were set.

The feasibility of the target for nuclear power is also in doubt. In 2010, nuclear power made up of 28.6 percent of Japan's electricity generation. As power companies shut down their nuclear reactors in the wake of the Tepco plant disaster, the share of nuclear power plunged to 1 percent in fiscal 2013. All of the nation's 48 reactors — including four aging ones that were officially decommissioned last week — are currently offline.

While the Abe administration is seeking to reactivate the idled reactors once they clear the Nuclear Regulation Authority's screening under what the government touts as the world's toughest safety standard, the 20-22 percent share for nuclear energy in 2030 still appears to be a tall order.

Following the Fukushima disaster, the government decided that reactors should be decommissioned after they have been in operation for 40 years in principle — except for a one-time extension of their life to up to 60 years on the condition that they undergo costly safety renovations. If no new nuclear power reactors are built in the coming years— which seems difficult given the continuing popular safety concerns about nuclear power — the power companies would need to extend the operation of about 15 aging reactors by 2030 to secure a 20 percent share for nuclear energy, assuming that all of the reactors approved by the NRA have been put back online.

Meanwhile, the government continued to balk at setting ambitious targets for increasing the share of renewable energy. The trade and industry ministry, which led the discussions at its panel, remained negative toward substantially boosting the share of renewable energy, which in 2013 stood at 10.7 percent, including hydro power. When the Environment Ministry in early April released a simulation commissioned to a private think tank that stated renewable energy can account for up to 35 percent of Japan's power supply in 2030, trade and industry minister Yoichi Miyazawa was quick to dismiss the calculation as impractical, noting that it fails to properly assess the feasibility of the various steps that need to be taken to promote the renewables.

Opponents to boosting the share of renewable energy often cite the high cost of power generation through such sources. Keidanren (the Japan Business Federation) argued against setting the target for renewables higher by citing the damage higher electricity charges would cause to businesses and consumers.

But what's missing from the argument is the issue of how the cost of renewable energy — which indeed remains high in Japan despite the trend of falling costs in other countries — can be lowered. The government should identify the hurdles that make renewable energy expensive in this country, and take steps to remedy the problems, including reform of the power transmission networks.

In setting the draft for the energy mix, the trade and industry ministry also released its estimate of the per-unit cost of each source of electricity in 2030. According to the estimates, the cost of nuclear energy per 1 kilowatt hour will be ¥10.1 — cheaper than ¥12.9 for coal-fired thermal power, ¥13.4 for liquefied petroleum gas-fired thermal power, ¥13.9-¥33.1 for wind power and ¥12.5-¥16.4 for solar power.

The cost of nuclear energy was raised from ¥8.9 in the earlier estimate released in 2011 to reflect the increased cost of measures to bump up plant safety in accordance with the updated NRA regulations and possible expenses of compensation in case of severe accidents, although the calculated frequency of such accidents was lowered in view of the tighter safety standards. The cost of thermal power that depends on imported fuel was raised from earlier estimates in view of the yen's fall against the dollar. While it was estimated that the equipment costs for renewable power would decline, the profits that generators of such power get through the feed-in-tariff system — which would be added on to the utility charges — were newly added to the calculations.

The validity of the formula of these estimates — based on which the government touts the cost advantage of nuclear energy over other sources — should be thoroughly examined.

As nuclear power plants were put offline, the utility firms fired up more thermal power plants, whose share in Japan's electricity generation rose from 61.7 percent in 2010 to 88.3 percent in 2013. Thermal power generation would need to be maintained for the foreseeable future. But unlike many other industrialized economies that promote the use of natural gas-fired thermal plants, which emit relatively small amounts of carbon dioxide, Japan seems to be pushing for coal-fired plants — because coal is less expensive. The draft sets the target share of natural gas-fired thermal power plants at 27 percent and that of coal-fired plants at 26 percent. The government should reconsider whether this is the right direction in view of the fight against climate change.

Practical nukes training difficult in Japan

May 11, 2015
Universities struggle to provide practical nuclear power training
http://mainichi.jp/english/english/newsselect/news/20150511p2a00m0na012000c.html

Universities are struggling to provide practical nuclear power training to students because reactors for education and research remain idle as they cannot meet the new regulatory standards introduced following the outbreak of the Fukushima nuclear crisis.
The new standards, worked out by the government's Nuclear Regulation Authority (NRA), require operators of reactors for education and research with smaller outputs to take as strict safety measures as those for commercial reactors.
However, universities operating these reactors are unable to beef up their safety measures, and there are no prospects that they will pass NRA safety screening.
Concerns have been raised that the suspension of operations at these reactors could adversely affect development of human resources in nuclear technology, but the NRA cannot loosen up screening standards for these reactors as they are directly linked to safety. As such, both universities and the NRA are at a loss about what to do.
Kyoto University's Research Reactor Institute in Osaka Prefecture has two reactors for education and research purposes, with an output of 100 watts and 5,000 kilowatts, respectively. Kinki University's Atomic Energy Research Institute, also in the prefecture, has one with an output of only 1 watt.
Both institutes claim that even if hit by a powerful earthquake, it would not cause a serious accident to the reactors that would require evacuation of local residents. Thousands of students and researchers, including those at other universities, have used these reactors for research and experiments, such as those involving starting up the reactors and adjusting their outputs.
Before the outbreak of the Fukushima nuclear crisis in March 2011, the operation of these reactors had been permitted if conditions that were set at the time of the installations were met.
Under the new standards, however, operators of these research reactors must assume the scales of earthquakes that could hit the reactors and implement multiple safety measures just like those for commercial nuclear reactors. Therefore, the operators are required to calculate how far every device in these research reactors can withstand vibrations estimated to be caused by the maximum possible earthquake.
Kinki University's reactor had been stopped by Feb. 5, 2014, and Kyoto University reactors were halted by May 26 last year for regular inspections.
The two universities applied with the NRA for safety inspections last fall, but the reactors have not yet passed the inspections as the regulator demanded that the universities submit specific figures and other information on the safety of the reactors.
Unlike electric power companies that have numerous employees, teachers at these universities must handle these duties while lecturing at classes and conducting their own research activities.
"Only five teachers can handle the duty. We can't assign more people to the task," laments Tetsuo Ito, head of Kinki University's Atomic Energy Research Institute.
NRA Chairman Shunichi Tanaka expressed understanding of the need for research reactors at universities. "These are important facilities for education," he has pointed out.

Still, Shinzo Kuromura, who oversees inspections on reactors at the NRA, said the authority cannot compromise its safety inspections.
"We can't relax our inspections," he said.
Kuromura added that he "would like to seek other ways" for the research reactors. However, neither the NRA nor the universities has come up with productive ways to ensure both human resource development and safety.
Since students cannot undergo training to operate nuclear reactors in Japan, Kinki University received a subsidy from the education ministry to dispatch students to participate in training at Kyung Hee University in South Korea.
Kyoto University organizes inspection tours of nuclear reactors for students instead of having them undergo training to operate reactors.
Ito of Kinki University underscored the need for students to learn through nuclear reactor operation training so that the decommission projects can be carried out safely at commercial reactors.
"We can't take all students studying nuclear technology overseas for training. It's regrettable that some students will start their career (in nuclear technology) without going through the tense training of operating nuclear reactors," he said.
May 11, 2015(Mainichi Japan)

Nuclear still the cheapest, acording to METI

May 11, 2015

Nuclear remains cheapest power source despite Fukushima meltdowns: government

Kyodo
A panel of nuclear experts on Monday largely approved a government report saying that atomic power remains the cheapest source of electricity despite the rising safety costs triggered by the 2011 Fukushima core meltdowns.
Despite an expected glut in solar power, the government is looking to make nuclear power account for 20 to 22 percent of Japan's electricity supply by 2030, underscoring its policy of sticking with atomic power even though the majority of the public remains opposed to restarting its idled reactors.
According to the latest estimate of power generation costs by the Ministry of Economy, Trade and Industry, atomic power would cost at least ¥10.3 per kilowatt-hour in 2030 — cheaper than power derived from fossil fuels, natural gas, wind and solar energy.
That's higher than the ¥8.9 projected in 2011 and is based on a projection that costs for plant decommissioning and compensation from a severe accident would jump to ¥9.1 trillion from the ¥5.8 trillion estimated in 2011, reflecting the Fukushima nuclear crisis.
METI also said additional safety measures required to run a nuclear reactor would cost an average of ¥60.1 billion.
But the increase in overall generation costs is limited because the probability of a nuclear accident would decrease after utilities complete their safety measures, it said.

In the report, the ministry also estimates that coal-fired power will cost ¥12.9 per kwh and liquefied natural gas ¥13.4 per kwh, compared with earlier projections of ¥10.3 and ¥10.9, respectively.
Wind power would cost up to ¥34.7, solar power up to ¥16.4, geothermal power ¥16.8, and hydropower up to ¥27.1 per kwh, the report said.
In its national energy policy adopted last year, the government of Prime Minister Shinzo Abe pledged to reduce reliance on nuclear power and promote renewable energy as much as possible, while standing by nuclear as a key power source, citing the importance of a stable electricity supply to economic growth.
Japan is expecting a glut in solar power because utilities refuse to upgrade their power grids to purchase all the energy as mandated under the feed-in tariff system. A study has found that seven of the nation's utilities lack the transmission network capacity to accept all of the solar power energy that suppliers plan to generate, METI says.
Combined, they can only accept 58 percent of the total, METI said. METI began looking into their transmission capacities after five utilities decided to cap their clean energy intake, revolting against the government's plan to increase generation of renewable energy in light of the Fukushima disaster.
Under the feed-in tariff system, utilities are obliged to purchase all electricity generated from such sources as solar, wind and geothermal power at fixed rates for a set period.
But the system ran into a roadblock after new suppliers flooded the solar power business, prompting the utilities to suspend signing power-purchasing contracts in September amid fears that overcapacity could cause blackouts.
Currently, all of Japan's commercial nuclear reactors remain offline to pass a beefed-up safety screenings based on new, more stringent regulations drafted after the Fukushima meltdowns. The government is planning to restart reactors that have met the post-Fukushima safety requirements.

Kepco's commitment to reducing costs questioned

May 14, 2015

EDITORIAL: We need to hear Kansai Electric's vision for future power sources

http://ajw.asahi.com/article/views/editorial/AJ201505140039

Kansai Electric Power Co. will raise its electricity rates for households in June. The standard monthly rate of 8,058 yen will go up to 8,220 yen.
The increase comes only two years after the last increase. In May 2013, the utility jacked up its power charges by nearly 10 percent.
Kansai Electric attributed the increase to swelling fuel costs due to the expansion of thermal power generation forced by the continued shutdown of its nuclear power plants.
But how much has the company done to cut costs to avoid a rate hike during this period?
The utility, during the government's review of the rate hike plan and public hearings over the issue, failed to provide persuasive arguments that it was committed to cost reductions.
One aspect of the company's operations that has cast doubt over its seriousness to cut costs concerns executive pay.

At the time of the previous increase, the government asked the utility to lower the average annual remuneration of the board members to 18 million yen. But Kansai Electric kept it at 21 million yen until the end of last year. After being criticized for failing to cut its executive salaries, President Makoto Yagi promised on May 12 to lower the average to 16 million yen.
The utility initially hoped to raise its power charges by more than 10 percent in April. But the government limited the hike to 8.36 percent, saying the company could do more to boost its cost efficiency.
An increase in electricity rates has a direct impact on people's livelihoods. The utility needs to demonstrate that it has made every effort to slash costs. That is a basic premise.
Since the catastrophic accident at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant, which led to a shutdown of all nuclear reactors in Japan, it has been impossible to resume nuclear power generation at pre-disaster levels.
Nuclear power accounted for half of Kansai Electric's overall power output before the accident. The utility now should make more serious efforts to wean itself from its dependence on atomic energy.
In spite of this, the company has said it will keep using nine of the 11 reactors it owns.
It appears that Kansai Electric is proverbially waiting for the storm to pass by pinning its hopes for earnings recovery on eventual restarts of its reactors.
Last month, the Fukui District Court issued an injunction to prevent restarts of two reactors at Kansai Electric's Takahama nuclear power plant in Fukui Prefecture. The court cited safety concerns in issuing the injunction in response to a request from local residents.
There is strong opposition to plans to bring offline reactors back on stream, especially in areas around Fukui Prefecture.
The utility should take more seriously the changes in the social environment caused by the Fukushima triple meltdown.
Kansai Electric's latest business plan also calls for greater efforts to build state-of-the-art thermal power plants with higher fuel efficiency and introduce renewable energy sources for power generation.
If it is serious about pursuing these goals, we suggest the company lay out a vision for its future power sources before the government's policy debate on the nation's future energy mix is concluded.
In its long-term growth strategy unveiled in 2010, the company pledged to raise the share of non-fossil fuel power sources, mainly nuclear energy, to a level of 60 to 70 percent in 2030. The target must now be reconsidered as a result of the disaster that unfolded in March 2011.
If the company sets clear numerical targets for lowering its dependence on nuclear power in 10 or 20 years, more constructive debate on its business plans will be possible.
The power retail market is slated to be fully deregulated next spring, which will allow households to freely choose their suppliers of electricity.
As the power market for industrial consumers has already been liberalized, more than 5,000 companies and local governments terminated their contracts with Kansai Electric, which raised the rates, and switched to new power suppliers by the end of March.
Unless it is willing to reform its management policy and structure in response to the changes of the times, Kansai Electric could lose many more customers.
--The Asahi Shimbun, May 14

High costs fo renewables as an excuse for nukes

May 27, 2015

Nuclear power crucial as renewable energy too costly, ministry says

http://ajw.asahi.com/article/behind_news/politics/AJ201505270040

THE ASAHI SHIMBUN

The high cost of renewable energy means Japan has no choice but to rely on nuclear power to provide between 20 and 22 percent of its energy by 2030, according to an industry ministry report.

That would be a small drop in the reliance on nuclear power from the levels before the 2011 Fukushima nuclear disaster.

The shift away from nuclear energy to renewables, including solar power, will generate “pressure for drastic rise in energy cost,” stated the report released May 26. The ministry, a staunch supporter of nuclear energy, concluded it is the least expensive method of power generation.

While nuclear energy should provide between 20 and 22 percent of Japan's electricity, renewable energy should account for 22 to 24 percent in fiscal 2030.

About 27 percent of Japan’s electricity was provided by nuclear power on a yearly average in the decade up to the 2011 Fukushima nuclear disaster.

The proposal also said that nuclear power was required to keep power costs at a manageable level for corporations and households and also to enable Japan to reduce greenhouse gases to levels set by advanced economies in the West.

The draft report was released by an expert committee at the Natural Resources and Energy Agency headed by Masahiro Sakane, a senior adviser at Komatsu Ltd. It will be finalized at a meeting of the committee in early June and adopted as the government’s official energy-mix plan in July at the earliest after going through a public-comment phase.

All the nation’s reactors were shut down after the disaster, and hurdles remain high for the government to restart many of them due to strong public opposition and safety concerns of local governments.

In its Strategic Energy Plan released in April 2014, the government underscored its intention to push for reactor restarts but said “dependency on nuclear power generation will be lowered to the extent possible.”

At a news conference April 26, the industry minister Yoichi Miyazawa said that high energy costs and other concerns "will be all solved by increasing the ratio of nuclear power.”

The minister emphasized that the 20-22 percentage scenario was the minimum possible reliance on nuclear energy.

While the Strategic Energy Plan projected that renewable energy must account for far more than 20 percent of Japan’s future plan, the draft report pointed out that solar and wind power output are particularly unstable.

The proposal states that Japan should rely on just 7 percent of energy from solar power and 1.7 percent from wind power.

During the committee sessions, Yukari Takamura, a professor of international law at Nagoya University, and two other members submitted opinion papers that asserted the discussions at the committee do not fully address the need to reduce nuclear energy and increase dependency on renewable energy.

But the figures in the draft proposal are likely to be approved in the committee's next meeting in early June.
(This article was written by Tomoyoshi Otsu and Kenichiro Shino.)
See : http://ajw.asahi.com/article/behind_news/politics/AJ201504280045

About Japan's energy mix draft

June 1, 2015

Some experts demanded less use of nuke power

http://www3.nhk.or.jp/nhkworld/english/news/20150601_26.html

Jun. 1, 2015 - Updated 10:58 UTC+2

In a discussion about the final draft plan on Japan's future energy sources, several experts have called for using less nuclear power.

The 14-member panel endorsed on Monday the draft for Japan's energy plan for fiscal 2030. It aims to set the country's nuclear power dependence at 20 to 22 percent of total energy.

Earlier, three of the panel members lodged a written objection against the panel's draft plan. They said it failed to meet Japan's policy to reduce as much as possible its reliance on atomic energy.

Their paper said the ratio is based on the scenario the operational lifespan of Japan's nuclear reactors will be extended beyond their standard of 40 years.

The experts said the use of renewable energy, set at 22 to 24 percent in the draft, should be raised to at least 30 percent by introducing more solar and wind power.

During Monday's meeting, some members proposed that renewable energy be available for use when nuclear plants cannot provide sufficient energy.

Others said the use of nuclear power should be reduced to meet public expectations. They said **priority should be attached to safety**, and existing power plants be replaced by new state-of-the-art nuclear facilities.

Industry ministry officials overseeing the panel said that no plan is in place to build new nuclear reactors or replace old ones with new ones.

They said some of the plants will be put into use beyond the operational lifespan, but with greater safety

levels and higher operating rates.

The plan was ultimately endorsed by the panel members. The final draft proposes that once the plan is officially adopted it be reviewed every 3 years.

Govt. panel endorses energy mix draft plan

http://www3.nhk.or.jp/nhkworld/english/news/20150601_24.html

Jun. 1, 2015 - Updated 09:33 UTC+2
A panel of experts on Monday endorsed the final draft plan submitted by industry ministry officials on Japan's electricity needs in the future.

The key issue is the balance of nuclear power, fossil fuels and renewables.

The plan indicates nuclear power should contribute 20 to 22 percent of total energy by fiscal 2030. The figure was about 28 percent before the Fukushima nuclear accident in 2011.

The plan also calls for Japan to more than double its reliance on renewable energy sources to up to 24 percent.

Renewables accounted for about 10 percent of total supply in fiscal 2013.

Ministry officials say they will collect comments from the public. They will officially decide on the energy plan as early as July.

Cut greenhouse gas emissions by 26%

June 2, 2015

Japan aims to cut greenhouse gas emissions by 26% by 2030

TOKYO (Kyodo) -- The Japanese government on Tuesday decided on its commitment to reducing greenhouse gas emissions by 26 percent by 2030 from 2013 levels, as part of efforts to reach a new international agreement at the end of the year to tackle climate change.
Prime Minister Shinzo Abe plans to explain about the emission goal at a summit of the Group of Seven industrialized nations starting Sunday in Germany, and submit it to the United Nations in July.
The target is "internationally comparable and ambitious," the premier told a government meeting on global warming. It "entails concrete measures and technologies" to reduce greenhouse gas emissions, he said.
The new reduction target, however, only represents an 18 percent cut compared with the Kyoto Protocol base year of 1990 and is seen as insufficient among environmental activists and researchers.

International society is seeking to create a new framework to replace the Kyoto Protocol, the current international framework for fighting global warming, at the 21st session of the Conference of the Parties to the U.N. Framework Convention on Climate Change, or COP21, to be held in Paris in November and December to decide on a post-2020 regime for reducing greenhouse gas emissions.
Japan has lagged behind other countries in setting a post-2020 reduction goal amid uncertainty over its future energy policy in the wake of the 2011 Fukushima meltdowns, which brought all of the country's nuclear reactors offline by the end of September 2013.
Under the new goal, Tokyo plans to cut emissions to the equivalent of some 1.04 billion tons of carbon dioxide in 2030. It represents a 25.4 percent reduction from 2005 levels.
In the long term, industrialized countries have agreed to cut their combined emissions by 80 percent by 2050. Japanese government officials said they believe Tokyo's new reduction goal is consistent with the global target.

June 2, 2015

Japan aims to cut greenhouse gases by 26%

http://www3.nhk.or.jp/nhkworld/english/news/20150602_19.html

Jun. 2, 2015 - Updated 05:13 UTC+2

Japan's government has decided to aim for a 26 percent reduction in greenhouse gas emissions by 2030, compared to 2013 levels.

Prime Minister Shinzo Abe was on hand when a government task force on climate change made the decision on Tuesday. The government consulted experts and the ruling parties about the target.

The latest emissions data available comes from 2013. The target also translates to a 25.4 percent reduction compared to 2005, the previous baseline.

Cuts in carbon dioxide emissions from power plants and corporate activities are expected to make up the bulk of the reduction, or nearly 22 of the planned 26 percent.
The remainder is to be achieved through cuts in other greenhouse gases and by counting CO2 absorptions by forests and farmland.

Countries around the world are being asked to present their emissions reduction goals beyond 2020 before a UN climate change conference is held at the year-end.

The prime minister told the task force that Japan's target is ambitious and on a par with international standards. Abe said he will explain Japan's vision at the upcoming Group of 7 summit.

He also said Japan is determined to lead global debate in the run-up to the climate change conference, to realize a fair and effective framework to be joined by all nations to counter global warming.

The government plans to solicit public opinion for about one month, and present the target to the United Nations, possibly in July.

Reduce by 26 % by 2030

June 8, 2015

Abe outlines greenhouse gas emission goal at G7

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Jun. 8, 2015 - Updated 13:46 UTC+2
Prime Minister Shinzo Abe has told leaders from the Group of 7 countries that Japan will aim to cut its greenhouse gas emissions by 26 percent by 2030.

Abe made the announcement on Monday, the second day at the G7 summit in southern Germany.

Abe said Japan has been faced with a huge shift in the energy environment since the March 2011 earthquake and tsunami.

He said Japan's energy consumption has declined since the disaster, but the country will not stop there.

Abe said Japan's government has decided to aim for a 26 percent reduction in greenhouse gas emissions by 2030, compared to 2013 levels.

Japanese officials say other leaders appreciated the target, calling it aggressive.

The leaders agreed to push for the adoption of a framework that includes all countries at the UN climate change conference scheduled for the year-end in Paris.

35 reactors by 2030?

JUne 11, 2015

Japan needs 35 nuclear reactors operating by 2030, says industry minister

http://ajw.asahi.com/article/behind_news/politics/AJ201506110038

THE ASAHI SHIMBUN

Japan needs about 35 working nuclear reactors by 2030 to achieve the government's long-term energy strategy to return the country's dependence on nuclear energy to slightly under the level it was before the 2011 Fukushima disaster.
That many would be required for nuclear energy to provide between 20 and 22 percent of the country's electricity, said industry minister Yoichi Miyazawa at a Lower House committee session on economy and industry.
Currently, there are 43 nuclear reactors in Japan with three more under construction, but none are actually operating.
After the Fukushima nuclear disaster in March 2011, the government limited the operational life of nuclear power reactors to a maximum of 40 years in principle, with an extension of up to 20 years in exceptional cases.
If the 40-year principle was to be strictly applied to all the existing reactors, there will be only 23 operative reactors in 2030, meaning that 10 or so reactors would have to have their lifespans extended in order to reach the power target.
The three new reactors include those at two new nuclear power plants in Aomori Prefecture, Electric Power Development Co.'s Oma plant and Tokyo Electric Power Co.'s Higashidori plant, while the other is the third reactor at Chugoku Electric Power Co.'s Shimane plant in Shimane Prefecture.
IAEA MEETING
Japan has strengthened safety measures against severe nuclear accidents and limited the operational lifespan of reactors through revisions of the nuclear reactor regulatory law, Ambassador Mitsuru Kitano told an executive meeting of the International Atomic Energy Agency (IAEA) in Vienna on June 10.
It was Japan's responsibility to share the experiences and lessons of the Fukushima disaster with other IAEA member nations, added Kitano, who is ambassador of the Permanent Mission of Japan to the International Organizations in Vienna.
At the meeting, the international nuclear watchdog unveiled its report on the Fukushima disaster, which will be officially released at its general meeting in September.
The report pointed out that blind trust in nuclear safety has prevented plant operator TEPCO from taking sufficient preparatory measures against tsunami and other natural disasters, while the government and its nuclear watchdog also failed to demand TEPCO take necessary safety steps prior to the accident.
While Kitano declined to comment on the government's opinion on the safety of nuclear power plants at the time the accident took place, he emphasized that Japan created a new nuclear watchdog, the Nuclear Regulation Authority, in 2012 to ensure its independence from the nuclear industry.

Environment minister against coal plant

June 12, 2015

Mochizuki to oppose coal-fired power plant

Jun. 12, 2015 - Updated 06:35 UTC+2

http://www3.nhk.or.jp/nhkworld/english/news/20150612_21.html

Japanese Environment Minister Yoshio Mochizuki says he will submit a letter of objection over the planned construction of a coal-fired thermal power plant in western Japan. He cites global warming concerns as a reason.

An operator that has secured funding from J-Power and Osaka Gas is planning to build the 1.2 million kilowatt plant in Ube City, Yamaguchi Prefecture. The ministry has conducted an environmental impact study of the project.

Mochizuki told reporters on Friday that he will say in the letter to the economy and industry ministry that the plan cannot be approved at present. The industry ministry is in charge of authorizing the plant's construction.

The environment minister expressed concern that the operation of the thermal power plant could undermine Japan's efforts to achieve its greenhouse gas emissions reduction goal.

Earlier this month, the government decided to aim to cut emissions by 26 percent by 2030 from 2013 levels.

Coal-fueled power generation involves sizeable carbon dioxide emissions.

But a series of projects to build such plants have been unveiled since the Fukushima Daiichi nuclear power plant accident in 2011.

The environment ministry estimates that if all the planned plants are brought into operation, power output by coal-fired plants may grow by more than 30 percent from fiscal 2013, which ended in March 2014.

The ministry is calling on the power industry to introduce a framework to reduce utilities' emissions.

Industrial watchers say the coal-fired plant construction projects may face a review.

All ready to start again

Japan returns to nuclear power

http://blogs.ft.com/nick-butler/2015/06/22/japan-returns-to-nuclear-power/**?**

Nick Butler
| Jun 22 05:30 | 3 comments | Share

Within the next few weeks the Japanese utility Kyushu Electric Power will restart its two nuclear power reactors at Sendai in the Kagoshima prefecture in the far south of the country. Fuel loading is set to begin

July and the plants should be onstream again in August. After four years of crisis and much legal and political debate, the Japanese nuclear industry is finally on the way back. The implications for the rest of the energy sector in Asia and across the world are significant.

The two reactors at Sendai have been closed since 2011. From a nuclear fleet of 50 reactors capable of producing some 47 GW of electricity and supplying over 30 per cent of Japan's daily electricity needs at the beginning of 2011, the sector's output shrank to zero in the months following the Fukushima disaster. At Fukushima itself six reactors have been closed and are being decommissioned. The rest of Japan's nuclear fleet stands cold and unused. Gradually, however, the negative mood of 2011 has abated. Now the operators of 24 different reactors across the country have applied for permission to reopen with the full and very active co-operation of the Japanese state and the powerful industrial lobbies such as the Kaidanren and the Keizai Doyukai.

Public opinion in Japan is divided about nuclear power but the Democratic Party of Japan (DPJ) which campaigned for the phasing out of all nuclear activity, lost power at the 2012 elections and has been unable to recapture the surge of support it enjoyed in the immediate aftermath of Fukushima.

The DPJ's plans to transform Japan's energy mix were dropped when the government of Shinzo Abe came to power. The policy of the current administration focuses on a gradual restoration of nuclear's share in Japan's energy mix . The process is slow and painful. Each plant still faces challenges to demonstrate conformity with new standards. In some cases there is local opposition but the chances are that up to 10 nuclear plants will be operational again within 18 months. There are even plans for the construction of new nuclear stations, most of which are reported to have strong local support. As the industry never fails to point out no one died at Fukushima and the story can be written as one of an industry responding to the challenge of a natural disaster completely beyond its control.

The record of the last four years has demonstrated once again the ability of the Japanese government to command the key players in the national economy when necessary. It is hard to imagine such a process working in the same way in the US or in Europe.

The first step was the imposition of a dramatic programme of energy conservation measures. Electricity demand fell by 12 per cent — and peak demand by 18 per cent. A comparable programme applied across the EU would reduce consumption by as much as 300 terawatt hours a year.

The remaining gap in Japanese energy needs has been filled by expensive gas and by coal. In both fuels Japanese demand has sustained the global market and kept prices up. As nuclear returns the impact will be painful, especially for gas. For the last few years gas prices have included an Asian premium because of increased demand from Japan. In recent months, however, gas prices have begun to fall as the coming shift back to nuclear is factored in. As a paper by Peter Hughes and Daniel Muthmann for the recent Pacific Energy Summit in Beijing demonstrates, the regional premium is disappearing and gas is becoming a single global commodity market with LNG spot prices in Asia and Europe converging.

Worldwide, the demand for traded gas is weak. As the new BP Statistical Review confirmed last week, gas demand in Europe fell by more than 11 per cent in 2014 as it was pushed out of the fuel mix by the combination of subsidised renewables and cheap coal. US demand is fully satisfied by local supplies. Japanese gas demand was 112bn cubic metres last year and could easily fall by 10 per cent a year for the next three years. Once the first nuclear stations such as Sendai are back onstream the pace of recovery could be quite rapid.

The trend will hit the coal market as well. Japanese coal imports grew after Fukushima and the Japanese government was forced to abandon their 2020 emissions reduction target. Now, however, Mr Abe's government is keen to get back to something close to the original targets within the next decade, and that means that coal use will be strictly limited.

The irony is that over time Fukushima may be seen as having done more damage to the nuclear sector outside Japan than to the industry within the country. It is Germany not Japan that has abandoned nuclear. Many other countries have found that the added costs of protecting nuclear stations from the sort of extreme weather conditions that destroyed Fukushima are prohibitive. New safety regulations have certainly contributed to the problems of Areva and EDF as they struggle to build new capacity in Finland, France and the UK.

In Japan, however, faith in civil nuclear power remains strong. The country imported more than 80 per cent of its energy needs in 2014 — an uncomfortably high figure. Nuclear is regarded as an indigenous source of supply that can limit this dependence. The Japanese economy retains a strong industrial sector which sees nuclear as a low-cost source of supply. Most important of all, despite the fact that the local utility Tepco made every possible mistake in handling the Fukushima disaster, the accident has not been blamed on the nuclear sector as such. Nuclear reactor businesses including Toshiba and Hitachi retain a very high reputation and remain attractive suppliers worldwide. In contrast to the panic in Germany, Japan has methodically adjusted to what has happened and has absorbed the costs of ever tighter regulation. By 2020 it would not be surprising to see Japan back as one of the most nuclear dependent economies in the world.

Europe has failed to learn from Fukushima

Source : Greenpeace
http://www.greenpeace.org/eu-unit/en/Publications/2015/Greenpeace-warns-Europe-is-failing-to-learn-lessons-from-Fukushima/

Greenpeace warns Europe is failing to learn lessons from Fukushima

Nuclear regulators and the Commission must strengthen stress tests

Press release - June 29, 2015

Brussels – A new report published today by Greenpeace [1] found that Europe's nuclear regulators have failed to act on vital lessons from the Fukushima catastrophe, exposing Europeans to the risk of a nuclear accident. The release coincides with the bi-annual conference of the European Nuclear Safety Regulator Group (ENSREG) held in Brussels.

Greenpeace nuclear energy expert Jan Haverkamp said: *"Europe has failed to learn some of the vital lessons from Fukushima and remains woefully unprepared for similar accidents. We call on the Commission and regulators to act now to ensure that European nuclear operators address these serious safety concerns."*

The report analyses national action plans that are based on a series of nuclear 'stress tests' [2] set up in the aftermath of the Fukushima nuclear disaster in Japan in March 2011. It found that several countries in Europe have failed to implement crucial protection measures against earthquakes, floods and hydrogen explosions, and the installation of proper pressure safety valves to prevent the release of radioactivity into the environment in case of accident. The lack of such valves at the Fukushima reactor forced operators to face the dilemma of risking over-pressurisation and explosion, or releasing radioactivity and therefore contaminating the environment and population.

In a communication on the Energy Union last February [3], the European Commission said the EU should have the world's safest nuclear generation by using the highest standards of safety, security, waste management and non-proliferation.
ENSREG was mandated by the European Council and the European Commission to carry out the stress tests and is expected to present the results of its own peer-review of national action plans.
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Notes to editors:
[1] Critical Review of the Updated National Action Plans (NAcP) of the EU Stress Tests on Nuclear Power Plants, June 2015, Greenpeace e.V.
[2] Greenpeace assessments of European nuclear stress tests:
Nuclear stress tests – flaws, blind spots and complacency, June 2012, Greenpeace EU Unit.

Updated review of EU nuclear stress-tests, April 2013, Greenpeace EU Unit.
[3] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank, A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy, Brussels (2015), COM(2015) 80 final.

Deregulation of power sector

July 5, 2015

Electricity and gas liberalization

http://www.japantimes.co.jp/opinion/2015/07/05/editorials/electricity-and-gas-liberalization/#.VZlBZkbwmic
The Diet last month enacted two bills to finalize the liberalization of the electricity and city gas industries. The government should do its utmost to ensure not only fair treatment of all entrants into the markets but also the stable supply of electricity and city gas to consumers.
Under a revision of the Electricity Business Law, the culmination of the liberalization of the power industry will come in April 2020, when power transmission and distribution sections will be separated from the nation's nine major power firms, which now enjoy regional monopolies. An earlier stage of reform started in April when the Organization for Cross-regional Coordination of Transmission Operations was established to facilitate power transmission between western and eastern Japan in case of an emergency. OCCTO's establishment was prompted by the experience of what happened in the wake of the March 2011 crisis at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant. Moving power to disaster-hit eastern Japan was made difficult by the difference in the frequency of electricity between the two regions.

In April 2016, retail sale of electricity to households and other small-lot users will be opened to new entrants. Since the gradual liberalization of electricity sales began in 1995, businesses from various other sectors have been selling electricity to large-scale users such as plant operators and have already taken a market share worth 3 million kilowatts of electricity — equivalent to the output capacity of three nuclear power plants combined.

To help push the liberalization of electricity retail sales for small-lot users, OCCTO will work to increase competition among power suppliers beyond traditionally demarcated service areas. It will also make it easier to transmit electricity generated from renewable energy sources such as wind and solar facilities over long distances, for example between eastern and western Japan.

Currently 1.2 million kW electricity can be transmitted between the country's western and eastern regions. OCCTO plans to eventually increase the capacity to 3 million kW by beefing up frequency conversion facilities. Major power firms have already started a project to raise the capacity to 2.1 million kW by the end of fiscal 2020.

Liberalization of the gas industry will follow deregulation of the power sector. A revision of the Gas Business Law will liberalize the gas retail market in 2017 at the earliest and will spin pipe management divisions off the major city gas firms in Tokyo, Nagoya and Osaka in April 2022 so that new entrants to the business can have better access to gas pipes.

These changes will facilitate not only the entry of new businesses into the electricity and gas markets but also help power and gas companies enter each other's markets. It is hoped that increased competition will result in lower electricity and gas bills for consumers and help initiate new services such as price discounts through the package sale of gas and mobile phone services, and coupon points accumulated through electricity purchases. Some new entities may attract eco-minded consumers by selling power from green sources.

Behind the decision by the Ministry of Economy, Trade and Industry to separate power transmission and distribution sections from the major utility firms is the view that new entrants would face difficulty entering the market unless they can use transmission lines now effectively monopolized by the major firms under more equitable conditions.

Still, doubts remain as to whether the competition between the major firms and new entrants will be fair because the spun-off power transmission and distribution businesses will be under the umbrella of holding companies that also control the power-generating firms that will be spun off the major power companies. A new committee that will be established to oversee transactions in the power and gas industries must keep a close eye on them and ensure the competition is fair.

The revised Electricity Business Law contains a supplementary provision that says that the power supply and demand situation will be reviewed when the separation of transmission and distribution sections from the major utilities is carried out and "necessary steps" should be taken in view of the situation. This means that depending on the supply and demand situation, the separation may be delayed. For example, major utilities might cite a delay in the restart of nuclear power plants — mostly idled in the wake of the Fukushima disaster — as an excuse to seek a delay of the separation. **The ministry should not allow the firms to link nuclear power generation to the implementation of the deregulation measure.**

The Abe administration, which is pushing for the reactivation of the idled nuclear power plants, plans to have nuclear power account for 20 to 22 percent of Japan's electricity generation in 2030. But increased competition through deregulation can raise the cost of nuclear power relative to other sources of electricity. **Since liberalization of the power-sector is meant to promote market-based competition under equitable conditions, the government should be aware that any preferential treatment for**

nuclear power plants to keep them competitive would defeat the purpose of the deregulation measure.
The government should also keep watch if liberalization of the power market causes any disadvantages to consumers. It needs to eliminate the possibility of major problems, such as power outages that could result from a lack of proper cooperation and coordination among power companies in the liberalized environment. In addition, electricity charges might rise unreasonably in areas where demand for power is low, such as small communities in mountainous areas. The government needs to take adequate steps when necessary to prevent the deregulation from having adverse effects on consumers.

Iran's Nuclear program: What's in it for Japan?

July 6, 2015

Influence of Iran's nuclear program on Japan

http://www3.nhk.or.jp/nhkworld/english/news/20150707_03.html
Jul. 6, 2015 - Updated 23:27 UTC+2
World powers are working on the issue of Iran's nuclear program. Japan has high hopes for a resolution, as **Iran could be a stable source of crude oil and a large potential market for Japanese companies.**

Iran was once one of the main exporters of crude oil to Japan, and has the world's 4th largest reserves.

But European countries and the United States tightened economic sanctions against Iran, prompting Tokyo to withdraw from a project to develop Iran's Azadegan oil field. The field has one of the largest deposits in the Middle East.

Japan has cut crude oil imports from Iran by over half in the past 5 years.

In response to the sanctions, Iran threatened to close the Strait of Hormuz at the mouth of the Persian Gulf, the world's most important route for crude oil shipments.
This prompted crude oil prices to rise and gasoline prices to jump in Japan.

Resolving the nuclear issue may also pave the way for Japanese firms to enter Iran's market, which has 78 million consumers and rich resources.

Nukes: Between 8 and 88% increase by 2030

July 10, 2015

IAEA Bullish On Long-Term Role For Nuclear, Report Shows

http://www.nucnet.org/all-the-news/2015/07/10/iaea-bullish-on-long-term-role-for-nuclear-report-shows

Plant Operation
10 Jul (NucNet): Global nuclear capacity could grow between eight percent and 88 percent by 2030 because of growth of population and demand for electricity in the developing world, recognition of the role nuclear power plays in reducing greenhouse gas emissions, the importance of security of energy supply, and the volatility of fossil fuel prices, the International Atomic Energy Agency said.
In its 'Nuclear Technology Review 2015', the Vienna-based agency said circumstances point to nuclear energy playing an important role in the energy mix "in the long run".

In 2014 near and long-term growth prospects remained centred in Asia, particularly in China, the IAEA said. Of the 70 reactors under construction, 46 were in Asia, as were 32 of the last 40 reactors that were connected to the grid since 2004.

There were 438 reactors operating at the end of 2014 and nuclear energy had a global generating capacity of 376.2 gigawatts, the IAEA said.

There was only one permanent shutdown in 2014. The single-unit Vermont Yankee in the US ended commercial operations on 29 December 2014 due to "financial considerations".

In 2014, five new reactors were connected to the grid: Atucha-2 in Argentina, Ningde-2, Fuqing-1 and Fangjiashan-1 in China, and Rostov-3 in Russia. Construction of the Atucha-2 reactor unit had originally started in 1981 but was delayed and reactivated only in 2009.

There were three construction starts – at Belarusian-2 in Belarus, Barakah-3 in the United Arab Emirates and Carem-25, a small integral type of pressurised light-water reactor design in Argentina.

Safety improvements continued to be made at nuclear stations, the IAEA said. These have included identifying and applying lessons learned from the Fukushima-Daiichi accident, improving the effectiveness of defence in depth, strengthening emergency preparedness and response capabilities, and protecting people and the environment from ionising radiation.

Although considerable exploration and development expenditure was reported, many new uranium mining projects have been or are expected to be delayed due to low uranium prices, the IAEA said.

The IAEA emphasised the need for "a comprehensive, integrated, cradle-to-grave approach" for radioactive waste management, and highlighted the fact that solutions are available for implementation.

The report is online: http://bit.ly/1CtNOhb

Reducing greenhouse gases by 2030

Juy 17, 2015

METI drafts plan to cut CO2 by 30% in 10 years

http://www3.nhk.or.jp/nhkworld/english/news/20150717_43.html

Jul. 17, 2015 - Updated 13:49 UTC+2
Industry ministry officials in Japan have devised a plan to develop new technologies for coal-fired power generation. They hope to cut carbon dioxide emissions by 30 percent in 10 years.

A panel with the Economy, Trade and Industry Ministry published the roadmap. It calls for building large energy-efficient plants by the early 2020s.

The coal gasification technology is expected to cut emissions by about 20 percent. The plan also calls for developing another more advanced coal-gasification technology by around 2025.

The ministry says it will support utilities in line with the roadmap.

Power industry announces CO2 emission target

http://www3.nhk.or.jp/nhkworld/english/news/20150717_30.html

Jul. 17, 2015 - Updated 10:07 UTC+2
Japan's power companies have come up with their own CO2 reduction target. The energy sector is Japan's largest emitter of greenhouse gases.

An industry group that includes the country's top power companies announced on Friday that it will cut emissions by 35 percent by 2030.

The target refers to the amount of gases emitted from generating one kilowatt-hour of electricity.

The group says the cuts from 2013 levels will bring them back to pre-Fukushima accident levels in 2010. Fifty nuclear power plants were online at that time. Japan has imported massive quantities of fossil fuels since the nuclear disaster in 2011.
To achieve the goal, utilities will have to generate more energy from renewable sources and restart some nuclear plants.

Japan aims to cut greenhouse gas emissions by 26% by 2030

http://mainichi.jp/english/english/newsselect/news/20150717p2g00m0dm061000c.html

TOKYO (Kyodo) -- The Japanese government officially decided Friday on a goal of reducing greenhouse gas emissions by 26 percent in 2030 from 2013 levels, as part of efforts to reach a new international agreement at the end of the year to tackle climate change.
Economy, Trade and Industry Minister Yoichi Miyazawa told a press conference that the government will swiftly submit the plan to the Secretariat of the U.N. Framework Convention on Climate Change.
Prime Minister Shinzo Abe said, "It is urgently needed to bolster efforts by the international community to combat climate change." He urged relevant Cabinet ministers to work together to realize Japan's national interests at U.N. climate talks.
The new reduction target, which is touted by Abe as "ambitious," only represents an 18 percent cut compared with the 1997 Kyoto Protocol's base year of 1990 and is viewed as insufficient among environmental activists.
Specifically, Tokyo will aim to achieve a 21.9 percent heat-trapping gas emissions reduction by promoting energy saving and reviewing its energy mix, or the proportion of electricity to be generated by various sources, and a 4.1 percent cut through forest absorption of carbon dioxide and reduced use of alternatives for chlorofluorocarbon, a major greenhouse gas.
The international community is seeking to create a new framework to replace the Kyoto Protocol, the current international framework for fighting global warming, at the 21st session of the Conference of the Parties to the UNFCCC, or COP21, to be held in Paris in November and December.
As the basis for the reduction target, Japan on Thursday decided on its energy mix for 2030, under which the government plans to make nuclear power, with its near-zero carbon emissions, account for 20 percent to 22 percent of total electricity output.
Nuclear power accounted for around 30 percent of total output in Japan before the March 2011 Fukushima crisis, which put domestic nuclear power generation at a standstill.

See also :

Japan sets 26 percent cut in greenhouse gas emissions as 2030 target

http://www.japantimes.co.jp/news/2015/07/17/national/japan-sets-26-percent-cut-in-greenhouse-gas-emissions-as-2030-target/#.VakRgfnwmie
Reuters

The government said Friday that Japan will slash greenhouse gas emissions by 26 percent by 2030 from 2013 levels and will submit the plan to the United Nations as its contribution to a global summit on climate change in Paris in November.
The target is based on the government's power generation plan for 2030 that the Ministry of Economy, Trade and Industry finalized Thursday. The plan calls for relying slightly less on nuclear power than on renewable energy following the 2011 Fukushima disaster.
Using 2013 as a baseline, Japan's 26 percent cut would be higher than an 18 to 21 percent cut by the United States by 2025 and a 24 percent cut by the European Union by 2030.
Japan — the world's fifth-largest emitter of greenhouse gases — saw its emissions rise to 1.41 billion metric tons of carbon dioxide equivalent, the second-highest on record, in the year through March 2014. That was up 10.8 percent from 1990, reflecting the rise in coal-fired power after the indefinite closure of nuclear power plants.

Green activists and some other countries that are calling for even bigger cuts say Japan will be blamed by the global community not only for a low target but also for plans to build more coal-fired power plants.
METI on Thursday said the government will plan to make nuclear energy account for 20 to 22 percent of Japan's electricity mix in 2030, versus 30 percent before Fukushima.
It set the target for renewable energy at 22 to 24 percent of the mix, liquefied natural gas at 27 percent and coal at 26 percent.
The Federation of Electric Power Companies, whose members include the 10 main power monopolies, and 25 other firms said Friday they have voluntarily set a goal to curb carbon dioxide emissions per 1 kilowatt of power by 35 percent from 2013 levels to around 0.37 kg in 2030.
By installing fossil fuel-fired plants using the best available technology, the power companies see a potential to reduce carbon dioxide emissions by as much as 11 million tons a year, they said.
The Paris summit in November aims to finalize an agreement as part of efforts to limit the global average temperature rise to 2 degrees above pre-industrial levels.

20 to 22% nukes by 2030

July 16, 2015

Japan adopts energy mix plan

http://www3.nhk.or.jp/nhkworld/english/news/20150716_46.html
Nuclear & Energy
Jul. 16, 2015 - Updated 14:48 UTC+2
An expert panel in Japan has approved a government plan that sets out how the country should meet its energy needs by the year 2030.

The panel endorsed the energy mix plan at a meeting on Thursday.

By fiscal 2030 Japan will take between 20 and 22 percent of its power from nuclear plants, down from more than 28 percent before the 2011 nuclear accident. Power from renewable sources will make up between 22 and 24 percent, up from just over 10 percent in fiscal 2013.

Some panel members opposed the plan. They said it contradicts a government policy to minimize dependence on nuclear power.
Experts are focusing on what kind of support the government will offer to the renewables industry and nuclear power operators.

2 years without any nukes - And now what?

July 30, 2015

EDITORIAL: Reflections on 2 years without nuclear power ahead of planned restarts

http://ajw.asahi.com/article/views/editorial/AJ201507300035

Japan has survived without atomic energy for almost two years since all of the country's nuclear power reactors were taken offline in the aftermath of the Fukushima nuclear accident triggered by the March 2011 earthquake and tsunami disaster.

The country rode out summers and winters, despite surges in electricity demand for air-conditioning and heating purposes, with no major blackouts.

The triple meltdown at the Fukushima No. 1 nuclear power plant, which threatened the very survival of the Japanese state, has yet to be brought under control.

Opinion polls show that more than half of the general public is opposed to restarting nuclear reactors. The public's desire to keep the reactors offline, even at the cost of inconvenience, is due to the fact that people have learned how dreadful atomic energy can be.

However, the Abe administration is seeking a return to nuclear power. It is preparing to restart Kyushu Electric Power Co.'s Sendai nuclear power plant in Kagoshima Prefecture in August, and aims eventually to have atomic energy account for 20 percent or more of Japan's electricity mix in the future.

We oppose any return to nuclear power that comes without serious debate. Japan should make utmost efforts to avoid restarts, while at the same time taking care that doing so will not place an onerous burden on people's living standards. Our energy needs should be centered on renewable energy sources rather than nuclear power as the primary source of electricity.

POWER DEMAND ALREADY COVERED

The Asahi Shimbun published a series of editorials in 2011 calling for a society free of nuclear power.

We stated that all of Japan's nuclear reactors should be decommissioned, hopefully in 20 to 30 years, with priority given to aged reactors and high-risk reactors. The reactors to be kept alive should be selected on a "safety first" basis and limited to those necessary from the viewpoint of supply and demand.

We also stated that Japan should do its best to develop and spread the use of renewable energy sources while simultaneously pursuing measures for power saving and energy conservation. Thermal power generation could be strengthened as a stopgap measure, although steps should be sought in the long term so that a departure from nuclear energy does not contribute to global warming.

We also said Japan should push forward with power industry reform to encourage new entrants into the market while moving toward a decentralized energy society where wisdom and consumer choice play a greater role.

Our basic ideas remain the same. But the situation has changed over the last four years.

The most dramatic development is that the amount of electricity generated by nuclear reactors is now zero.

Nuclear reactors were up and running across Japan four years ago. They were subsequently taken offline one after another for regular inspections. Kansai Electric Power Co.'s Oi nuclear power plant in Fukui

Prefecture was reactivated temporarily, but no single nuclear reactor has been brought back online since September 2013.

Despite concerns that were raised, no serious power shortages occurred. Emergency power sources were raked up to stave off a crisis on some occasions, but there has always been sufficient supply to cover demand, partly because the practice of saving power has taken root in the public mind, and partly also because capacities were enhanced at thermal power plants and regional utilities cooperated in supplying power to each other.

But it is too early to say that we have a solid foundation for keeping the number of active nuclear reactors at zero.

The clustered siting of power plants, whereby electricity is sent from large-scale power stations to faraway areas with heavy power consumption areas, has remained unchanged after the nuclear disaster. Systemic vulnerability is still an issue. And there is always the danger of unforeseen circumstances unfolding if a key thermal power plant were to malfunction during peak power demand.

SYSTEMIC VULNERABILITY PERSISTS

The current situation, where thermal power accounts for 90 percent of Japan's electricity, could hardly be called sustainable. As long as Japan relies on imports for its energy sources, the country will remain permanently exposed to the risk of variations in foreign exchange rates and prices.

We are also left to reflect on the extent to which the general public and the Japanese economy could tolerate additional increases in electricity rates. We have to avoid letting rate hikes, without detailed studies, have a serious impact on people's living standards and general economic activity.

The risk of a serious impact on people's lives has yet to be reduced to zero. Given the situation, it is difficult to totally rule out the option of restarting nuclear reactors as a last resort.

However, decisions on restarting individual nuclear reactors must be made with extreme care.

What kind of disadvantage could be averted by activating a particular nuclear reactor? Will a nuclear restart still be necessary after power demand has been covered by a mutual supply of electricity over broad areas? Persuasive explanations should be available from viewpoints such as these.

The nuclear reactor in question must be safe enough from the viewpoint of its geographical location. Means must also be available to allow residents of adjacent areas to evacuate in an emergency. These are obvious preconditions for a nuclear restart.

The fact that we have got along without nuclear power has correspondingly heightened the hurdles for a restart.

Japan, under these circumstances, must develop renewable energy sources as quickly as possible and pursue a shift to a distributed system of electric power. Indispensable to that end are policy initiatives for guiding a switch to the new direction.

The central government should set a pathway for reform and focus its resources on upgrades on the power grid, disposal of nuclear waste and other efforts. There should also be organizational arrangement for pursuing the decommissioning of nuclear reactors, assistance to local governments that will lose revenue from the nuclear plants they host, and transitional measures for business operators associated with nuclear power generation.

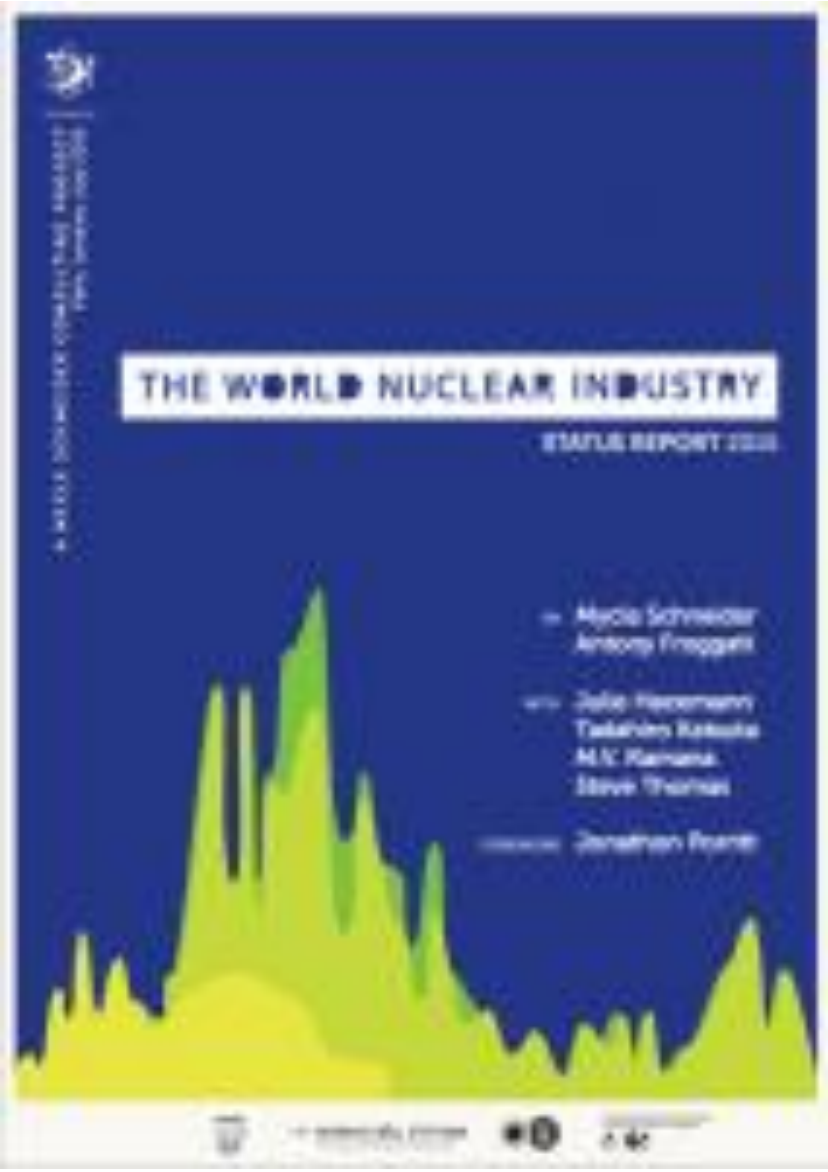
FUKUSHIMA DISASTER THE STARTING POINT

The Abe administration, however, is heading in the opposite direction.

It initially said it would reduce Japan's dependence on nuclear energy as much as possible, but then changed course to maintaining nuclear plants, and left it all up to the Nuclear Regulation Authority to make all decisions on the safety of nuclear reactors ahead of any go-aheads for restarts.

The NRA is tasked only with screening procedures to ensure the safe operation of nuclear power plants. It is not in any way responsible for the entire policy.
The administration told local governments hosting nuclear plants that the central government will be responsible, but what precisely this entails remains to be seen. A mountain of unanswered questions remain about the Sendai nuclear plant, such as measures to ensure the safety of local residents and measures against potential volcanic eruptions.
The Fukushima nuclear disaster should be the starting point for reflecting on the issue of nuclear power generation.
We should think about ways to make the most of the fact that no nuclear reactor is active now.
--The Asahi Shimbun, July 30

World Nuclear Report 2015



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The World Nuclear Industry Status Report 2015

The challenge to select and assess the outstanding events of the year for the release of the July 2015 edition of the *World Nuclear Industry Status Report* turned out to be particularly tough: For the first time in 45 years, Japan was without nuclear electricity (and no lights went out) and, indeed, without any operating industrial nuclear facility or even research reactor; AREVA, the self-proclaimed "global leader in nuclear energy", went technically bankrupt; China, the global leader in new-build, launched a construction site after a 15-month break; in the U.K., concerning the French sponsored new-build project, there are "growing suspicions" that the Treasury "would not be disappointed if Hinkley [Point C] never happened"; the French draft Energy Bill passed the second reading at the French National Assembly stipulating the reduction of the nuclear share from three quarters to about half by 2025; and so on. While this report attempts to provide an overview of essential events of the past year its main aim is to identify and highlight the trends.

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http://www.worldnuclearreport.org/IMG/pdf/20150715wnisr2015-v1-lr.pdf

The World Nuclear Industry Status Report 2015

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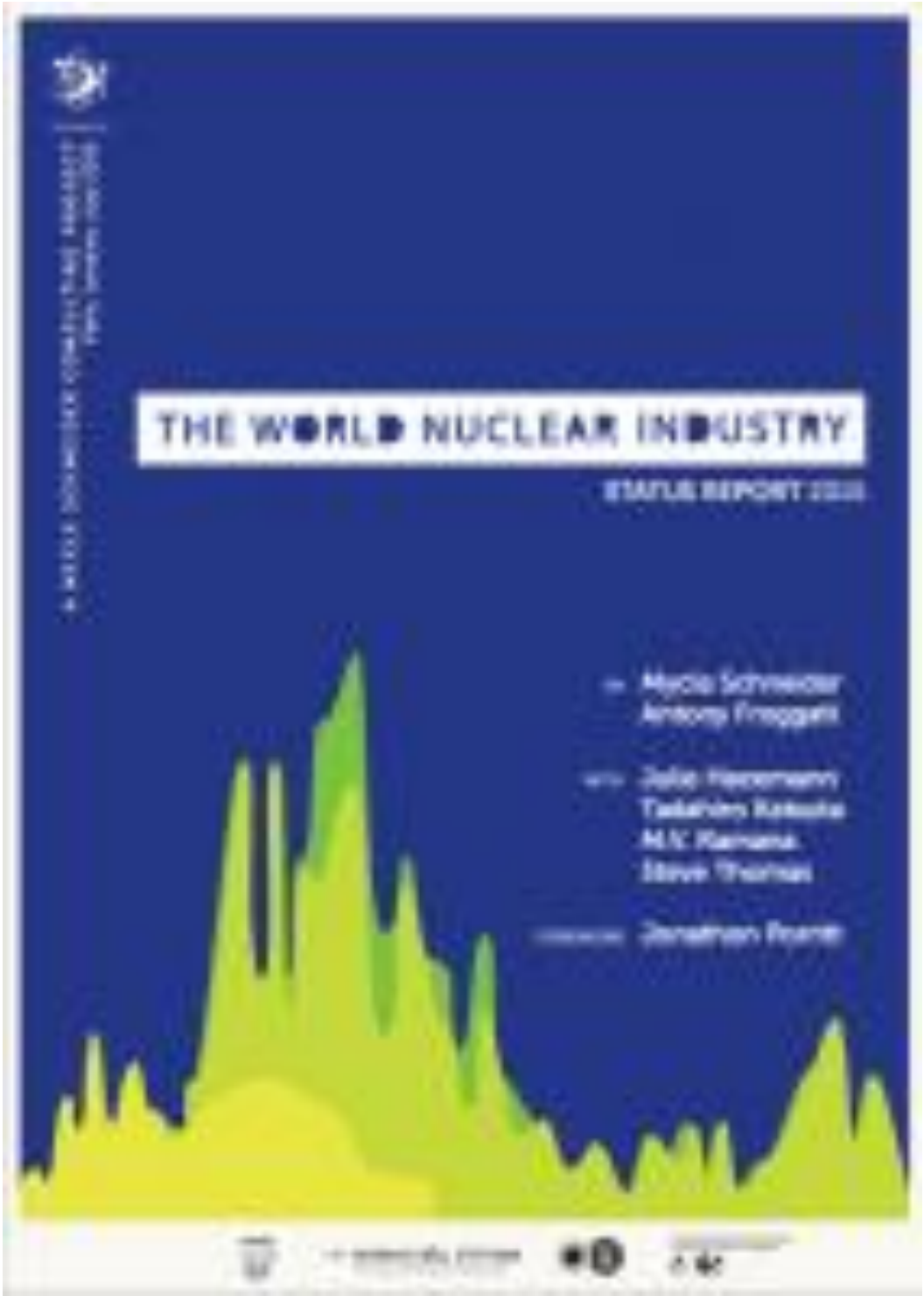
U.K.
Lead Author

Deconstructing the nuclear industry



http://thebulletin.org/deconstructing-nuclear-industry8565
Bulletin of the Atomic Scientists
07/27/2015 - 15:38

Deconstructing the nuclear industry

Mycle Schneider & Antony Froggatt

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Released on July 15, the World Nuclear Industry Status Report 2015 *(WNISR 2015)* is the latest independent assessment of nuclear energy trends in a series first published in 1992. This year's report comes at a time when most energy and environmental experts shy away from the words "nuclear renaissance" but some view nuclear power as an indispensable substitute for fossil fuels in global efforts to combat climate change. Current trends, however, suggest that a rapid ramp-up of nuclear power is unlikely, and that renewable energy is surging past nuclear power in many countries. Here are a few of the report's key findings:

Nuclear electricity generation. By mid-2015, 30 countries were generating electricity from nuclear power. Nuclear plants generated 2,410 net terawatt-hours of electricity last year, a 2.2 percent increase over the previous year but close to 10 percent below the 2006 historic peak—by comparison, solar power surged by 38 percent and wind by 10 percent. A surprising eight countries (China, Hungary, India, Russia, Slovenia, South Africa, South Korea, and Taiwan) achieved their greatest nuclear production in 2014, but of these countries only China and Russia started up new reactors during the year. The gains in other countries were essentially a result of uprating or better management at existing power plants.

Although nuclear electricity generation increased last year, nuclear energy's share of global commercial electricity generation has changed little over the past three years. In 2014, nuclear power was 10.8 percent of the global mix. As in previous years, the "big five" countries—the United States, France, Russia, South Korea, and China—generated more than two-thirds of all nuclear electricity in the world. The United States and France accounted for half of all global nuclear production, and France alone generated half of the European Union's nuclear power.

Construction starts and delays. *WNISR 2015* goes further and deeper than previous reports in analyzing the pace of nuclear power plant construction: the length of the process, the reasons for delays, the number of projects that have been cancelled or suspended, and how construction trends vary from country to country. These are limiting factors in any plan for a global scale-up of nuclear power.

The average construction time of the 40 units that started up in nine countries since 2005—all but one (in Argentina) in Asia or Eastern Europe—was 9.4 years, with a large range from 4 to 36 years. Construction starts plunged from 15 in 2010 to three in 2014. There are currently 62 reactors under construction, five fewer than a year ago, and at least three-quarters of these projects are facing delays. In 10 of 14 countries that are building new reactors, *all* projects are delayed, many by years. Five reactors that are "under construction" are projects that began more than 30 years ago.

For the first time, this year's report devotes a full chapter to Generation III+ reactors such as the Westinghouse AP1000, Rosatom AES-2006, and Areva EPR—advanced reactors designed to improve the safety and economics of nuclear power. These reactors are not proving easy to build: By May 2015, 18 next-generation reactors were under construction, but only two projects were still on schedule; the rest were running behind by two to nine years. This includes the AP1000s being built at the Summer and

Vogtle nuclear plants in the United States, which after only two years of construction are late by at least two years.

Generation III+ reactors were originally seen as a transition to even more advanced Generation IV reactors, but if Generation III+ reactors fail, the future for the nuclear industry looks bleak. Small Modular Reactors (SMRs) or radically new reactor designs, known as Generation IV and optimistically touted by some nuclear lobbyists as the key to de-carbonizing the global economy, are still decades away from commercial deployment. Meantime, existing nuclear plants around the world are edging toward retirement, with an average age that has been increasing steadily and now stands at 28.8 years.

Nuclear heavyweights. In both France and Japan, two of the three countries with the largest installed nuclear capacity (the United States is number one), the nuclear industry is in deep trouble. Although Japan still has 40 reactors that are counted as installed capacity, none of them operated in 2014. It was the first time in 50 years that Japan was without nuclear electricity for an entire calendar year. And no lights went out. As of today, it appears likely that two reactors, at most, will restart in Japan this year.

In France, long the world's role model for how to successfully develop nuclear energy, the National Assembly passed an energy bill that defines a target to reduce nuclear's share of the electricity mix from three-quarters to half by 2025. The French state-controlled energy group Areva—the self-proclaimed global leader in nuclear energy—went technically bankrupt after reporting massive losses for four years in a row. Credit-rating agencies have downgraded Areva's long-term debt to "junk," and the company's share price plunged to a record low earlier this month, a level 90 percent below its record high in 2007. Areva is the designated builder for the Hinkley Point C project, which was to be the United Kingdom's first new reactor in decades, and had planned to contribute 10 percent of the investment. That project is now in shambles. In addition to Areva's financial woes, the pressure vessels for the Flamanville (France) and Taishan (China) EPRs—the same European Pressurized Water Reactor design planned for Hinkley Point C—have "very serious" material defects, the French Nuclear Safety Authority told a parliamentary hearing in April 2015.

The rise of renewables. In the United Kingdom, electricity output from renewables (including hydropower) has overtaken the output from nuclear. Meanwhile, China, Germany, Japan, Brazil, India, Mexico, the Netherlands, and Spain generated more power from non-hydro renewables than from nuclear in 2014. Compared with 1997, when the Kyoto Protocol on climate change was signed, in 2014 there was an additional 694 terawatt-hours of wind power and 185 terawatt-hours of solar photovoltaics—each outpacing nuclear's additional 165 terawatt-hours.

What is spectacular is the extent to which the nuclear industry and many decision-makers are appearing to ignore the financial and technical realities of 2015, and the generalized move toward decentralized electricity generation and storage. The industry's track record of delays and cost overruns, coupled with the urgency of replacing fossil fuels with efficiency improvements and low-carbon sources of energy, do not bode well for the long-term future of the industry.

Victory for nuclear lobby

August 11, 2015

In major victory for nuclear industry, first reactor goes online under post-Fukushima regime
by Eric Johnston

Staff Writer

SATSUMASENDAI, Kagoshima Pref. – Four years and five months to the day after the crisis began at the Fukushima No. 1 power station, Japan formally returned to nuclear power Tuesday with the restart of Kyushu Electric Power Co.'s Sendai No. 1 reactor in Kagoshima Prefecture.

Despite nationwide public opposition, questions about plant safety, the practicality of disaster response plans and who will be responsible for them, the strongly pro-nuclear Prime Minister Shinzo Abe and the Ministry of Economy, Trade and Industry, as well as the politically powerful utilities, local Liberal Democratic Party politicians, and major corporations involved in the nuclear industry have pushed hard to bring as many reactors back online as possible.

The nuclear lobby strongly argues that atomic power is cheaper than importing oil or coal and will help curb greenhouse gas emissions.

With the restart of the Sendai No. 1 reactor, the first under the new safety inspection regime that went into effect two years ago, attention has now turned to whether there will be a rush to restart other reactors.

In addition to reactor No. 2 at the Sendai plant, which is expected to be brought back online in early or mid-October, another 23 reactors at 14 plants are under consideration to restart.

Three of these, including the No. 3 and No. 4 reactors at Kansai Electric Power Co.'s Takahama facility in Fukui Prefecture and reactor 3 at Chugoku Electric Power Co.'s Ikata plant in Ehime Prefecture, have been given the green light for restart by the Nuclear Regulatory Authority (NRA).

However, the two Takahama reactors have a provisional injunction against their restart slapped on them by the Fukui District Court in April, thereby making their fate uncertain.

On Tuesday morning, workers at the two-reactor Sendai plant in the city of Satsumasendai pulled out the control rods that have been suppressing nuclear fission in reactor 1 for the first time since May 2011, when it was taken offline for mandatory regular checks.

The reactor was expected to reach criticality within half a day, and the utility plans to start generating and delivering electricity in three days.

The reactor will have a test run for about a month, and if no problems are encountered, Kyushu Electric Power will begin selling the nuclear-generated electricity in mid-September.

At about the same time, final preparations will begin for a restart at the plant's No. 2 reactor, which is expected to occur in early or mid-October, with electricity from that reactor being sold by mid-November.

"The Abe administration, under its basic energy plan, has already decided it will activate reactors that have cleared new nuclear safety standards by the NRA, which are the toughest in the world. It's under this policy that the Sendai reactor was restarted," Chief Cabinet Secretary Yoshihide Suga said Tuesday morning.

Local communities like Satsumasendai, and the pro-nuclear local chapters of the Liberal Democratic Party, also rely heavily on central government subsidies and utility donations that come with hosting a plant.

The restart of the Sendai reactor thus marks a major victory for nuclear proponents at not only the national level but in other localities looking to restart another two dozen reactors.

At a news conference in the afternoon, Satsumasendai Mayor Hideo Iwakiri welcomed the restart, saying he believes the plant's reactors are safe and that he hopes they will provide a much-needed financial and economic boost.

"Between 5 and 6 percent of the town budget comes from central government funding for hosting a nuclear power plant or from Kyushu Electric," Iwakiri said.
Tuesday's restart came despite local concerns about what will happen if an accident occurs and, most importantly, who bears responsibility for the orderly and timely evacuation within 30 km of the plant.
"The premise of evacuation plans drawn up by Kagoshima assumes that the main access road in the area will not be damaged and will be available to get people out of the contaminated area before they are exposed to radiation. If that's the case, what happens?" asks Shoji Takagi, a manga artist and anti-nuclear activist.
The question of where final responsibility lies for the overall safety of the plant's operation, including proper safety measures, has emerged as the key issue in the debate over not only Sendai but all possible restarts.
Local officials say they grant permission for restarts based on the "central government's" seal of approval but admit they also need direction from Tokyo to draw up more detailed and effective accident contingency plans.
The NRA, however, says it is only responsible for the technical aspects of the safety of each plant.
Yukio Edano, secretary-general of the Democratic Party of Japan, the nation's largest opposition force, said that while the local governments have been tasked with drawing up and carrying out emergency evacuation programs, the roles of the central government have not been spelled out.
"(The Fukushima crisis) has made it clear that it is impossible for local governments alone to (evacuate residents). The central government should play responsible roles to evacuate them," Edano said.
"But the state is trying to evade that responsibility," he added.
In an attempt to quell lingering concerns, industry minister Yoichi Miyazawa said Tuesday that in the event of an accident, the central government will take the lead in responding to any emergency.
However, with nearly two dozen reactors elsewhere up for restart, both the central government and local authorities who want the money that comes with restarts are likely to find that demands to address these concerns in more detail are not going away.
Staff writer Reiji Yoshida contributed to this story.

Kepco anticipates improved supply

August 11, 2015

Utility says restart will improve supply

http://www3.nhk.or.jp/nhkworld/english/news/20150811_25.html

Aug. 11, 2015 - Updated 07:01 UTC+2
The operator of the Sendai nuclear power plant expects the restart of its reactor to greatly improve energy supply.

Nearly 40 percent of Kyushu Electric Power Company's output came from nuclear power before the 2011 accident in Fukushima. The ratio is higher than those of other utilities.

Company officials say they are meeting this summer's power demand by operating thermal plants at full capacity and procuring power from other firms. But they say the thermal plants are old and often stop running.

The officials say that with the full operation of the Sendai plant's No.1 reactor, the company can secure power reserves of 5 percent or more. The reactor has a generation capacity of 890-thousand kilowatts.

Sendai restart leaves too many questions unanswered

August 12, 2015

EDITORIAL: Sendai No. 1 reactor must not become a model case for future restarts

http://ajw.asahi.com/article/views/editorial/AJ201508120023

The No. 1 reactor at the Sendai nuclear power plant in Kagoshima Prefecture, operated by Kyushu Electric Power Co., was brought back online Aug. 11. It is the first facility to be reactivated in Japan after nearly two years of suspended operation of all reactors.

The Sendai reactor is also the first to clear new safety standards set by the Nuclear Regulation Authority after the 2011 disaster at the Fukushima No. 1 power plant. Now that the Sendai reactor is back in operation, the government intends to reactivate all nuclear reactors that meet the NRA's safety requirements.

But the process by which the reactivation of the Sendai reactor was given the green light leaves numerous questions unanswered. For instance, serious doubts still remain about the NRA's risk assessment with regard to major volcanic eruptions. Deficiencies have been pointed out in the evacuation plans drawn up for a possible severe accident, and more than half of the residents of Kagoshima Prefecture are opposed to the reactor's reactivation. It is unclear which parties are ultimately responsible for the decision to put it back in operation.

We cannot accept this decision that not only leaves all these unresolved questions and doubts, but also goes against the will of the people. And we are adamantly opposed to the government's use of the Sendai No. 1 reactor as a model case of decision-making in favor of reactivation and piecemeal revival of the nation's reliance on nuclear power generation.

BASELOAD AN OUTDATED CONCEPT

Prior to reactivating the Sendai reactor, the government established the nation's power source composition target for 2030 and set the proportion of nuclear power generation at 20 to 22 percent of the total. This level cannot be attained without building new nuclear reactors or extending the serviceable years of a good number of already old reactors.

Makoto Yagi, president of Kansai Electric Power Co. and chairman of the Federation of Electric Power Companies of Japan, told a news conference in late July: "I understand that those numbers (set by the

government) require the operation of many of the current 46 reactors (including three under construction)."

Quite clearly, the government and utility companies alike are set on returning to nuclear power generation.

Nuclear power generation is positioned as a "baseload power source," which is described as "a low-cost source of stable supply of electricity, which renders 24/7 operation viable."

But in advanced nations, the baseload concept itself is being phased out. The current trend is to maximize reliance on wind, solar and other sources of renewable energy, and position nuclear and thermal power generation as "regulating valves" for when power from renewable sources is insufficient.

Such a switch is made possible by power industry reforms.

In Europe, power transmission business is separated and kept independent from power generation business, but both are managed and operated in an integrated manner. As for satisfying demand for power generated by renewable energy sources that are prone to be affected by weather conditions, operations cover extensive areas and are kept flexible according to accurate weather forecasts.

In the days ahead, the key to success in the power industry is said to lie in technology for flexible supply control in keeping with fluctuations in demand.

Though belatedly, Japan has embarked on power industry reforms, and the last package of related laws have been enacted in the current session of the Diet. The reforms will proceed in three stages until 2020. It is hoped that Japan will be transformed into an energy society where various power source and service options, including power from renewable energy, will be available to consumers with utilities competing under fair conditions.

NUCLEAR POWER GENERATION NOT COST-EFFECTIVE

In such an energy society, there will no longer be regional monopolies that have supported nuclear power generation, nor the present billing system that enables utilities to slap their operating costs directly on consumers.

Nuclear power generation was said to be "inexpensive." But in recent years, the costs of operation and construction of facilities have been rising steadily worldwide.

Areva, a French multinational group and one of the largest nuclear plant makers in the world, had to be bailed out by the government when the bloating construction costs of new facilities drove it into dire financial trouble. And Japan's Toshiba Corp., which has been embroiled in an accounting scandal, is now paying dearly for having reinforced its nuclear department.

Japanese utilities are projecting 2.4 trillion yen ($19.18 billion) for the implementation of additional safety measures. In the days ahead, they will be forced to make further investments every time new measures become necessary.

When expenditures are added up--such as for subsidizing communities chosen for the disposal of nuclear waste and construction of a new facility, and for damages that will have to be paid in the event of an accident--it becomes clear that nuclear power generation is hardly cost-effective, and that this business is not viable in the new power generation and supply system. And more than anything, a majority of the Japanese people now want a "society that does not have to rely on nuclear power generation."

BRACING FOR 'SACRIFICES'

What the government needs to be doing now is definitely not to reactivate offline reactors one by one and bring nuclear power generation back as the mainstay of the power industry. The government's task should be to decommission older reactors and those with safety concerns although it may have to temporarily turn to nuclear power generation, while nurturing the renewable energy industry at the same time.

In terms of natural environment, Kyushu is one of the ideal regions.
In the meantime, the feed-in tariff system has been established for fixed-price purchase of power generated by renewable energy sources, and "local utilities" that play up regional features are debuting nationwide. While the current trend poses some problems, such as the tendency to rely too heavily on solar power and the need to review the purchase prices, momentum is definitely building up for greater reliance on self-supply energy sources that can also help curb global warming.
New projects require financial support for the time being, but once the infrastructure for ready access to the grid is firmly in place, there is every likelihood that renewable energy will become a cheaper and more stable source of electricity.
Of course, it takes time for society to diversify its energy sources and switch to relying mainly on renewable energy. Various problems are also bound to arise along the way. The public will have to be prepared to make some sacrifices, such as paying bigger electricity bills at times.
Still, the Fukushima disaster has taught us to fear nuclear power generation. And that is where we start in seeking a new energy society.
--The Asahi Shimbun, Aug. 12

Nuclear power poses fundamental problems

August 12, 2015

Editorial: Japan should not depend on nuclear power

Kyushu Electric Power Co. restarted the No. 1 reactor at its Sendai Nuclear Power Plant in Satsumasendai, Kagoshima Prefecture, on Aug. 11. The move comes four years and five months after the outbreak of the crisis at the tsunami-ravaged Fukushima No. 1 Nuclear Power Plant that severely affected local residents' livelihoods.
It was the first reactivation of a nuclear reactor under the new regulatory standards enforced following the nuclear accident triggered by the March 11, 2011 Great East Japan Earthquake and tsunami. The central government and power companies apparently intend to use the resumption of operations at the Sendai plant as a springboard to restart idled nuclear reactors one after another across the country.
However, the government's basic stance toward nuclear power has remained unchanged since the outbreak of the disaster, and lessons learned from the catastrophic accident have not been sufficiently put to good use. The restart of the Sendai plant's reactor must not be a step toward reviving the pre-disaster myth of nuclear plants' infallible safety.
Lessons learned from the disaster include: Nuclear accidents can happen even if countermeasures are taken and that damage caused by nuclear accidents to people, the environment and society differ markedly from that triggered by other accidents in terms of quality and scale. Moreover, Japan is a volcanic country prone to earthquakes. Such being the case, it is highly risky to continue operating atomic power stations in this country. Nuclear energy is far from being a sustainable energy source when

considering how to dispose of radioactive waste. Therefore, the Mainichi Shimbun has insisted that Japan should stop using nuclear plants as early as possible.
At the same time, the Mainichi Shimbun has said there could be occasions where Japan must approve of the minimum necessary operation of atomic power plants under certain conditions, taking into account economic and social risks that would be caused by an immediate halt to all nuclear plants.
However, the latest reactivation of the Sendai plant's No. 1 reactor does not meet such conditions and should not have been approved.
In the first place, the government has not clearly characterized the restart as part of the process of phasing out nuclear power. The basic energy plan approved by the Cabinet of Prime Minister Shinzo Abe last year states that Japan's reliance on atomic power will be reduced to the minimum possible level. As such, it is the national government's duty to draw up a road map toward steadily phasing out nuclear power in line with this policy.
However, the Economy, Trade and Industry Ministry has set the ratio of nuclear power to total electric power to be generated in Japan in 2030 at 20-to-22 percent. To achieve this, it would be necessary to rebuild or extend the use of aging nuclear reactors beyond the 40-year limit, and construct new reactors. This indicates the government intends to return to a society dependent on atomic power.
The essential condition of minimizing damage that would be caused by a nuclear accident to local residents has not been met. It is true that the new regulatory standards require nuclear plant operators to implement stricter safety measures, assuming serious accidents that had not been assumed under the previous standards. The Nuclear Regulation Authority (NRA) that examines whether nuclear reactors meet the regulatory standards has become more independent of the government. However, these measures to beef up safety measures are necessary conditions but are not sufficient.
In the Fukushima nuclear crisis, confusion in the chain of command worsened the situation. Information on the spread of radioactive substances was not provided to local residents, causing some of them to flee to areas where radiation levels were higher. The evacuation of hospitalized patients and residents of nursing care facilities was greatly confused and many people died while evacuating or at evacuation shelters. Following the accident, the zone where local bodies are required to work out evacuation plans for local residents was expanded from 8-10 kilometers from nuclear plants to 30 kilometers.
Evacuation plans have been worked out for residents near the Sendai plant, but evacuation drills have not been conducted to secure the effectiveness of the plan. The national government has tolerated the local body's failure. The attitude to hastily restart the Sendai nuclear reactor without taking sufficient safety measures for local residents is apparently based on the myth of nuclear plants' infallible safety. To ensure the safety of local residents, the local government should conduct evacuation drills, clarify problems involving the evacuation plan and even suspend operations at the plant depending on the results of the drills.
A lack of clarity for responsibility over reactivating nuclear plants has not changed since before the March 2011 outbreak of the nuclear plant crisis. Since nuclear plants are operated by private companies as business activities, power companies are primarily responsible for restarting atomic power stations and ensuring safety at the plants. However, nuclear plants are operated as part of the government's policy. The government intends to approve reactivation of nuclear reactors as long as the reactors meet the regulatory standards, while the NRA is of the view that meeting the standards does not necessarily mean the plants are absolutely safe. This has raised concerns that nobody would be held responsible if another nuclear accident were to take place, just as was the case with the Fukushima crisis.
There are more fundamental problems. The government has failed to show its determination to promote a nuclear and energy policy while gaining public understanding.

In most opinion polls conducted by various news organizations, those who are opposed to restarting nuclear plants have outnumbered those in favor since the March 2011 accident. In an Aug. 8-9 survey conducted by the Mainichi Shimbun, 57 percent of the respondents expressed opposition to resuming operations at the No. 1 reactor at the Sendai power station.
Still, no means have been secured to reflect public opinion in the country's energy policy even following the nuclear accident that has had such a huge impact on local residents. The process of using an advisory panel to the Economy, Trade and Industry Ministry to determine the direction of the nation's energy policy has remained unchanged since before the crisis. The previous government led by the Democratic Party of Japan, which is now the largest opposition party, at least attempted to conduct a deliberative poll and took other measures to reflect public opinion in the energy policy. However, the current administration has not even shown such a stance.
The fact that radioactive waste will only accumulate as long as atomic power plants are operated poses a serious challenge. It is necessary to consider final disposal of radioactive waste on the assumption that it will take 100,000 years before such waste becomes harmless, but Japan has no prospects for working out any feasible disposal plan. Even if a nuclear accident were not to occur again, atomic power stations can not be maintained over a long period as long as no solution is found to problems involving the final disposal of radioactive waste.
First and foremost, the government should draw up a specific road map toward scrapping nuclear power. It is also necessary to create a system under which the NRA would evaluate local governments' evacuation plans and drills in advance. The restart of the Sendai Nuclear Power Plant should not be used as a springboard to revive Japan's dependence on atomic power.
Click here for Japanese article
August 12, 2015 (Mainichi Japan)

Post 3/11 (energy) reality

August 15, 2015

Post-3/11 power-conservation goals change the energy game

by Philip Brasor
Special To The Japan Times
The heat wave rolling over Tokyo is a godsend for Olympics bashers like former newscaster Hiroshi Kume. On his TBS radio show last week, he said that five years from now when the games are held here, they will “violate the Olympic charter,” which requires an environment where all athletes can demonstrate their abilities to the fullest.
The last time Tokyo was the host, the games were held in October, when it’s cooler, but American broadcasters, who call the shots, would never approve such a move nowadays because then the Olympics would overlap with the World Series as well as the American football and basketball seasons. Actually, Tokyo’s heat is no worse than Beijing’s or Athens’, but many athletes fainted at the Beijing Opening Ceremony and a substantial portion of the field for the women’s marathon in Athens dropped out during the race.

Olympics Minister Toshiaki Endo is reportedly working on countermeasures, such as pavement that reflects infrared rays, mist curtains for long-distance running sports and scheduling that slots outdoor events in the early morning or after dusk.

All this concern focuses on the well-being of foreign athletes. Locals don't need these countermeasures, apparently, because suffering is an integral part of Japanese sports. The National High School Baseball Championship is always held during the hottest weeks of the year. Nobody has ever suggested it be played in a different month or at night in order to safeguard the health of adolescent boys, because showing what they can do under hellish conditions is part of the contest's appeal.

The tournament is sponsored by the Asahi Shimbun, and last year the Global Energy Policy Research website, a propaganda organ for nuclear power interests, blasted Asahi for being hypocritical since the nominally left-wing newspaper supports the antinuclear cause and yet won't change the dates. The writer of the piece claimed that electricity usage goes up significantly during the competition because people are watching at home, and TVs and air conditioners consume electricity in large amounts — this during the riskiest time of the year for power companies since, at the time, all nuclear reactors were offline.

He dug deeper, comparing the Osaka headquarters of the Asahi with the offices of Kansai Electric Power Co., which happen to be across the street from each other. While Asahi's employees plot the ruination of Japan in climate-controlled comfort, Kepco workers sweat because the company won't use air conditioning so as to set an example for responsible energy use. The writer admires Kepco's forebearance, but these efforts can also be seen as a form of corporate passive-aggression — martyrdom in the name of nuclear revival.

Such a view is supported by the fact that for the past several summers there has been no danger of overtaxing the power grid. After the Great East Japan Earthquake took out the Fukushima No. 1 nuclear plant and led to the shutdown of all reactors until safety measures were improved, power companies feared they might not have the capacity to supply enough electricity during the peak summer months and called on everyone to cut back for the good of the country.

They were all too successful. Normally, utilities are worried when usage tops 95 percent of capacity, but according to Asahi, during the current hot spell the sole utility that exceeded the limit was Chubu Electric Power in central Japan, and that was only momentarily on Aug. 1. Tokyo Electric Power Co. recorded only a few days over 90 percent, and that's because consumers have reduced electricity usage by 10 percent since before the 2011 disaster, so all the thermal plants that replaced the idle nuclear reactors have no problem producing enough power. In fact, the only reason Chubu Electric demand breached 95 percent is that the utility underestimated usage for that day.

Of course, if they're burning fossil fuels that's a problem for the environment and one that needs to be addressed regardless of how many reactors go back online, but another reason capacity is abundant is the spread of solar panels, a matter the regional power companies, not to mention the mainstream media, neglects to mention. **The amount of electricity generated by solar systems in Japan has increased tenfold since 2010.** Solar energy remains relatively inefficient, but since it's renewable, it's not as if producers and users are wasting finite resources. **As it stands, the amount of power being produced by solar is equivalent to the output of a dozen nuclear reactors.**

Naysayers point out that solar is not stable enough for power generation because it only works when the sun is out, but it is exactly while the sun is shining in the summertime — when temperatures soar and people reach for the remote control — that supplemental solar power makes sense. The advantage of solar energy is that it can take care of the extra demand as that demand increases.

With the reboot of Kyushu Electric Power Co.'s Sendai nuclear reactor last week, the solar solution takes on less urgency, but as the Tokyo Shimbun points out, the area serviced by the reactor has nine times the

solar capacity it had when the reactor was turned off. Asahi quotes the chief of the 21st Century Political Policy Research Center as saying that nuclear power is needed to bring down electricity costs, but Kyushu Electric hasn't said it will lower prices, only that it won't raise them again. Its first responsibility is to stockholders, and last year all the regional utilities recorded hefty profits thanks to the drop in oil prices. One reason for the high price of electricity is the lack of competition in the energy-supply field. The nuclear industry emphasizes the cost of other forms of energy in order to get reactors back online before next spring's market liberalization, when consumers will be able to choose their suppliers and the Asahi Shimbun can blast its air conditioners without anyone complaining.

IAEA and Kazakhstan agreement

August 28, 2015

IAEA, Kazakhstan agree on uranium bank

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Aug. 28, 2015 - Updated 01:00 UTC+2
The International Atomic Energy Agency and Kazakhstan have signed an agreement to set up what they call a Low Enriched Uranium Bank in the country.

IAEA Director General Yukiya Amano and Kazakhstan's Foreign Minister Erlan Idrissov signed the deal on Thursday in the Central Asian country's capital, Astana.

The facility to be built in Oskemen, eastern Kazakhstan, is aimed at promoting nuclear non-proliferation. It will help to ensure the stable supply of low enriched uranium to countries. It will also work to curb enrichment of uranium that could lead to nuclear weapons production.

The Low Enriched Uranium Bank will store 90 tons of the element. That amount can power a large city for 3 years. It will open in 2 years under IAEA safeguard.

Idrissov said his country will contribute to the development of nuclear energy as well as global security at the same time.

Kazakhstan is the world's largest producer of uranium. More than 450 nuclear tests were conducted during 40 years in the Soviet era at the Semipalatinsk test site, in the northeast region of the country. That left about one-million people exposed to radioactivity. Kazakhstan is well known for its activity in promoting nuclear non-proliferation.

A matter of opinion

September 3, 2015

IEA chief calls Japan's 22% nuclear energy policy 'realistic'

http://www.japantimes.co.jp/news/2015/09/03/national/iea-chief-calls-japans-22-nuclear-energy-policy-realistic/#.VegPrZfwmif

by Sohei Ide
Kyodo

Fatih Birol, newly installed executive director of the Paris-based International Energy Agency, has said the nation's energy policy following the Fukushima meltdowns provides a "realistic and balanced outlook," underscoring the importance of continued use of nuclear power in the country.

In its future energy mix, decided in July, the government plans to have nuclear energy account for 20 percent to 22 percent of the country's total electricity supply in 2030. This compares with 28.6 percent in the fiscal year that ended in March 2011, the year of the disaster.

"I believe Japan without nuclear energy will face major challenges," such as higher energy prices, greater energy security problems and greenhouse gas emissions, Birol, who took office Tuesday, told Kyodo News by phone last week.

"This plan provides a good prospect for nuclear power, and I believe nuclear power has an important role to play in Japan for the prosperity, cleanness and also the security of the country," he said.

Turning to the lifting of sanctions related to Iran's nuclear program and its possible impact on the global energy market, Birol foresees a boost in oil production in Iran. He said output from existing oil fields may increase by half a million barrels to 3.4 million barrels per day "within a year's time" once sanctions are lifted.

There is a "substantial potential for new production, new investment and new capacity building," said Birol.

"How much Iran can make out of this will be in line with what kind of investment framework the Iranian government will offer to attract new investment and technology."

Regarding the Group of Seven energy ministers' meeting scheduled next May in Japan, Birol noted that it will take place "at a very crucial time" as it follows an international gathering this year aimed at reaching a new global agreement to tackle climate change.

"It will be the very first occasion that G-7 energy ministers will meet together to look at the result" of the 21st session of the Conference of the Parties to the UNFCCC, or COP21, to be held in Paris in November and December.

Founded in 1974, the IEA has 29 member countries and makes policy proposals on energy issues, among other things. Birol was chief economist and director of global energy economics at the Paris-based organization before becoming executive director.

IAEA keen to share lessons of Fukushima

September 14, 2015

IAEA discussing nuclear issues in Iran and Japan

http://www3.nhk.or.jp/nhkworld/english/news/20150915_03.html
Sep. 14, 2015 - Updated 18:20 UTC+2
Members of the International Atomic Energy Agency have begun discussing an international nuclear deal with Iran, among other issues.

The nuclear watchdog agency opened its 5-day annual General Conference in Vienna on Monday.

In his opening speech, Director General Yukiya Amano said the nuclear deal made between Iran and 6 world powers in July contributes to the IAEA's verification procedures.

US Energy Secretary Ernest Moniz praised the agreement for making clear that Iran would not possess nuclear weapons under any circumstances.

The head of Iran's atomic energy agency Ali Akbar Salehi called for an impartial and objective conclusion of the ongoing process by the IAEA and the 6 powers. He said unjust sanctions should be removed.

The IAEA has submitted to the conference its final report on the 2011 nuclear accident at the Fukushima Daiichi nuclear power plant. The agency hopes to share lessons from Fukushima and improve the safety of nuclear plants.

Chairman of Japan's Atomic Energy Commission Yoshiaki Oka briefed the conference about the restart of a nuclear power plant in August under new regulations introduced after the Fukushima accident. All nuclear plants in Japan had been off line for nearly 2 years.

TEPCO's agreement with French CEA

September 23, 2015

TEPCO to sign cooperation pact with France's CEA

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Sep. 23, 2015 - Updated 01:41 UTC+2
NHK has learned that the operator of the crippled nuclear plant in Fukushima plans to sign an agreement with a French organization to obtain the necessary technology to decommission the facilities.

Tokyo Electric Power Company, or TEPCO, will initially focus on decontaminating the areas around the reactor containment vessels.

The removal of molten nuclear fuel will be the toughest challenge in the decontamination process because of the extremely high radiation levels.

TEPCO plans to obtain technical knowhow from the Alternative Energies and Atomic Energy Commission, or CEA, which is funded by the French government. The French organization has expertise in dismantling aged nuclear reactors and fuel-reprocessing facilities.
Sources say that under the agreement, the CEA will help TEPCO to develop remote-controlled robots that can withstand high radiation levels.

The CEA will also help with training workers and TEPCO will provide data for the decommissioning process.

This will be TEPCO's second agreement with a foreign organization. Last year, it signed a pact with a British company to address the buildup of contaminated water.

Mitsubishi to nuy into Areva?

September 24, 2015

Mitsubishi Heavy in talks on investment in Areva reactor unit

http://www.japantimes.co.jp/news/2015/09/24/business/corporate-business/mitsubishi-heavy-talks-investment-areva-reactor-unit/#.VgQIyZfkNME
JIJI, Kyodo
Mitsubishi Heavy Industries Ltd. said Thursday it is in talks about taking an equity stake in Areva NP, a reactor unit of French nuclear giant Areva SA.
The heavy machinery maker is discussing the deal with Areva SA and Electricite de France, a French power utility known as EDF, which is deciding whether to support financially struggling Areva NP.
Mitsubishi Heavy said in a statement it is in talks over the possibility of investing in the Areva subsidiary. "No decision has been made so far," it said.
Areva SA has been reeling from a slump in the nuclear power industry since the Fukushima disaster began in 2011. For the business year ended in December 2014, the company logged a net loss of around €4.8 billion (¥645 billion).
EDF has agreed to buy between 51 percent and 75 percent of Areva NP.
Mitsubishi Heavy and Areva SA are in an alliance to develop and sell a new pressurized water reactor called Atmea. Areva SA apparently sought investment from Mitsubishi Heavy as a measure to help rebuild its slumping business.
EDF has already agreed on a framework to give support to Areva SA by acquiring an equity stake of up to 75 percent in Areva NP. The remainder will be held by Areva SA.

As the stake to be taken by EDF is supposed to be at least 51 percent, the utility is expected to seek additional investment from other companies, including Mitsubishi Heavy and a Chinese firm, to lower its holdings.

French PM will discuss nuclear energy policy

September 24, 2015

French prime minister to visit Japan early October, seek cooperation on climate conference

http://www.japantimes.co.jp/news/2015/09/24/national/politics-diplomacy/french-prime-minister-visit-early-october-seek-cooperation-climate-confab/#.VgRJpZfkNME

Kyodo
PARIS – French Prime Minister Manuel Valls will visit Japan early next month to seek Tokyo's cooperation toward a Paris conference on climate change later in the year, the French Foreign Ministry said Wednesday.
During his four-day trip from Oct. 2, Valls hopes to hold talks with Prime Minister Shinzo Abe to discuss the prospects for the 21st session of the Conference of the Parties to the U.N. Framework Convention on Climate Change, or COP21, to be held from late November.
Valls also plans to hold talks on bilateral security and defense cooperation as well as **nuclear energy policy**, according to the ministry.
It will be Valls' first visit to Japan since he assumed office in March last year.

Ever optimistic IAEA

18.09.2015_No37 / World Nuclear Review

Post-Fukushima Action Plan Has Delivered Concrete Results, Says IAEA

http://www.nucnet.org/all-the-news/2015/09/18/post-fukushima-action-plan-has-delivered-concrete-results-says-iaea

Security & Safety
18 Sep (NucNet): The International Atomic Energy Agency's Action Plan on Nuclear Safety, drawn up following the 2011 accident at the Fukushima-Daiichi nuclear station in Japan, has delivered concrete results and nuclear facilities have already become safer because of it, the agency said.
In a final report on the implementation of the action plan the IAEA said the main purpose of the plan was to set a framework for the further strengthening of nuclear safety worldwide. The plan focused on 12 key areas including safety assessments, IAEA peer reviews, emergency preparedness and response, national regulatory bodies, and the international legal framework.

Since the adoption of the plan in 2011, the IAEA secretariat, member states and relevant stakeholders have undertaken a number of activities and have introduced concrete measures which have effectively strengthened nuclear safety worldwide, the IAEA said. It said the secretariat has initiated 68 projects with extra-budgetary funding across all 12 areas of the plan.

Results include better collaboration between member states and all stakeholders. The IAEA peer review mechanism has been strengthened and member states have been encouraged to regularly host peer reviews at their nuclear facilities.

The report is online: http://bit.ly/1QL3Q9g

Franco-Japanese cooperation in nuclear (and defense)

October 6, 2015

Japan, France pledge tight cooperation in nuclear and defense

http://ajw.asahi.com/article/behind_news/politics/AJ201510060049

THE ASAHI SHIMBUN
Japan and France agreed to bolster their cooperation in the fields of nuclear and defense technology at a meeting in Tokyo on Oct. 5.
Prime Minister Shinzo Abe and his French counterpart Manuel Valls agreed to help ensure Japan maintains its longtime policy to recycle spent nuclear fuel and develop technology to decommission reactors.
In addition, they pledged to collaborate on joint development of defense equipment and assistance to Africa to enable developing countries there achieve sustainable growth.
Abe briefed Valls on security legislation enacted last month to drastically widen the overseas role of Japan's Self-Defense Forces.
Valls expressed his hope that Japan will cooperate for success of a meeting of the United Nations Climate Change Conference, which gets under way in Paris from late November.

Enough power for winter

October 10, 2015

Enough power to go around this winter

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201510100034

By TOSHIO KAWADA/ Staff Writer
The government is confident there is a sufficient electricity supply to heat homes and offices this winter and will not call on households and businesses to conserve energy.
It said forecasts show that there will be enough supply even on the coldest of days when demand will peak.
Forecasts on supply and demand of electricity this winter were compiled by nine electric utility companies and released by the industry ministry's Electricity Supply-Demand Verification Subcommittee on Oct. 9.
The nine companies include all Japanese regional electric utility monopolies, except Okinawa Electric Power Co.
According to the report, all nine firms have secured sufficient power to maintain electricity within a 3-percent margin.
Because of this, the government decided there is no need to set a specific goal on energy conservation by homes and offices.
Kyushu Electric Power Co. said it will be generating more electricity this winter with the restart in August of the No. 1 reactor of its Sendai nuclear power plant in Satsuma-Sendai, Kagoshima Prefecture.
It was the first nuclear power plant to come back online after all nuclear power plants were shut down in the aftermath of the 2011 nuclear disaster in Fukushima Prefecture.
The utility had expected to take advantage of a power pool from another utility last winter, but was able to maintain a 3-percent capability margin without having to do so. The figure is estimated to improve to 4.7 percent this winter.
Hokkaido Electric Power Co.'s supply capabilities are also expected to improve this winter and, like the last one, will not be imposing restrictions on electricity consumption to households and businesses.
Whether or not nuclear power plants under Kansai Electric Power Co. will be restarting anytime soon remains unclear, but nevertheless, the utility said it will be able to maintain a 3.3-percent capability margin this winter.
The nine utilities had projected that demand this past summer would total 162.6 million kilowatts. However, actual demand fell short by 8.06 million kilowatts.
This was most likely due to conservation practices becoming more commonplace than the utilities had initially thought, along with a shift toward alternative energy sources, including household power generation and the utilization of surplus power from factories. Low temperatures experienced by western and central Japan also played a role in falling demand for power over the hottest months of the year.

Positive impact of Fukushima?

08.10.2015_No190 / News

Prospects For Nuclear In Southeast Asia Have Diminished Since Fukushima, Says IEA

http://www.nucnet.org/all-the-news/2015/10/08/prospects-for-nuclear-in-southeast-asia-have-diminished-since-fukushima-says-iea

Comment & People

8 Oct (NucNet): Rising electricity demand, growing dependence on imported fossil fuels and environmental concerns have prompted several Southeast Asian countries to consider the role that nuclear power could play in their energy mix, but since the Fukushima-Daiichi accident in Japan the near- to medium-term prospects for nuclear in the region have diminished, a report by the Paris-based International Energy Agency says.

All countries in Southeast Asia that are interested in deploying nuclear power face “significant challenges”, the report says. These challenges include sourcing the necessary capital on favourable terms, creation of legal and regulatory frameworks, compliance with international norms and regulations, sourcing and training of skilled technical staff and regulators, and ensuring public support.

There are no commercial nuclear power plants in operation in Southeast Asia, but there has been interest in developing nuclear power technology including in Indonesia, Malaysia, Philippines, Thailand and Vietnam.

The report says Vietnam has made the most progress, albeit with major delays, and aims to start construction of a Russian-supplied plant in 2019.

A master plan calling for nuclear power to provide about 10 percent of electricity production by 2030 was passed by the government in 2011, the report says.

In 2010, Vietnam signed reactor construction agreements with Japan and Russia under which each country agreed to supply two 1,000-megawatt reactors. Russia was to build the first one, Ninh Thuan-1, with construction slated to begin in 2014 for operation by 2020 and the second plant for operation by 2021.

Construction on the Japanese reactors was scheduled to begin in 2015. But in January 2014, Vietnam announced that the projects had been postponed by four years. Another delay was announced in January 2015, pushing the expected construction start to 2019.

Negotiations regarding financing and technology as well as safety and legal concerns have delayed construction of all these reactors, the report says.

Malaysia has undertaken feasibility studies for the possible introduction of nuclear power, but the government has yet to make a formal decision on whether it will pursue it.

Thailand‘s National Energy Policy Council requested a feasibility study for nuclear power and approved the construction of nuclear capacity in its Power Development Plan (PDP) for 2007-2021, the report says. In each subsequent PDP the capacity target and timeframe for nuclear power have been revised and extended. The 2015 PDP includes two 1,000-MW nuclear power plants to begin operation by 2036.

Japan pledges to help Iran on nuclear matters

October 13, 2015

Japan to provide expertise on nuclear energy to Iran

http://ajw.asahi.com/article/asia/around_asia/AJ201510130043

By DAISUKE KANDA/ Correspondent

TEHRAN--Japan pledged Oct. 12 to provide personnel and expertise to Tehran to help it develop nuclear energy for peaceful purposes.

Agreement was reached here during talks between Foreign Minister Fumio Kishida and his Iranian counterpart Mohammad Javad Zarif.

Kishida and Zarif agreed that Japan will provide its know-how on earthquake-preparedness at nuclear facilities based on its experience of the Fukushima nuclear disaster in 2011.

Tokyo will also share its experience of emergency measures it took after the triple meltdown at the Fukushima No. 1 nuclear power plant and other steps to improve safety at nuclear facilities.

"Japan will continue efforts to foster cooperation between the two countries by providing its expertise to Iran in fields with which it has advanced know-how," Kishida said during a news conference.

The two ministers also signed a bilateral investment pact to entice Japanese companies to make inroads into the Iranian market.

Under a historic accord Iran signed with a group of six nations led by the United States, Tehran can continue nuclear development to supply energy and for medical purposes. The United States had imposed sanctions against Iran over its uranium enrichment program.

In exchange, the pact requires Tehran to establish a "nuclear safety center" to obtain technological expertise on nuclear energy with support from the six nations and other countries.

According to a joint statement released after the ministerial meeting, Japan will dispatch nuclear experts to the center to help it map out strategies to cope with a nuclear accident.

Japanese experts will also provide training to their Iranian counterparts to explain the importance of building nuclear facilities capable of withstanding earthquakes and provide know-how on calculating and managing nuclear materials.

The experts are likely to arrive at the center next year or later when Iran is ready to implement the accord with the six countries.

The investment pact, which aims to assist Japanese firms as they tap into the Iranian market, was signed after only one month of negotiation. Teheran has signed similar investment accords with 52 countries, including Germany, France, China and South Korea.

Kishida also agreed to set up a Japan-Iran cooperation council to promote bilateral cooperation in economic, environmental and other fields.

During the news conference, Zarif expressed confidence in expanding bilateral cooperation, saying a very bright future lies ahead for the two countries' diplomatic relations.

Promotion of nuclear fuel recycling will continue

October 22, 2015

Govt.: Nuclear fuel recycling policy unchanged

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Oct. 22, 2015 - Updated 19:01 UTC+2
Japan's newly-appointed industry minister says the central government will continue to promote nuclear fuel recycling.

Motoo Hayashi made the remark on Thursday in a meeting with Aomori Prefecture Governor Shingo Mimura.

The northeastern prefecture hosts the country's first fuel reprocessing plant. But its completion has been postponed many times due to repeated problems during test runs.

Governor Mimura asked Hayashi for the government to promote the fuel recycling policy in a responsible and stable manner.

Mimura also asked the minister not to make his prefecture the final disposal site for the high-level radioactive waste from reactors in the country.

The prefecture has only allowed the reprocessing of spent nuclear fuel.

Hayashi said the government will keep its promise not to build the final disposal site in Aomori. He said the site will be determined by consensus from the Japanese populace at large and the local community involved.

The governor said he values Hayashi's words clarifying the government's fundamental stance. Mimura added that he will continue to closely watch the actions of the government and the plant's operator, so that he can ensure the safety and security of people in the prefecture.

Alaskan LNG: Kyoto nuclear-free by 2040?

October 25, 2015

Kyoto advances nuclear-free agenda with Alaska LNG pact

http://www.japantimes.co.jp/news/2015/10/25/national/kyoto-advances-nuclear-free-agenda-alaska-lng-pact/#.Vi053Ct1Cot

by Eric Johnston
Staff Writer

KYOTO – The Kyoto Prefectural Government signed an agreement with Alaska last month to explore the possibility of importing liquid natural gas from the state to Maizuru, a port city on the Sea of Japan.

While daunting financial and bureaucratic challenges mean it will still be a while before Alaskan LNG flows to Kyoto, the agreement represents a step forward for Kyoto to achieve a larger goal: ending prefectural dependence on nuclear power by 2040.
The strategy, as outlined by Kyoto Gov. Keiji Yamada, calls for building up LNG facilities at Maizuru and installing new LNG pipelines in the Kansai region. The prefecture envisions Maizuru supplying not only Kyoto, but other prefectures in the region with gas to replace Fukui Prefecture's nuclear power plants as a major source of electricity.
Kyoto is not alone in seeking to replace atomic power with a combination of LNG imports and renewable energy. As of the end of 2014, more than 600 local governments nationwide had declared their intent to be nuclear-free, although not all of have set specific dates like Kyoto, and many lack a strategic plan for achieving that goal.
Yamada listed several reasons why the prefecture needs to end its usage of nuclear power, which comes mostly from 11 Kansai Electric Power Co. reactors in neighboring Fukui.
"We're grateful to Fukui for hosting nuclear power plants. But given issues like what to do with spent nuclear fuel and the need to decommission older reactors, we in Kyoto have to think about our energy future," Yamada said in 2013, when he first announced the plan.
Just prior to the memorandum of understanding with Alaska, the governor also said that, in addition to helping the prefecture get out of nuclear power, increasing natural gas usage via the port of Maizuru would have regional benefits.
"In the event of a national disaster off the Pacific coast of Kansai, it's possible that LNG facilities in the Osaka Bay area will be destroyed. Maizuru could then serve as a major natural gas hub," he said.
At present, Niigata is the only prefecture on the Sea of Japan coast that has the facilities needed to serve as an LNG base. In Kansai, the ports of Sakai, Osaka Prefecture, and Himeji, Hyogo Prefecture, have LNG facilities.
Kyoto and Hyogo, along with Osaka Gas, Kepco, and the Ministry of Economy, Trade and Industry, agreed in early September to formally research the cost of building an LNG pipeline from Maizuru to Sanda, Hyogo Prefecture, that could then supply other parts of Kansai and likely lead to other localities needing less nuclear power.

What energy future for Japan?

October 29, 2015

Japan's nuclear energy choices

http://www.japantimes.co.jp/opinion/2015/10/29/commentary/japan-commentary/japans-nuclear-energy-choices/#.VjHWyyt1Cov

by Kathleen Araujo

STONY BROOK NEW YORK – As Japan recovers from recent flooding, concerns about nuclear safety are never far from people's minds. During the flooding, bags of contaminated debris were swept away from cleanup sites associated with the 2011 Fukushima No. 1 nuclear power plant accident. Japan also restarted commercial operation of domestic nuclear generation last month under more rigorous, post-accident rules. Amid these developments, questions linger over whether the country should (or even is ready to) expand its nuclear operations. For this, answers may lie in fuller public engagement.

In August, news broadcasts showed the control room of the Sendai No. 1 reactor in Kagoshima Prefecture renewing initial operations. Among those protesting the restart was former Prime Minister Naoto Kan, who held office during the Fukushima crisis. Shortly after the reactor's restart, five cracked tubes were discovered in the cooling system, requiring new mitigation measures.

To put the experience into broader context, Japan is highly seismic and volcanic in nature. It is home to 110 active volcanoes and has 1,500 earthquakes of varying magnitudes each year. In August, the Meteorological Agency warned of larger-than-usual risks (prompting evacuation) in conjunction with volcanic eruptions at Mount Sakurajima. Based roughly 50 km from the restarted Sendai plant, the volcano is one of the most active in Japan, with volcanic sediment from previous flow found about 5 km from the plant.

Critics of the nuclear restart point out that new safety rules and evacuation planning are not adequate. Sufficient numbers of buses, for example, are not available in some areas should the need for evacuation arise. It is also not clear whether design adaptations to Japan's nuclear fleet adequately account for international best practices and the country's natural conditions. Moreover, polls indicate strong misgivings by a majority of the public, which favors a slow phase-out of nuclear technology.

By contrast, supporters see promise in the return to nuclear generation. As an island nation with few natural resources, nuclear energy offers a form of low-carbon power generation that can run nearly continuously.

This past summer, Japan experienced one of its hottest seasons in recent history with utility usage rates running at 80 to 95 percent, as 43 operable reactors remained idle. Kyushu Electric Power Co., the utility that manages the Sendai plant, reportedly paid more than double its costs following the accident for alternative generation. With the restart at the Sendai plant, economic benefits are projected to equal $25 million per year for the local economy. (This compares with estimates of accident-related damages valuing the abandoned region, homes, businesses, and agricultural land alone at $250 billion to $500 billion in a national economy of $4.7 trillion.)

Looking ahead, Japan's current, national energy plan outlines a goal of meeting 20 percent of domestic energy supply with nuclear generation by 2030. The new nuclear regulator and safety infrastructure will also undergo a review this January with the International Atomic Energy Agency. Yet, some say economic recovery has dominated political decision-making at the expense of more difficult discussions about risk in the country's energy choices.

At this juncture, Japan has the chance to create a more durable national energy strategy. To begin, public discussions should present trade-offs and risks in technically viable energy options. Meetings should openly convey information about the assumptions and challenges in reasonably understandable form, and include top policymakers, safety regulators, members of industry and citizens.

Discussions should also allow for consideration of alternative options, like renewable energy and changes in practices, with rationale for costs and benefits. These exchanges could provide greater visibility to what may be a new safety culture, while also enabling better cross-sectoral channels for widespread learning. A national referendum could then follow, asking which national energy path citizens will support and on what terms (for instance, higher taxes or costs passed to consumers). This approach would require more time and broad-based commitment, but prioritizing safety and fuller societal buy-in may prove to be more sustaining for Japan over the longer term.

For a country that has witnessed some of the darkest moments in nuclear history and also shown unmistakable evidence of resilience and innovation, Japan now has a unique opportunity to chart a more enduring path with policy and safety implications that can resonate globally. If nuclear energy is to have a chance at being sustainable in Japan, public officials, the nuclear industry and the country's citizens will need to openly engage about what is known and assumed in their complex set of energy choices.

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MHS closer to investing in Areva

November 6, 2015

Source : Bloomberg
http://www.bloomberg.com/news/articles/2015-11-06/mitsubishi-heavy-steps-closer-to-investment-in-france-s-areva

Mitsubishi Heavy Steps Closer to Investment in France's Areva

Masumi Suga
November 6, 2015 — 10:21 AM CET

- Couches proposal in terms of wider Franco-Japan collaboration
- Two nuclear companies have relationship going back to 2006

Mitsubishi Heavy Industries Ltd. moved closer to investing in Areva SA's reactor unit after it said it has begun examining a "concrete proposal" to take a minority stake, a step that would deepen ties between Japan and France in the generation of nuclear energy.

Japan's sole producer of pressurized water reactors said Friday that in coming weeks it will consider the conditions for making an offer for Areva NP, including "ownership ratios," and will also "work up a proposal of Japan-France collaborative measures" around the safety and reliability of nuclear power plants.

The Tokyo-based company's statement comes a month after French Prime Minister Manuel Valls sought Japanese investment in the Areva unit as part of wider collaboration between the two governments over nuclear energy. Any deal would help state-owned Areva shore up its finances after losses caused in part by the retreat from atomic energy in countries including Japan and Germany.

Mitsubishi's investment would deepen a partnership with Areva that began in 2006. The two companies signed a $22 billion agreement in May 2013 to build a nuclear power plant in Turkey, the first major order for a Japanese firm since Fukushima. It would also signal the importance to Mitsubishi of seeking overseas contracts to replace domestic sales lost by the shuttering of Japan's atomic reactors in the wake of the 2011 disaster.

Nuclear Cooperation

Mitsubishi would join Electricite de France SA in owning Areva NP. EDF, the world's biggest operator of nuclear plants, said in July it plans to take a majority stake in the reactor unit as part of a rescue plan for the unprofitable Areva. The two state-controlled companies also agreed to set up a venture to manage new projects, including exports, that would be led by EDF.

Mitsubishi first said it was interested in investing in Areva NP June. This week, Areva SA said China National Nuclear Corp. may buy a minority stake in the parent company as part of wider ranging nuclear cooperation.

Mitsubishi is a maker of ships, planes and rockets. Its recent success has been in power systems that now account for 40 percent of revenues. Its thermal business is conducted in partnership with another Japanese conglomerate, Hitachi Ltd.

Japan restarted the first of its 43 operable atomic reactors in August despite public opposition. The government anticipates that nuclear will account for as much as 22 percent of electricity generation by 2030.

Mitsubishi built about half of the nuclear reactors in Japan. For its project, the Turkish government chose a 1,100-megawatt unit, called Atmea, which was jointly designed by Mitsubishi and Areva.

Remember your humanity but forget about nuke-free world for now

Pugwash 2015: Remember your humanity, but forget about a nuclear free world for now
Posted: 03 Nov 2015 10:29 PM PST*

Pugwash 2015: Remember your humanity, but forget about a nuclear free world for now

"The person who prays for peace must not hide even a needle, for a person who possesses weapons is not qualified to pray for peace."
-Takashi Nagai, *Towers of Peace* [1]

Remember your humanity, but forget about a nuclear free world for now. That may not be the official line, but it was the take-away message from the Pugwash Conference sessions in Nagasaki on November 1, 2015. Diplomatic niceties and patience were emphasized at this time when "mutual trust and confidence" have declined amid alarming new regional conflicts and refugee crises. The imbalances of economic and military power make nuclear deterrence, with only slow, incremental disarmament, the only safe way to proceed.

Maiden of Peace, Nagasaki Peace Park

One might think that because the Pugwash Conference espouses such high ideals that it has always called for the immediate abolition of nuclear weapons, but it never actually made such a radical demand. The website of the *Pugwash Conferences on Science and World Affairs* includes the following description of the founding of the organization:

During the darkest days of the Cold War, the founders of Pugwash understood the dangers of nuclear weapons. In their efforts to change dangerous policies they became pioneers of a new kind of transnational, "track 2" dialogue. [2]

The conference was founded two years after Albert Einstein and Bertrand Russell had released their famous 1955 manifesto, signed by nine other distinguished scientists [3]. It is notable that the manifesto did not stress the abolition of nuclear weapons but rather the abolition of war. It stated, "Although an agreement to renounce nuclear weapons as part of a general reduction of armaments would not afford an ultimate solution, it would serve certain important purposes." A footnote called for this to be a "concomitant balanced reduction of all armaments." The manifesto seemed to assume that nuclear weapons were here to stay and would inevitably be used in war, so the more urgent issue was for nations to accept "distasteful limitations of national sovereignty" and "find peaceful means for the settlement of all matters of dispute between them." Thus one shouldn't expect the Pugwash Conference to be a militant organization that cannot tolerate the existence of nuclear arsenals. Pugwash and its co-founder were awarded the Nobel Peace Prize in 1995 in recognition of their mission to "diminish the part played by nuclear arms in international politics and, *in the longer run*, to eliminate such arms." [emphasis added] [4]

1955年7月、哲学者のバートランド・ラッセルと物理学者のアルバート・アインシュタイン[原書]を発表し、核兵器廃絶を訴えた。

In July 1955, philosopher Bertrand Russell and physicist Albert Einstein issued a "declaration" calling for the abolition of nuclear weapons.

Other organizations have emerged over the years that have much less patience for elimination "in the long run," so the Pugwash Conferences seem complacent by comparison. At the Pugwash Conference public session in Nagasaki on November 1, 2015, most of the speakers, aware that they were facing an audience of divided opinions, chose to stick to factual reports and to refrain from expressing their personal conclusions. Government officials preached pragmatism and patience.

There was no opportunity for the audience to challenge the ideas presented or have a dialogue with the speakers. The Q and A sessions were too short, and only the Pugwash members in the front rows were offered chances to ask questions, and most of them were inarticulate and long-winded commentaries. Some of them showed by their questions that they hadn't even been following current events like Fukushima and didn't know some of the basic science and history of the nuclear era, but they have been deliberately asking naïve questions just to make a point.

Meanwhile, the general public and media representatives in the back rows were supposed to only listen and learn. It was ironic to hear the speakers saying repeatedly that the public is woefully ignorant about the issues and needs to be educated, while here members of the public had made the effort to attend yet their questions and comments were not wanted. Why should the public get educated if they are not going to have any influence even at a small conference such as this?

This structure revealed what seems like a serious problem with the Pugwash organization. Perhaps back in 1957 when the US and USSR were playing with hydrogen bombs like they were firecrackers, there really was an urgent need for scientists from both countries to get together in a remote place for private meetings so that they could go back and hopefully influence leadership in their respective countries, but this hardly seems necessary now. This sage-on-the stage approach seems unnecessary now when scientists are even more sidelined from power than they were then. The mass media would flock to a press release concerning the latest iPhone release, but here is no equal to Russell or Einstein today who could assemble the media to take note of an "important announcement."

What is needed now are truly participatory events that are connected with critical voices, citizen groups and contrarians who can break through the polite diplomatic niceties and stale frameworks in order to truly debate the issues—at the risk of offending the dignitaries present. These problems can't be solved if leaders are not going to really make the effort to educate themselves while they educate others, get out of their elite bubbles, then listen and do the hard work of leading by obeying.

Statue of Mother and Child at the Hypocenter, Nagasaki

What follows is a discussion of the session that was held on the afternoon of November 1, 2015. For anyone who has been following the anti-nuclear movement on the street or in the free-for-all of alternative media, blogs, twitter and facebook groups, the stilted and constrained parameters of discussion will come as a shock. All discussions were limited by the realities that have been laid down by the United Nations and the signatories of the Non-Proliferation, Strategic Arms Limitation and Nuclear Test Ban Treaties. The experts who know the history of these treaties can extemporaneously list all the dates, treaty numbers, signatories, conditions and exceptions, with the effect that the listener is left in a state of utter confusion and intimidation. Once one becomes an expert in this subject, one is in that world and can no longer think about lofty ideals and principles. The possible is restricted to only what the treaty history has carved out. So this process is very slow at nuclear disarmament, but it is very effective at disarming anti-nuclear activists who would like to see rapid change.

From the start the anti-nuclear activist is already out of the picture because the basis of all the Non-Proliferation Treaties is that all states which agree to forego the development of nuclear weapons are guaranteed the freedom to develop nuclear energy. This idea became entrenched before the first nuclear catastrophes, and it is always presumed the IAEA will be eternally omnipotent and capable of spotting any attempt to convert plutonium from a civilian waste product to a product that is militarily useful.

Thus the entire framework of global disarmament has no problem with the legacy of Chernobyl and Fukushima Daiichi, and the risk of other future catastrophes is not a concern. The treaties have nothing to say about unsecured uranium mine tailing ponds, depleted uranium weapons, and the seventy-year-old unresolved question of what to do with nuclear waste. Ecological, social and human health impacts are of no concern.

Spent nuclear fuel facilities could be considered as a radiological weapons which nations stupidly build as if they wanted to do a favor for any future aggressors they might have. They spare enemies the need to have a nuclear weapon because all they require is a conventional missile to launch at a nuclear facility. Or it could be that nuclear facilities are supposed to be a kind of a deterrent. Who would want to pillage or occupy a country after it has been turned into a nuclear wasteland? Unfortunately, disarmament treaties pay no attention to this hazard.

One of the first people on the stage was Hitoshi Kikawada, Parliamentary Secretary, Ministry of Foreign Affairs, Japan, who repeated the usual government platitudes: the only country ever attacked by nuclear weapons, deeply committed to a world free of nuclear weapons, and so on…

If the Japanese government were serious and it really wanted to change the behavior of the nuclear states, it would break off ties, impose sanctions, and employ any means available to alter the behavior it wanted changed. This is where Japan's hypocrisy becomes obvious. It is hardly "deeply committed" to a nuclear free world at all. It may *want*a nuclear free world, but it is not a high priority. If Japan were serious, it would come out from the US nuclear umbrella, and, as long as the US insisted on having nuclear weapons, it would not host US military bases on its soil. In interpersonal relations, we call this having the courage of one's convictions. Or it's just the use of simple strategies, like those of a housewife who has various ways of withdrawing affection and cooperation to deal with a wayward husband. But governments seem to have trouble resorting to strategies that are just common sense within personal relations.

States like Japan which live under a nuclear umbrella have been called the "weasel states" [5] of global disarmament talks, and along with the truly non-nuclear states they have always overlooked their power to shun, exclude and sanction the nuclear powers as a strategy for forcing them to change their ways. Perhaps the time has come for them to employ this strategy, but so far they have been divided and ruled, or other considerations force them to stay in their alliances.

At this time of "heightened tension" and "degraded trust" (no one at the conference had the courage to say "Syria" or "Ukraine" explicitly), it was interesting to see two officials from the US and Russia sitting side by side, sticking to their talking points while diplomatically only alluding to the mutual grievances that were on full display at the UN just weeks earlier. [6] But at least they showed up in this forum to respond to an organization that has for 61 years urged the superpowers to seek peaceful solutions and pursue disarmament. In the roster of speakers, the absence of representation from North Korea, Pakistan, Israel and France was notable, and no one from Germany was there to discuss the recent exit from nuclear energy or its diplomacy on the front lines between East and West.

Anita Friedt, Principal Deputy Assistant Secretary, Bureau of Arms Control, Verification and Compliance, Department of State (USA), claimed that arms reductions are continuing, and went over the progress of the 1990s. She said the expensive upgrades to the arsenal consist of no expansion of capability. Knowing that President Obama has been ridiculed for his Nobel Peace Prize, she insisted that his commitment to a world without nuclear weapons hasn't diminished. She just blamed Russia for not picking up the offer to begin talking about reductions.

She said all this apparently oblivious to Russia's reasons for not being ready for such a step. She would be a rather incompetent official if she didn't know that Russia is displeased with eastward expansion of NATO, overseas "democracy promotion" propaganda in Eastern Europe and even within Russia, [7] the recent decade of illegal wars and drone targeting against sovereign nations (Afghanistan, Iraq, Libya, drone in Yemen and Pakistan), and America's enormous expenditures on conventional weapons—including advanced weapons projects that aim to eliminate strategic parity. [8] It's hard to know if she is incompetent or if she was deliberately trying to portray this false image of American innocence. Vladimir

Putin has spoken very clearly on these points at recent press conferences, so the Russian point of view is hardly a state secret. [9]

Mikhail Ulyanov, Director of the Department for Non-Proliferation and Arms Control, Ministry of Foreign Affairs, Russia, hinted at these grievances but didn't state them explicitly. This was a shame because the audience may not have grasped exactly what he was referring to, and in any case, a good raging argument would have made things interesting. It was mid-afternoon by this time and everyone was getting drowsy. I had to wonder if this is the reason we now have this lamentable state of "degraded trust" over "situations" that couldn't be described. If speakers at such gatherings didn't use such passive-aggressive and evasive language, perhaps they could really talk and work out their differences right there. Every couple knows bad things happen later if one goes to bed angry.

Mr. Ulyanov stressed the important point that one cannot talk of nuclear disarmament without talking about imbalances in conventional weapons. He could have expanded this point by adding that conflicts are ultimately driven by financial interests and financial crises. Russia knows well that the conflicts in Ukraine and Syria involve struggles over energy resources and efforts to bring those countries, and surrounding regions, into Western economic spheres.

Mr. Ulyanov, like his counterpart, also tried to pass off some nonsense as pearls of wisdom. He claimed that we just have to accept that disarmament will proceed slowly because the rapid loss of deterrence could be extremely destabilizing. As evidence he said that deterrence with conventional weapons failed in WWII, and the USSR lost 27 million lives in that war. He said Russia cannot accept ever risking that situation again. However, he left out some crucial details such as the fact that Stalin had purged his military of effective leadership by the time the Nazis invaded. They had no effective conventional deterrence at the time. Also, the harsh conditions imposed on Germany after WWI created the resentment which in turn led to Nazism and militarization. All nations in Europe ignored the build-up and made no attempt to create conventional forces that would deter Germany. The "deterrence failed" argument is very weak. War can be avoided in numerous ways without a nuclear arsenal, and in fact, the existence of a nuclear arsenal can make nations extremely complacent about building the foundations of lasting peace. Furthermore, if we assume that nuclear deterrence succeeded after WWII, that is only the selfish viewpoint of the superpowers counting the lives of their own citizens. The Third World countries that were devastated by Cold War conflicts might have a different view. We also have to take account of the opportunity costs, and the ecological and human toll of uranium mining and the manufacturing and testing of nuclear weapons, both inside and outside the territories of the US and the USSR. The nuclearization of nations also transformed them into paranoid security states, and the harm to the political and social fabric was carried over to the "war on terror." Finally, while one is busy nuclear deterring, one is running the constant risk of unleashing all the consequences that would follow from the accidental detonation of a nuclear weapon. The logic of deterrence doesn't hold up, but if Russia still wants to insist they need deterrence, then logically it makes sense for all nations—and so the weaker ones need it all the more.

Mr. Kim Won-soo, UN Under Secretary-General and Acting High Representative of Disarmament Affairs (Republic of Korea) was next and spoke of being "deeply disappointed" by the recent failure of NPT Conference (May 2015). [10] For this author it was "deeply disappointing" that he couldn't specifically talk about some of the reasons for the failure. The hesitation to name names and describe specific disagreements amounts to a shrug in which global leadership just seems to wistfully say "stuff happens."

Professor Hiromichi Umebayashi, of the University of Nagasaki, discussed his group's proposal for working toward a nuclear free Northeast Asia. This plan seemed fatally flawed. It is hard to understand how they could seriously believe that North Korea would ever consider this plan. It depends on the

building of mutual trust among North Korea, South Korea and Japan, with China, Russia and the US promising (scouts honor) to never resort to the use of nuclear weapons in a dispute in this region. One flaw in the plan is the fact that the US is called a "neighboring nation" when its territory is nowhere near Northeast Asia. More importantly, North Korea would never consider this proposal while Japan stays under the US nuclear umbrella and hosts US military bases. Even if the US promised not to use nuclear weapons, its nuclear-armed submarines would still be patrolling the ocean in the region, and the US would be capable of hitting North Korea from afar by other means even if the subs were removed.

Furthermore, North Korea distrusts Japan for all the same reasons as China and South Korea. There is no common agreement about what happened in the region in the early 20th century, and this problem provides a rather weak foundation for building the trust needed for a nuclear weapons-free zone. A nuclear free Northeast Asia seems to require a nuclear free world, so the first step would be for South Korea and Japan to each unilaterally break with the American alliance. This would be the only change that North Korea could believe in. But even then there would be that little problem of Japan's plutonium stockpile in Rokkasho. What, exactly, are their intentions?

The final speaker was Ambassador Akylbek Kamaldinov, Ambassador Extraordinary and Plenipotentiary of the Republic of Kazakhstan to Japan, who was honored by Pugwash for his nation's bold decision to give up the nuclear weapons it had on its territory at the breakup of the USSR. Kazakhstan has recently announced that it wants to lead a movement that will see the world free of nuclear weapons by 2045. They stole my idea, but that's OK. They only seem to have the half of it that pertains to nuclear weapons. They take the high ground in speaking about nuclear weapons, but speak little of the widespread contamination throughout the country caused by seven decades of uranium mining. Kazakhstan is a leading producer of uranium, and Japanese Prime Minister Shinzo Abe was recently there concluding deals for the future development of nuclear energy. [11]

Progress in nuclear disarmament is impossible if two aspects of the accepted reality continue to go unchallenged. Firstly, nuclear energy is incompatible with a world free of nuclear weapons. Secondly, few countries will want to give up their nuclear deterrence as long as one superpower maintains a global network of military bases and outspends all others combined on conventional military forces. [12] I got the impression that the resolution statement of this year's Pugwash Conference will have little to say about these two obstacles.

It may seem unrealistic to call for such drastic "unrealistic" changes, but history shows that the unchangeable reality can unravel very fast. No one in 1980 predicted the collapse of the Soviet Union by the end of the decade. It is entirely foreseeable that nuclear energy and the American empire will soon have a confrontation with reality. The evident costs and dangers of both are catching up with them.

Notes

[1] This quotation is on display in the Nagasaki Atomic Bomb Museum. For information about Takashi Nagai see: Shohei Okada, "Film tells story of Nagasaki scientist who cared for A-bomb survivors," *Asahi Shimbun*, February 15, 2014, http://ajw.asahi.com/article/behind_news/social_affairs/AJ201402150015.

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[3] The Russell Einstein Manifesto, Pugwash Conferences on Science and World Affairs, July 9, 1955, http://pugwash.org/1955/07/09/statement-manifesto/.

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[5] "Alice Slater: US is not Honoring its NPT Promise for Nuclear Disarmament," *Farsnews*, October 31, 2015, http://english.farsnews.com/.

[6] Luciana Bohne, "A Game of Dice With Russia: 'Do You Realize What You Have Done?'" *Counterpunch*, October 1, 2015, http://www.counterpunch.org/2015/10/01/a-game-of-dice-with-russia-do-you-realize-what-you-have-done/

[7] Gerald Sussman, "The Myths of 'Democracy Assistance': U.S. Political Intervention in Post-Soviet Eastern Europe," *Monthly Review*, December 6, 2006, http://monthlyreview.org/2006/12/01/the-myths-of-democracy-assistance-u-s-political-intervention-in-post-soviet-eastern-europe/.

[8] "Gorbachev calls US military might 'insurmountable obstacle to a nuclear-free world,'" *Russia Today*, August 6, 2015, http://www.rt.com/news/311796-gorbachev-nuclear-free-world/.

[9] "Vladimir Putin Meets with Members of the Valdai Discussion Club. Transcript of the Final Plenary Session of the 12th Annual Meeting," *Valdai International Discussion Club*, October 23, 2015, http://valdaiclub.com/opinion/highlights/vladimir-putin-meets-with-members-of-the-valdai-discussion-club-transcript-of-the-final-plenary-sess/.

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[11] "Abe Says Japan Can Reap 3 Trillion Yen in Central Asia Projects," *The Japan Times*, October 27, 2015, http://www.japantimes.co.jp/news/2015/10/27/national/politics-diplomacy/abe-vows-support-kazakhstans-plan-introduce-nuclear-power/#.VjgbG1_XfCQ.

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Safety and costs: Keep Monju?

November 12, 2015

Fate of troubled Monju reactor hangs in balance

http://www.japantimes.co.jp/news/2015/11/12/national/fate-troubled-monju-reactor-hangs-balance/#.VkRV7L8R-os

by Reiji Yoshida

Staff Writer

The fate of the nation's troubled prototype fast-breeder reactor is in the air amid continued questions over its safety and cost. Political challenges to the country's nuclear policy are also taking a toll.

Taro Kono, the anti-nuclear Cabinet minister in charge of administrative reforms, has himself started attacking the Monju project, openly questioning the feasibility of the plant after a high-profile budget review by a team of experts Wednesday in Tokyo.

In a separate move, the Nuclear Regulation Authority was set to lodge a formal request for a change in the plant's ownership. It was to ask the education and science ministry Friday to find a new operator after decades of serious problems that have shaken confidence.

The NRA's recommendation could lead to Monju's closure because it will be hard to find a replacement for the government-backed Japan Atomic Energy Agency (JAEA), observers say.

"This will be (Monju's) last chance to win the trust of the nation," Chief Cabinet Secretary Yoshihide Suga told a news conference Thursday.

Kono, who was appointed as administrative reform minister in the Oct. 7 Cabinet reshuffle, has long been critical of the policy to develop a nuclear fuel cycle.

During the budget review session Wednesday, he criticized JAEA for wasting vast sums of money on maintaining the nuclear-fuel transport ship Kaiei Maru.

The ship, built in 2006, costs about ¥1.2 billion every year to maintain and has been used only four times.

"After all, you can't tell if Monju will actually work or not," Kono said following the session Wednesday.

"We need to examine whether budgets for certain related projects are really effective, such as those for nuclear fuel recycling," he said, according to media reports.

Monju was designed to produce more plutonium fuel than it consumes. Fast-breeder reactors are a central component in the nuclear fuel recycling system the government still is trying to build, despite Monju's lousy record of accidents and decades of idleness. One of the potential threats stems from the massive amount of dangerous sodium it contains as coolant.

In November 2012, it emerged that JAEA had failed to check as many as 10,000 of Monju's components, as required by safety rules.

In May 2013, the NRA ordered JAEA to halt operations pending improvements to the plant's management.

During a Nov. 4 news conference, NRA Chairman Shunichi Tanaka said the agency had yet to see significant improvement in JAEA's management of the plant, and as a result it wanted the agency fired.

The education ministry will have six months to show how it will respond to the NRA's request.

"Exactly 20 years ago, Monju had an accident involving a sodium leak. Ever since then, numerous measures have been taken to fix problems, but they haven't been corrected yet," Tanaka said.

Tanaka said the NRA had the legal power to retract its "construction permission" for Monju, which would force the government to close the prototype reactor immediately.

But the NRA was not thinking of the option "at this stage," Tanaka quickly added.

He said the NRA was questioning only Monju's safety, not the government's nuclear recycling policy as a whole.

On Thursday, a high-ranking government official admitted the Monju project had drawn much public attention, saying the government should "provide an explanation that can be understood by every party."

The official said JAEA had enjoyed such unqualified support from the government's nuclear policy that it had been indulged a stretch too far.

"JAEA has become spoiled," the official said.

Fukui asks for full govt. commitment to Monju

Nov. 12, 2015 - Updated 09:59 UTC+1

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

The governor of Fukui Prefecture has urged the government to take the initiative in addressing safety management issues at the trouble-prone prototype fast-breeder reactor Monju. The prefecture, in central Japan, hosts the reactor.

Monju was developed for the recycling of spent nuclear fuels building up at other reactors in Japan, but due to various safety problems its operator has been banned from conducting a test-run.

Fukui Governor Issei Nishikawa met industry minister Motoo Hayashi on Thursday.

The meeting came after the country's regulator last week judged the operator of Monju, the Japan Atomic Energy Agency, unfit to run the facility, citing its lax safety management.

The regulator plans to recommend the education minister, who oversees the project, to pick a new operator.

The governor said Monju is a pillar of Japan's nuclear fuel recycling plan and the government must be responsible for solving the issue.

He told Hayashi Cabinet members related to Japan's fuel recycling project should set up a system to take responsibility for the plant or otherwise safety problems would recur.

The industry minister replied the education minister will lead discussions on how to address the Monju issue. But he stressed the government will stick to the fuel recycling plan with the understanding of local authorities concerned, as well as from the international community.

NRA's recommendation on Monju: What impact?

November 14, 2015

NRA's Monju reactor recommendation could deal serious blow to nuclear fuel cycle

http://mainichi.jp/english/english/newsselect/news/20151114p2a00m0na007000c.html

The Nuclear Regulation Authority (NRA) officially recommended on Nov. 13 that the troubled Monju fast breeder test reactor be taken out of the hands of the Japan Atomic Energy Agency (JAEA) -- a move that could deal a serious blow to Japan's decades-long "nuclear fuel cycle" policy.

The Ministry of Science, Culture, Sports, Science and Technology -- the JAEA's regulator -- will consider a new organization to operate the Monju facility possibly with the cooperation of utilities and foreign nuclear power companies. However, the range of candidates the science ministry could call on is severely limited in terms of technological prowess and overall capabilities. If the ministry cannot designate a new operator by the May 2016 deadline for responding to the NRA recommendations, it will be forced to consider more radical options, including decommissioning the Monju reactor.

The Monju reactor in Fukui Prefecture was built to run on MOX fuel -- a mix of plutonium and uranium processed from spent conventional nuclear fuel -- and produce yet more plutonium that could be made into yet more fuel. MOX fuel can also be put into conventional reactors, but the Monju project held the promise of creating a fuel loop and help resource-poor Japan become energy self-sufficient. The Monju plant, however, has spent the vast majority of its life shut down due to a string of accidents including a fire -- mishaps that played a major role in the NRA's recommendation to find a new operator for the facility.

After receiving the recommendation from NRA Chairman Shunichi Tanaka, science minister Hiroshi Hase said, "I want to get (Tanaka's) advice and guidance on how to proceed from here on" regarding putting together a new organization to operate the Monju plant. Tanaka, however, later commented at a news conference, "I've presented our recommendation, so I cannot also provide the answer," indicating he has no intention of participating in discussions on finding a new operator.

The JAEA has survived serious scandals and mishaps twice before by changing its name, but Tanaka explained that such a tactic wouldn't work this time around, saying, "It clearly states in the recommendation that a different organization" should take over the Monju project.

Of essential importance to the science ministry's search for a new operator is whether the candidate organization has the technology to handle liquid sodium. The substance is used in the Monju reactor as a coolant, but is also explosive if it comes into contact with air or water. The only domestic body that has any experience handling liquid sodium is the JAEA, so the science ministry plans to consider cooperating with foreign nuclear power companies on the Monju project.

Overseas candidates, however, are also hard to come by, as the United States, Britain and Germany have all given up on fast breeder reactors. Research advances into the technology were made in the 1950s and '60s in Europe and North America, but the volatility of liquid sodium proved a very serious roadblock, and many fast breeder projects had been suspended or cancelled by the 1990s.

Currently, only three countries are pursuing fast breeder reactor research seriously: Russia, China and India. Due to defense and nuclear security concerns, however, it looks very unlikely that Japan will be able to partner with any of these nations. Even the NRA's Tanaka said at the Nov. 13 news conference, "I can't determine that no organization (would take over the reactor). Very little research (on fast breeder reactors) is being done anywhere in the world and, personally, I will forgo a personal evaluation of the matter."

Toshiba still hopeful for nuclear future

November 20, 2015

Toshiba's U.S. nuclear arm poised for Indian reactor contracts

http://ajw.asahi.com/article/business/AJ201511200024

By KEIKO NANNICHI/ Staff Writer
PITTSBURGH, Pennsylvania--The U.S. nuclear power subsidiary of troubled electronics company Toshiba Corp. is set to receive orders to construct nuclear reactors for the first time since the 2011 Fukushima nuclear disaster.
Daniel Roderick, president and CEO of Westinghouse Electric Co., said in a recent interview with The Asahi Shimbun that the company is negotiating orders to build six to 12 reactors in India.
He said the company is expecting to sign the deal in January to March next year. He added that it is also hopeful to win contracts for 30 to 50 reactors in China and eventually to build next-generation nuclear reactors in Japan.
Roderick also said the company hopes to receive orders from the United States, Eastern Europe and Australia.
The subsidiary of Toshiba, which has been embroiled in an accounting scandal since May, has received no reactor construction orders since the ongoing crisis at the Fukushima No. 1 nuclear power plant began in March 2011.
Roderick said Westinghouse sank deep into the red in fiscal 2012 and 2013. The Fukushima nuclear disaster forced the company to scrap its long-term business plan mapped out a decade ago to earn 80 percent of its revenue from construction of new reactors.
Westinghouse's revenue from reactor construction is flagging at around 20 percent of net earnings, but Roderick said the company earned its largest profit in fiscal 2014 since becoming a Toshiba subsidiary thanks to brisk earnings from reactor maintenance services and fuel-related businesses.
The business sectors earned 40 percent and 30 percent, respectively, of the company's net earnings last fiscal year, he added.

Gas a clean fuel?

November 25, 2015

Exporters to promote natural gas consumption

http://www3.nhk.or.jp/nhkworld/english/news/20151124_17.html

Nov. 24, 2015 - Updated 04:21 UTC+1
Members of the Gas Exporting Countries Forum, or GECF, met in Tehran on Monday. They agreed to promote natural gas as a clean fossil fuel, saying it's an abundant and sustainable energy source.

At the start of the meeting, Iran's President Hassan Rouhani proposed that member nations enhance coordination in production and trade. He said that common strategies will help them achieve their goals.

Officials at the International Energy Agency say natural gas consumption will grow at an average rate of two percent a year through 2020. This figure represents a downward revision by the officials, who cited the increasing use of renewable energy.

The leaders of the GECF member nations agreed in a joint declaration to redouble their efforts to expand consumption. They are planning constructive talks with gas importing countries.

There has been a rumor that the GECF might begin fixing prices. But Iran's oil minister Bijan Zanganeh indicated that the organization is not ready to do so.

IAEA still believes in the future of nuclear power

December 8, 2015

IAEA chief: Interest in nuclear power up despite Fukushima

http://mainichi.jp/english/articles/20151208/p2g/00m/0in/009000c

MANILA, Philippines (AP) - Despite the Fukushima nuclear disaster that devastated northeastern Japan in 2011, interest in nuclear power has increased significantly, mainly in Asia, the U.N. nuclear watchdog chief said Monday.

International Atomic Energy Agency chief Yukiya Amano said the appetite for nuclear power has grown in Asia because of the need to fuel the region's bustling economies and demand for relatively clean energy amid concerns about climate change.

Globally, at least 30 developing countries are seriously considering the use of nuclear power, Amano said, adding that more than 440 nuclear power plants are currently operated worldwide.

"After the Fukushima Dai-chi accident, some believed that is the end of nuclear power. It was not the case," Amano told a news conference in Manila, where he attended a conference and discussed with Philippine officials how to harness nuclear technology for economic progress.

"Nuclear power plants or use of nuclear power is increasing significantly," he said.

The meltdowns at the Fukushima Dai-ichi nuclear power plant in northeastern Japan following an earthquake and tsunami displaced more than 100,000 people due to radioactive contamination and spurred a national debate over resource-scarce Japan's reliance on nuclear power.

The plant "was not well prepared for the severe natural hazard," Amano said. Following the disaster, Amano said he visited nuclear plants in several countries and saw that considerable safeguards had been introduced.

"After Fukushima, lots of improvements have been made," he said.

Each government, he said, ultimately has to decide whether to embrace nuclear energy for power generation based on many factors, including the availability of other options like hydropower.

Japan remains committed to nuclear power despite the meltdowns at Fukushima. Only two of the country's 43 workable reactors are currently online, with the others shut down pending safety checks, but the government wants to restart as many as possible.
To offset the shortfall in power output, Japan ramped up imports of oil and gas and fired up more thermal power plants, slowing progress toward reducing its emissions of greenhouse gases.
Countries, meanwhile, need to ensure the security of nuclear power plants and materials amid terrorism threats, Amano said, adding that the IAEA has provided training and other assistance to help governments deal with such concerns.
"If nuclear materials fall into the hands of terrorists, that can be used for dirty bombs," he said. "If it happens in a big city, that can cause a panic."
"Terrorists always target the weakest link, so we need to be well prepared for that to address nuclear security," he said.

Nukes and COP21

08.12.2015_No221 / News

IAEA Calls For Nuclear To Be Part Of COP21 Energy Options

http://www.nucnet.org/all-the-news/2015/12/08/iaea-calls-for-nuclear-to-be-part-of-cop21-energy-options

8 Dec (NucNet): Nuclear energy is a “clean, reliable, affordable and modern energy source” that should be considered among low carbon options and as an important contributor to a sustainable energy future, International Atomic Energy Agency deputy director-general Mikhail Chudakov told the Paris climate conference yesterday.
Mr Chudakov told an audience at a United Nations side event at COP21 that nuclear energy has low life-cycle greenhouse gas emissions and has the potential, with innovative technologies, to serve humanity effectively for a very long time.

He also said that in developing economies more effective use should be made of technologies such as small and medium reactors.

“When considered in the broader context of sustainable development, nuclear power enhances energy security and reduces damage to ecosystems and impact on human health,” he said.

At the event, senior representatives from several UN and civil society organisations discussed how to ensure access to affordable and modern energy for sustainable development. Panellists highlighted the issues and priorities and how their organisations plan to contribute to sustainable energy.

Speakers agreed that there was an urgency to make the transformation in business models, technologies and consumer habits that are necessary to move to a low-carbon future. They said drastic energy efficiency improvements and fast upscaling of all low-carbon technologies, including nuclear, carbon capture and sequestration and renewables were necessary in order to limit the increase of average global

temperatures to below two degrees Celsius compared to pre-industrial levels.

In response to a question regarding energy innovations in Africa, Mr Chudakov said that in order to support developing economies, such as in Africa, “we need to make more effective use of technologies, such as small and medium reactors that are safe, secure and sustainable”.

Taking place from 30 November to 11 December, the 21st Conference of Parties (COP21) to the UN Framework Convention on Climate Change (UNFCCC) provides countries the opportunity to present their climate change strategies and negotiate an international agreement.

The IAEA said developing an effective international response to “the threat of climate change” and identifying appropriate mitigation strategies will require a joint framework.

Japan and India ready to sign nuclear agreement

December 9, 2015

Japan, India poised to forge nuclear power agreement

http://mainichi.jp/english/articles/20151209/p2a/00m/0na/007000c

December 9, 2015 (Mainichi Japan)
The Japanese and Indian governments are set to reach a broad agreement on nuclear power that would make it possible for Japan to export its nuclear technology to India, government sources disclosed on Dec. 8.
The two governments are making arrangements ahead of a summit to be held between Japanese Prime Minister Shinzo Abe and his Indian counterpart Narendra Modi in India on Dec. 12. If an agreement is reached, it would be the first pact between Japan and a country that has not signed the Nuclear Non-Proliferation Treaty (NPT).
India and Japan have continued working-level talks on exporting nuclear technology to India as the country looks to increase the number of its nuclear power plants to help solve its energy problems.
India conducted nuclear tests in 1974 and 1998 while remaining outside the NPT. Officials have therefore focused on how to respond should India conduct another nuclear test. Officials have also been wary of the reprocessing of spent nuclear fuel that could be converted for military use.
Japan, the only country to have suffered atomic-bomb attacks, has placed emphasis on nuclear nonproliferation under the NPT, and has sought regulations clearly stating that any agreement would be halted should India conduct a nuclear test. After its test in 1998, India declared a moratorium on nuclear testing.
When the United States formed an agreement with India in 2008, there were no stipulations on nuclear testing, but the U.S. established a domestic law under which exports of nuclear fuel to India would be suspended if India were to conduct a nuclear test.
India was reportedly reluctant to commit to a clear statement, but a Japanese Foreign Ministry official commented, "Regulations stricter than those of the United States are needed."

It appears that officials are searching for a compromise, such as a substantial mechanism to halt technical cooperation following any nuclear test.
India is asking that Japan consent to reprocessing of nuclear fuel at designated facilities, such as reprocessing facilities placed under the watch of the International Atomic Energy Agency. The United States has agreed to reprocessing at facilities that are under surveillance, and the Japanese government is expected to adopt a similar approach.

Japan, India in talks to seal nuclear pact

http://www3.nhk.or.jp/nhkworld/english/news/20151209_15.html

Dec. 9, 2015 - Updated 02:23 UTC+1
Officials from Japan and India are holding talks to lay the groundwork for an agreement on nuclear cooperation in time for a summit meeting this week.

Prime Minister Shinzo Abe will meet his counterpart Narendra Modi during a 3-day visit to India that starts on Friday.

The Japanese government hopes they will agree to sign a pact that would allow Japan to export nuclear power plant technology to India. The two countries have been discussing the deal for 5 years.

India is interested in Japanese nuclear technology to cope with a serious shortage of electricity.

But Japan has insisted that India promise not to convert the technology to military use. India is not a signatory to the Treaty on the Non-Proliferation of Nuclear Weapons.

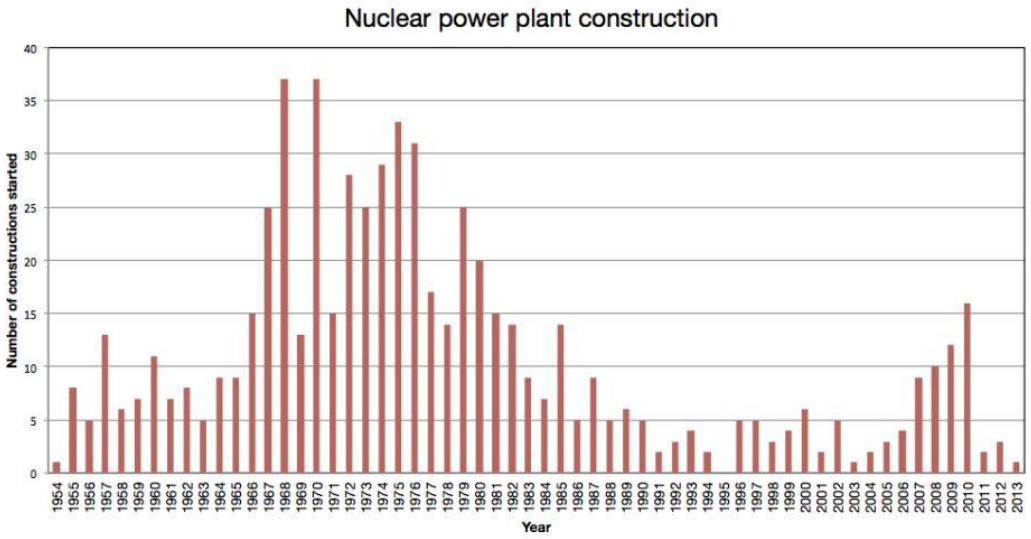
Michael Mariotte on the future of energy

GreenWorld

News, Views & Musings for our nuclear-free, carbon-free energy future

The nuclear industry's COP 21 dilemma: 100% renewables is attainable

http://safeenergy.org/2015/12/07/the-nuclear-industrys-cop-21-dilemma/



"Nuclear power plant construction" by James Douch – Own work. Licensed under CC BY-SA 3.0 via Commons –

If you think you've been seeing a lot more pro-nuclear propaganda in the media than usual in the past couple of weeks, well, it's not your imagination. The nuclear industry and its champions are out in force, publishing articles and appearing in the media wherever and whenever they can in what may be a last-ditch effort to convince the world–or at least its leaders–that nuclear power is the answer, or one answer, to our climate crisis. As one writer put it yesterday, "At the Paris Climate Summit (COP21), the global nuclear lobby is in overdrive."

If it all smacks a bit of desperation–and a lot of the pro-nuke pieces out there right now verge on the hysterical, with blatant attacks on those of us who envision a clean energy future–well, that's not your imagination either. That's because there is no global consensus on nuclear power. Some nations are against it entirely while a relatively few others are ardently pro-nuclear, with most–including the U.S.–somewhere in-between. And that means, by the very nature of the COP 21 talks, that nuclear isn't getting what the industry needs; indeed, so far at least, nuclear is simply a non-factor.

Still, it's important to examine and if possible refute the pro-nuclear assertions. It's important to prevent them from taking hold at COP 21, or afterwards, because making large-scale investments in nuclear power as a climate solution would make real carbon reductions more difficult to attain. Nuclear would set the world on the wrong path, and that would prove disastrous. Fortunately, refuting nuclear advocates' arguments becomes easier and easier with the passage of time. Not only are most of the industry's positions fantastical, but the concept of a world powered 100% by clean renewable energy is no longer seen as a hippie pipedream but as a necessary and, more importantly, achievable goal at every level–from individuals to large corporations to cities large and small to entire nations.

Leading the nuclear pack of course, by virtue of respect for his work on climate, is Dr. James Hansen and a small band of cohorts in the climate science community. At his press conference in Paris late last week (background here) and a companion piece published in The Guardian Thursday, Hansen et al made their familiar argument that nuclear must be considered a climate solution and that the world must rapidly develop "…next-generation nuclear power with a closed fuel cycle (where spent fuel is reprocessed)…"

A big part of that argument is their belief, which seems to be based mostly on International Energy Agency (IEA) reports and projections, that renewable energy currently provides only a tiny part of global electricity supply and that renewables cannot scale up rapidly enough to replace fossil fuels. Nuclear, they

claim on the other hand, can do so. According to Hansen, et al, "For example, a build rate of 61 new reactors per year could entirely replace current fossil fuel electricity generation by 2050. Accounting for increased global electricity demand driven by population growth and development in poorer countries, which would add another 54 reactors per year, this makes a total requirement of 115 reactors per year to 2050 to entirely decarbonise the global electricity system in this illustrative scenario. We know that this is technically achievable because France and Sweden were able to ramp up nuclear power to high levels in just 15-20 years."

If Hansen and his friends were correct, perhaps the argument would have merit. But they're not. First, the world has never built 115 reactors per year, much less come close to sustaining such a level for 35 years. The chart at the top of this page shows that, in fact, worldwide we've never even hit 40 per year, and in only four years–all during the nuclear go-go years of the 1970s– did we even top 30 new reactors. Note that the chart shows reactor construction starts, not completions–a lot of those starts, especially in the U.S., were never even finished.

While in theory the world could build more reactors than we presently are (and since Fukushima new starts have dropped to nearly nothing), 61 new reactors per year, over 35 years, is not even remotely achievable; 115 new reactors per years is pure fantasy. The world does not have the infrastructure to build that many, nor the infrastructure to operate that many (nor does the infrastructure, in terms of trained operators and other personnel, plus regulatory systems exist to handle even a fraction of that many reactors in any kind of safety-first environment).

And note that Hansen et al don't take into account the reality that by 2050, most of the existing reactors will have reached the end of their licensed lifetimes and will be closed, so there are another 400+ that would need to be built under their scenario.

The costs of attempting such a program would be astronomical. Not only are the reactors themselves the priciest means of electricity generation available today, but the costs of attempting to build an infrastructure capable of even a fraction of that many reactors would be prohibitive. Sure, there are costs involved with clean energy too; no one ever said addressing the climate crisis will be cheap (but we do, in fact, say a clean energy system will be economically beneficial), but at least it doesn't need the kind of infrastructure (giant complexes capable of forging reactor pressure vessels, huge expansion of nuclear regulatory agencies, etc) that nuclear does.

To look at this another way, consider: in the 60 years since the dawn of the commercial atomic age, the world has built and operated fewer than 600 nuclear reactors (there are 437 currently operable). Hansen, et al. argue this track record proves the world can successfully build and operate 4,025 more reactors in the next 35 years. **The history proves exactly the opposite.**

Clearly, however, the world could build more than we are doing now. Not enough to close a lot of coal plants or make a significant dent in carbon emissions, but we could build more. Do we need to? Can renewables really not scale up in time?

If one relies on IEA reports and projections, it's easy to see why you would think renewables can't handle the job. The IEA's World Energy Outlook shows that for 2013, renewables including large-scale hydro supplied only 4% of the world's primary energy (not just electricity, analyzing this way gives nuclear only 5% of primary energy). By 2040, the World Energy Outlook doesn't see much change: renewables are projected to supply 8% and nuclear 7%.

There are two problems here. First, we need to report and project electricity, not primary energy: nuclear reactors provide only electricity and so do most renewables. The second problem, as we've pointed out before, is that the IEA has proven invariably wrong when it comes to projecting the growth of renewables.

Renewables now provide 22.8% of the world's electricity–which even the IEA has been forced to admit places renewables as the second largest "fuel" source, behind only coal. So it's not renewables that are the small fish in the pond, it's nuclear. **In other words, nuclear power would have to scale up more rapidly than renewables to make a difference, not the other way around.**

And, again, the opposite is happening. Investment is going into renewables, not nuclear. Half of all new generation this year will be renewables (for the U.S. in October, *all* new generation was renewables) , and that number is likely to increase next year and every year from now on.

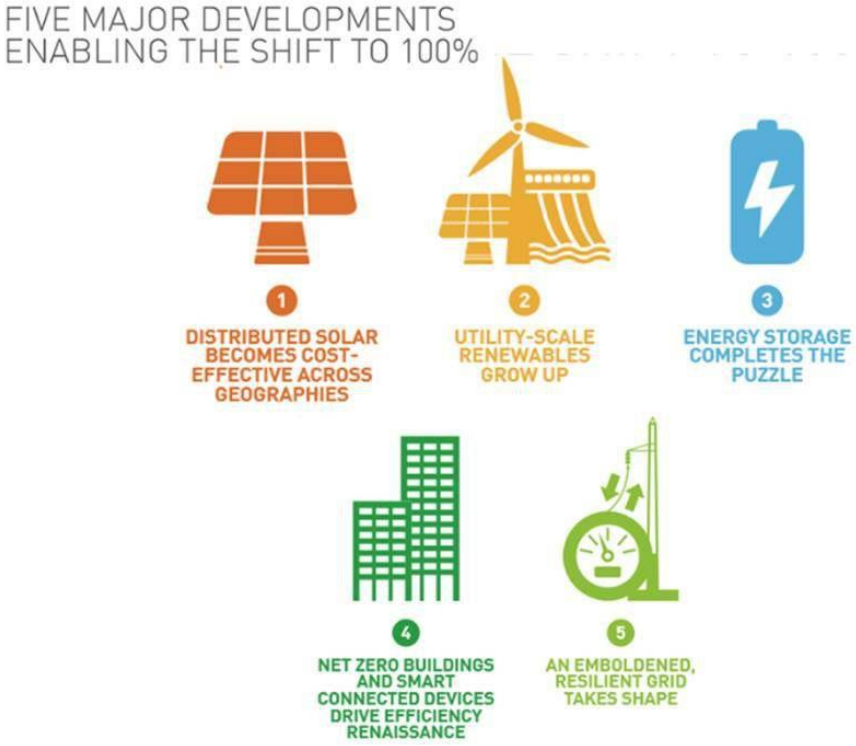
We've reported numerous times on investment bank studies showing that renewables are where they want to put their money. Here are two more from Goldman Sachs: one projects wind and solar power will provide more energy over the next five years than the shale gas (read: fracking) revolution has over the past five years. The other says the most effective investments to reduce carbon emissions are four existing technologies: solar, onshore wind, LED lighting and electric cars.

That these are existing technologies is important. Hansen et. al.'s nuclear-first approach requires use of "Generation IV" technologies that don't exist. The reality is that we have the tools to effectively address the climate crisis, we just need to use them. Bill Gates made a lot of headlines last week with his "Breakthrough Energy Coalition" fund to come up with new energy solutions, including "advanced" nuclear. It's not that innovation isn't welcome (and there remains plenty of innovation in clean energy technologies), but what's needed most right now is large-scale deployment of the innovations of the past few years. These, such as the technologies identified by Goldman Sachs, are already cost-effective and climate-effective. So why not use them?

But if we were to embark on a major new nuclear development and construction program, the economic resources to deploy the clean energy technologies would be dangerously depleted. "All of the above" always sounds reasonable to the public–why not do everything we can?–but it's not only unrealistic, it's irrational: since resources are not unlimited, choices are required and we need to focus resources on what works the best and the most cost-effectively. And that is renewables and efficiency, backed up with electricity storage (which we would argue Goldman Sachs should have included as a fifth effective investment).

Fortunately, the message is beginning to get through.

A growing number of large corporations–Google, Apple, Ikea and the like–are committed to 100% renewable energy for their operations, and are making the investments necessary to attain that goal. So are a growing number of cities: 1,000 mayors have descended on Paris this week with a call for a 100% renewable energy system. Entire nations are relatively quietly moving to 100% renewables; Uruguay, for example, is now at 95%. Even in the U.S. House of Representatives, one of the last bastions of outright climate denial, a resolution for a 100% renewable energy system has been introduced (H. Res. 540) with more than 20 co-sponsors.



Graphic from CleanEdge

All of this is being driven by the five factors in the graphic to the right (click to enlarge). Electricity storage was the missing link. While large-scale (30-40%) use of variable renewables is possible even without storage, 100% renewables was not. But the rapid growth of storage technology coupled with its equally-rapid decline in cost makes that goal both achievable and affordable.

There are more signs. Coal use is already dropping faster than anticipated. The U.S. Energy Information Administration (EIA), not quite as bad at projecting renewables as the IEA, but almost, suddenly added 30% more solar capacity in the U.S. because they've finally started counting rooftop solar. Contributing to the nuclear industry's hysteria in Paris this week is their knowledge that the announced early shutdowns of the Pilgrim and FitzPatrick reactors (on top of five closed reactors in 2013-14) and reactors in Sweden won't be the last such announcements.

A 100% renewable energy system is no longer far-fetched. It's being held back not by inadequate technology, not by an inability to scale up rapidly, but by the still-powerful–but decreasingly so–fossil fuel and nuclear interests. As their fortunes begin to fade, the political and economic power of those interests is weakening, but it must be weakened further.

The danger for the nuclear industry and its apologists is not that a massive clean energy campaign won't work, that renewables can't scale up quickly enough, that they can't reduce carbon and methane emissions fast enough, but that such a campaign *will* work. Because that will mean that nuclear, and its myriad of other environmental and economic deficiencies, simply aren't needed. And all the evidence shows that is, in fact, the case. Nuclear power is not needed to reduce emissions. And so why would anyone want to generate more lethal radioactive waste and subject the world to more permanently uninhabitable zones from the occasional and inevitable nuclear meltdowns? Obviously, the nuclear industry wants to protect its own economic interests. But for the rest of us–and that's nearly everyone–a nuclear-free, carbon-free system makes perfect sense.

Michael Mariotte

December 7, 2015
Permalink: http://safeenergy.org/2015/12/07/the-nuclear-industrys-cop-21-dilemma/

Nuclear pact with India

December 11, 2015

Abe off to India for talks with Modi on nuclear technology pact

http://www.japantimes.co.jp/news/2015/12/11/national/abe-off-india-talks-modi-nuclear-technology-pact/#.VmrpTr8R-os
JIJI, Reuters
Prime Minister Shinzo Abe left Friday for a three-day visit to India, where he will meet with his Indian counterpart, Narendra Modi, to discuss a proposed bilateral nuclear cooperation treaty.
Speaking to reporters at his office before departure from Tokyo International Airport at Haneda, Abe expressed his intention to make efforts to reach an agreement on measures to prevent Japanese nuclear technologies sold to India from being diverted to military use.
"Japan is the only country in the world that has ever suffered an atomic bombing," Abe said. "We're holding negotiations based on this fact."
India is not a signatory to the Nuclear Nonproliferation Treaty. The nuclear cooperation agreement with India would be Japan's first with a country outside the NPT regime.
Japan and India started negotiations on a bilateral nuclear cooperation treaty in 2010. They are in the final stages of discussions on whether to stipulate in the treaty that bilateral nuclear cooperation would be suspended if India conducts a nuclear test again. India has not carried out a nuclear test since 1998.
At their meeting slated for Saturday in New Delhi, Abe and Modi are also expected to reaffirm that their countries will strengthen cooperation with the United States at a time when China is accelerating its maritime expansion.
"I'm aiming for results (from the meeting) that will add strong momentum to the further development of the relationship between Japan and India," Abe said.
The two leaders are also seen agreeing on the use of Japan's shinkansen system for a planned high-speed railway between Mumbai and Ahmedabad in western India. Japan is planning to support the project with a large amount of low-interest yen loans.
On Thursday, an Indian government minister and official said India's Cabinet has cleared a $14.7 billion Japanese proposal to build its first bullet train line, one of India's biggest foreign investments in its infrastructure sector.
The decision ahead of Abe's visit gives Japan an early lead over China, which is also bidding to build high-speed rail lines across large parts of India's congested and largely British-era system.
Japan had offered to finance 80 percent of the cost of the train, which would link the financial capital Mumbai with Ahmedabad, the commercial center of Indian Prime Minister Narendra Modi's home state of Gujarat, at an interest rate of less than 1 percent.
"It's been done," said a government minister who attended the Cabinet meeting headed by Modi late on Wednesday.

An official in Modi's office confirmed the decision, saying there were some issues relating to the bullet train that had since been sorted out in time for Abe's visit.
"We expect to make an announcement during the visit," the official said. Both the minister and the official declined to be identified.
Broad agreements are also likely to be reached on two bilateral treaties that would enhance defense cooperation between Japan and India.
One is designed to prevent the transfer of defense technologies to a third country, while the other will specify rules for information protection.
This is Abe's third trip to India, including during his first tenure between 2006 and 2007. It will be the fifth time for him to have bilateral talks with Modi.
Abe and Modi will together visit the sacred Hindu city of Varanasi on Saturday in a gesture to further deepen their personal relationship of trust.

India-Japan nuclear ties

December 12, 2015

India to get Japan's bullet train, deepens defense and nuclear ties

http://ajw.asahi.com/article/behind_news/politics/AJ201512120053
REUTERS
NEW DELHI--Japan will provide $12 billion of soft funding to build India's first bullet train, the two countries announced on Dec. 12 during a visit by Prime Minister Shinzo Abe, which also yielded deeper defense ties and a plan for civil nuclear cooperation.
Relations have strengthened between Asia's second and third largest economies as Abe and his Indian counterpart, Narendra Modi, seek to balance China's rise as Asia's dominant power.
The deal to build a high-speed train line between the financial hub of Mumbai and Ahmedabad city gives Japan an early lead over China, which is conducting feasibility studies for high speed trains on other parts of the Indian rail network.
"This enterprise will launch a revolution in Indian railways and speed up India's journey into the future. It will become an engine of economic transformation in India," Modi said in a speech.
Under the defense deals announced on Dec. 12, the two sides will share technology, equipment and military information, but the long-awaited sale of Japanese aircraft in a deal worth about $1.1 billion was not concluded.
Similarly, while they agreed to work toward cooperation in civil-nuclear technology, they stopped short of signing an agreement, citing outstanding technical differences.
Japan, the only country to have experienced nuclear attacks, has been demanding additional nonproliferation guarantees from India before it exports nuclear reactors.
India and Japan have been negotiating a nuclear energy deal since Japan's ally, the United States, opened the way for nuclear commerce with India despite its weapons program.

"The memorandum we signed on civil nuclear energy cooperation is more than just an agreement for commerce and clean energy, it is a shining symbol of a new level of mutual confidence and strategic partnership in the cause of peaceful and secure world," Modi said.
"I know the significance of this decision for Japan and I assure you that India deeply respects that decision and will honor our shared commitment," Modi added.
India and Japan have been holding talks for two years on the purchase by India of US-2 amphibious aircraft made by ShinMaywa Industries, which would be one of Japan's first arms sales since Abe lifted a 50-year ban on weapon exports.

December 11, 2015

Abe off to India for talks with Modi on nuclear technology pact

http://www.japantimes.co.jp/news/2015/12/11/national/abe-off-india-talks-modi-nuclear-technology-pact/#.VmrpTr8R-os
JIJI, Reuters
Prime Minister Shinzo Abe left Friday for a three-day visit to India, where he will meet with his Indian counterpart, Narendra Modi, to discuss a proposed bilateral nuclear cooperation treaty.
Speaking to reporters at his office before departure from Tokyo International Airport at Haneda, Abe expressed his intention to make efforts to reach an agreement on measures to prevent Japanese nuclear technologies sold to India from being diverted to military use.
"Japan is the only country in the world that has ever suffered an atomic bombing," Abe said. "We're holding negotiations based on this fact."
India is not a signatory to the Nuclear Nonproliferation Treaty. The nuclear cooperation agreement with India would be Japan's first with a country outside the NPT regime.
Japan and India started negotiations on a bilateral nuclear cooperation treaty in 2010. They are in the final stages of discussions on whether to stipulate in the treaty that bilateral nuclear cooperation would be suspended if India conducts a nuclear test again. India has not carried out a nuclear test since 1998.
At their meeting slated for Saturday in New Delhi, Abe and Modi are also expected to reaffirm that their countries will strengthen cooperation with the United States at a time when China is accelerating its maritime expansion.
"I'm aiming for results (from the meeting) that will add strong momentum to the further development of the relationship between Japan and India," Abe said.
The two leaders are also seen agreeing on the use of Japan's shinkansen system for a planned high-speed railway between Mumbai and Ahmedabad in western India. Japan is planning to support the project with a large amount of low-interest yen loans.
On Thursday, an Indian government minister and official said India's Cabinet has cleared a $14.7 billion Japanese proposal to build its first bullet train line, one of India's biggest foreign investments in its infrastructure sector.
The decision ahead of Abe's visit gives Japan an early lead over China, which is also bidding to build high-speed rail lines across large parts of India's congested and largely British-era system.
Japan had offered to finance 80 percent of the cost of the train, which would link the financial capital Mumbai with Ahmedabad, the commercial center of Indian Prime Minister Narendra Modi's home state of Gujarat, at an interest rate of less than 1 percent.

“It’s been done,” said a government minister who attended the Cabinet meeting headed by Modi late on Wednesday.
An official in Modi’s office confirmed the decision, saying there were some issues relating to the bullet train that had since been sorted out in time for Abe’s visit.
“We expect to make an announcement during the visit,” the official said. Both the minister and the official declined to be identified.
Broad agreements are also likely to be reached on two bilateral treaties that would enhance defense cooperation between Japan and India.
One is designed to prevent the transfer of defense technologies to a third country, while the other will specify rules for information protection.
This is Abe’s third trip to India, including during his first tenure between 2006 and 2007. It will be the fifth time for him to have bilateral talks with Modi.
Abe and Modi will together visit the sacred Hindu city of Varanasi on Saturday in a gesture to further deepen their personal relationship of trust.

Japanese agreement with India raises protests

December 12, 2015

Civic groups, A-bomb survivors blast Japan-India nuclear power deal

http://www.japantimes.co.jp/news/2015/12/12/national/civic-groups-a-bomb-survivors-blast-japan-india-nuclear-power-deal/#.Vm1_nr8R-ov

Kyodo

Civic groups and atomic bomb survivors on Saturday criticized the Japanese government for agreeing with India to work toward sealing a civil nuclear cooperation pact, fearing the move might lead India to divert the technology to weapons production.

Some 150 civic group members and others gathered in front of the prime minister's office in Tokyo, holding banners such as "We cannot create peace with nuclear" and protesting, "We oppose the Japan-India nuclear deal."

A deal, which involves the export of Japanese nuclear power plant technology, is controversial because India, a nuclear-weapon nation that conducted its first nuclear test in 1974, has not joined the Nuclear Non-Proliferation Treaty. The NPT only recognizes Britain, China, France, Russia and the United States as nuclear powers.

Kanna Mitsuta, a member of an environmental group called Friends of the Earth Japan, said the agreement "tramples" on nonproliferation efforts made by Japan, which had the bitter experience of suffering the devastation of U.S. atomic bombings during World War II.

S.P. Udayakumar, a leading figure in India's anti-nuclear movement, also joined the event via Skype, condemning Japan for trying to sell nuclear power even though its own people are struggling due to the 2011 Fukushima nuclear power plant disaster.

While admitting that the fast-growing Asian country needs electricity, he said people do not want it in the form of nuclear power.

People in Hiroshima and Nagasaki, the two Japanese cities reduced to ruins by U.S. atomic bombs in 1945, also expressed anger.

Hiroshi Shimizu, secretary general of the Hiroshima Prefectural Confederation of A-Bomb Sufferers Organizations said, "We are not sure when India, for some reason, will seek to divert the technology to nuclear weapons."

"This move is intolerable for atomic bomb survivors because it goes against the government's position to seek the abolition of nuclear weapons," the 73-year-old Shimizu said.

Nagasaki Mayor Tomihisa Taue called the latest development "extremely regrettable," noting that atomic bomb survivors' groups and many others were against the civil nuclear cooperation pact.

"I strongly urge (the Japanese government) to fulfill its responsibility as a country subjected to nuclear weapons," he said.

In India on Saturday, Japanese Prime Minister Shinzo Abe agreed with his Indian counterpart Narendra Modi in principle on concluding a civil nuclear cooperation pact, saying the deal will be signed after technical details are finalized.

Reduce thermal to cut emissions

December 17, 2015

Panel: Japan needs to reduce thermal power plants

http://www3.nhk.or.jp/nhkworld/english/news/20151218_02.html

Dec. 17, 2015 - Updated 17:42 UTC+1

An expert panel of Japan's environment ministry has compiled the outline of a proposal calling for fewer coal-fired and other thermal power plants to meet pledges in the new global climate framework agreed in Paris.

The Paris accord obligates countries to submit emissions-cut goals every 5 years. It also seeks to cut net global greenhouse gas emissions to zero in the second half of this century by reducing emissions to levels that forests, oceans, and other matter can fully absorb.

The expert panel discussed how Japan should set a long-term emissions reduction plan within the new framework.

They agreed to advise the ministry to go ahead with a significant cut in the number of thermal power plants. They say such a cut is needed to achieve a Cabinet-decided long-term goal of cutting emissions by 80 percent by 2050.

They say if the country wants to stick to thermal plants, it must use expensive technology to bury carbon dioxide deep underground. They add because of the high cost, Japan must be careful in approving the construction of coal-fired thermal plants.

Plans to build coal-fired plants are gaining momentum in Japan amid the stall of nuclear power generation after the 2011 Fukushima Daiichi accident. In addition, scheduled deregulation of electricity retailing in April is leading newcomers to tend to pick coal-fired thermal plants based on cheaper coal costs.

The panel will submit the final proposal around January of next year.

Nuclear pact with India should not be rushed

January 7, 2015

Govt. to carefully handle nuclear pact with India

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Jan. 7, 2016 - Updated 22:08 UTC+1
The Japanese government will not seek the approval of a nuclear power pact with India at the current Diet session. It cites the need for careful bilateral coordination.

Japan's Vice Foreign Minister Akitaka Saiki and India's Foreign Secretary S. Jaishankar met in Tokyo on Thursday. They discussed procedures to conclude a nuclear pact.

Last month, Japanese Prime Minister Shinzo Abe and his Indian counterpart, Narendra Modi, agreed in principle to conclude a pact that would allow Japan to export its nuclear power-related technology to India.

The mayors of Hiroshima and Nagasaki have expressed regret over the deal. They say **India held nuclear tests in the past and is not a signatory to the Nuclear Non-Proliferation Treaty.**
A senior Foreign Ministry official says the content of a pact must be firm enough to get through expected rigorous debate at the Diet. Parliamentary approval is needed for concluding the deal.

Other government officials have expressed the desire not to proceed hastily with the deal ahead of an Upper House election this summer.

Japan needs to hold in-depth debate on nukes

January 12, 2016

Nuclear Watch: When will Japan awake from the 'dream' of nuclear energy? (Pt. 63)

http://mainichi.jp/english/articles/20160112/p2a/00m/0na/005000c

People form human letters saying the equivalent of, "Congratulations, initial firing ceremony," on the premises of JRR-1, Japan's first nuclear reactor, on Sept. 18, 1957. (Mainichi)

"Japan still has a dream that the country had when it started using atomic energy," said Nobuyasu Abe, a member of the Japan Atomic Energy Commission (AEC), when he talked in a recent interview about challenges that Japan's nuclear energy policy faces.
Abe, 70, has raised questions about Japan sticking to all nuclear-related projects, including fast-breeder reactors and nuclear fuel reprocessing facilities, based on the idea in the 1950s that uranium is an important resource and must be effectively utilized. **Abe calls it "a law of inertia," and dismisses it as Japan's bad habit. He points to the need to hold in-depth debate on the issue depending on changes of the times.**

Japan has repeated that it will never have surplus plutonium. Still, Japan has found no way to spend 47.8 tons of plutonium that the country has accumulated. With revisions to the Japan-U.S. nuclear energy agreement coming in three years, bilateral negotiations on the matter will face rough going unless Tokyo paves the way for solving this problem.

"Holding Japan-U.S. talks (on the issue) is equal to considering the future direction of Japan's atomic energy," says Toichi Sakata, 67, former vice minister of education, culture, sports, science and technology, who was involved in bilateral talks in the 1980s.

Sakata suggests that **unless all those involved in the use of nuclear energy begin discussions to work out long-term policy measures, Japan's utilization of atomic energy will come to a deadlock.**

There is a reference case in Britain, which has accumulated 114 tons of plutonium for civilian use, more than twice the amount Japan possesses. Britain held discussions for nearly two years from 2010 on whether plutonium is a resource or waste because the country needed to spend 2 billion pounds a year, or some 240 billion yen at the exchange rate at the time, on storing plutonium and had difficulties managing it. People from various circles participated in the discussions. The process of the discussions was fully released to the public for national debate. They concluded that plutonium should be used to make mixed-oxide fuel and plutonium that could not be processed to produce such fuel should be dumped.

Tatsujiro Suzuki, 64, professor at Nagasaki University who had served as acting chairman of the AEC, points out that Britain has expressed its readiness to take over plutonium Japan has accumulated if Tokyo pays a certain amount of money. Suzuki says this is an option.

One cannot help but wonder when Japan will awake from its "dream." **Japan should hold in-depth debate from a long-term perspective instead of adopting an all-or-nothing approach of simply debating whether to promote or discontinue the use of atomic energy.** (By Haruyuki Aikawa, Senior Writer)

What nuclear "renaissance"?

Nuclear renaissance? Failing industry is running flat out to stand still

http://www.theecologist.org/News/news_analysis/2987010/nuclear_renaissance_failing_industry_is_running_flat_out_to_stand_still.html

Dr Jim Green

30th January 2016

Despite the endless rhetoric about a 'nuclear renaissance', there are fewer power reactors today than there were a decade ago, writes Jim Green. The one country with a really big nuclear build program is China, but no one expects it to meet its targets. And with over 200 reactor shut-downs due by 2040, the industry will have to run very hard indeed just to stay put.

Over the next 10-20 years, global nuclear capacity may increase marginally, with strong growth in China more than masking patterns of stagnation and decline elsewhere. Beyond that, the aging of the global fleet of power reactors will be sharply felt.

Ten new power reactors began supplying electricity last year (eight of them in China), and eight reactors were permanently shut down.

Nuclear power's 20-year pattern of stagnation continues. In 1995 there were 434 'operable' reactors - operating plus temporarily shut down reactors. In 2005 there were 441, and now there are 439.

Thus there are fewer reactors today than there were a decade ago. Moreover the 439 figure includes 41 reactors in Japan that have been shut down for several years, and not all of them will be restarted.

The nuclear power industry's malaise was all too evident at the COP21 UN climate change conference in Paris in December. Former World Nuclear Association executive Steve Kidd noted:

"It was entirely predictable that the nuclear industry achieved precisely nothing at the recent Paris COP21 talks and in the subsequent international agreement. ...

"Analysis of the submissions of the 196 governments that signed up to the Paris agreement, demonstrating their own individual schemes on how to reduce national carbon emissions, show that nearly all of them exclude nuclear power.

"The future is likely to repeat the experience of 2015 when 10 new reactors came into operation worldwide but 8 shut down. So as things stand, the industry is essentially running to stand still."

According to the International Atomic Energy Agency, only seven out of 196 countries mentioned nuclear power in their climate change mitigation plans prepared for the COP21 conference: China, India, Japan, Argentina, Turkey, Jordan and Niger.

Now it's getting nasty

A striking feature of the debates around the COP21 conference was the vitriol directed at the anti-nuclear and environmental movements. Tim Judson from the Nuclear Information and Resource Service noted:

"The industry's rhetoric is getting increasingly desperate and personal. The industry rolled out a new front group called 'Nuclear for Climate', which handed out thousands of copies of a book attacking anti-nuclear activists and blaming us for the climate crisis.

"Needless to say, their efforts to intimidate activists are backfiring. In fact, they have given us a clear sign of how close we are to winning.

"Greenpeace International's Kumi Naidoo reminded activists in a speech in December - in which he broadened the call for divestment to include nuclear, as well as fossil fuels - of the famous adage attributed to Gandhi about the path to victory: 'First they ignore you. Then they laugh at you. Then they fight you. And then you win.'"

Perhaps the five stages of grief are relevant as nuclear lobbyists confront the reality that the nuclear renaissance didn't eventuate and isn't likely to. Denial and anger are very much in evidence, along with some bargaining ('we need all low carbon power sources'), depression and, in time, acceptance.

China's great leap forward

With 30 operable reactors, 24 under construction, and many more in the pipeline, China remains the only country with significant nuclear expansion plans. China is unlikely to meet any of its targets - 58 GW by 2020, 110 GW by 2030 and up to 250 GW by 2050 - but growth will be significant nonetheless.

Growth could however be derailed by a serious accident, which is all the more likely because of China's inadequate nuclear safety standards, inadequate regulation, lack of transparency, repression of whistleblowers, world's worst insurance and liability arrangements, security risks, and widespread corruption.

There are fears, for example, that China may press ahead with its twin-EPR project at Taishan despite fears over the metallurgy of its reactor vessels and heads. Similar components supplied to the EPR at Flamanville in France have been found to have areas of excessive carbon leading to brittleness and possible failure in use. The French project is now on hold and may never be completed.

Over the next 10-20 years, global nuclear capacity may increase marginally, with strong growth in China more than masking patterns of stagnation and decline elsewhere. Beyond that, the aging of the global fleet of power reactors will be sharply felt: the International Energy Agency anticipates almost 200 permanent shut-downs by 2040.

Steve Kidd notes that the industry is running to stand still, and it will have to run faster to stand still as the annual number of shut-downs increases.

Growth elsewhere?

India is the only other country where there is a possibility of significant nuclear growth in the nearish-future. But nuclear growth in India has been modest - six reactor start-ups over the past decade - and may remain so.

In early 2015, India claimed to have resolved one of the major obstacles to foreign investment by announcing measures to circumvent a liability law which does not completely absolve suppliers of responsibility for accidents.

But those claims were met with scepticism and a capital strike by most foreign suppliers is still in effect. Strong public opposition - and the Indian state's brutal response to that opposition - will also continue to slow nuclear expansion.

India has just signed an 'preliminary agreement' with EDF to build a massive six-reactor EPR project at Jaitapur, 360km south of Mumbai. But given the still-unresolved liability issues and the EPR's disastrous construction record to date, it's hard imagine any but the most cautious of progress taking place.

Meanwhile renewables are surging ahead. One part of the Jaitapur deal that is likely to move ahead fast is 142MW of wind power in Gujarat that EDF is to develop with its Indian partner, SITAC.

And in mid-January 2016, the latest auction of solar energy capacity in India achieved a new record low price of 4.34 rupees / kWh (US$0.064; €0.059). Energy minister Piyush Goyal said: *"Through transparent auctions with a ready provision of land, transmission and the like, solar tariffs have come down below thermal power cost."*

Russia has 35 operating reactors and eight under construction (including two very low power floating reactors). Only six reactors have started up over the past 20 years, and only four over the past decade. The pattern of slow growth will continue.

As for Russia's ambitious nuclear export program, Steve Kidd noted in October 2014 that it *"is reasonable to suggest that it is highly unlikely that Russia will succeed in carrying out even half of the projects in which it claims to be closely involved".*

South Korea has 25 operable reactors and three under construction. Six reactors have started up over the past decade. Along with China, India and Russia, South Korea is supposedly one of the four countries driving the 'nuclear renaissance'. But the best the industry can hope for in South Korea is slow growth.

South Africa plans 9.6 GW of new nuclear capacity to add to the two Koeberg reactors. But the nuclear program is more theatre than reality. Pro-nuclear commentator Dan Yurman states:

"South Africa's plans to build 9.6 GW of nuclear power will continue to be embroiled in political controversy and be hobbled by a lack of realistic financial plans to pay for the reactors.

"Claims by both Rosatom and Chinese state nuclear firms that they have won the business are not credible. Even if written down on paper, these claims of contracts cannot be guaranteed in the long term due to the political twists and turns by South African President Jacob Zuma.

"Most recently, he burned through three finance ministers over differences about whether the country could afford the cost of the reactors said to be at as much as US$100 billion including upgrades to the electrical grid. Additionally, Zuma is distracted by political and personal scandals."

Brazil's nuclear industry provided some theatre in 2015 with the arrest of Othon Luiz Pinheiro da Silva, the former CEO of Brazil's nuclear power utility Eletronuclear, for allegedly accepting bribes to fix the bidding process for the Angra 3 reactor under construction 100 km from Rio de Janeiro. Fourteen other people were also charged as a result of the federal police's 'Operation Radioactivity'.
"The arrest is a tragedy for the industry," said former Eletrobras' chief executive Luiz Pinguelli Rosa. *"The industry was already in crisis, but now the corruption concerns are bound to delay Angra 3 further and cause costs to rise even more."*
Newcomer countries: The World Nuclear Association claims that *"over 45 countries are actively considering embarking upon nuclear power programmes."* Balderdash. Only two 'newcomer' countries are actually building reactors - Belarus and the United Arab Emirates. Other countries might join the nuclear club but newcomers will be few and far between.
Moreover, some countries are phasing out nuclear power. Countries with nuclear phase-out policies include Germany, Belgium, Taiwan, and Switzerland. Other countries - e.g. Sweden - may phase out nuclear power partly as a result of deliberate government policy and partly because of natural attrition: aging reactors are being shut down without replacement.
Stagnation and decline
Patterns of stagnation or slow decline in North America and western Europe can safely be predicted. In 2014, the European Commission forecast that EU nuclear generating capacity of 131 GW in 2010 will decline to 97 GW in 2025.
The European Commission forecasts that nuclear's share of EU electricity generation will decline from 27% in 2010 to 21% in 2050, while the share from renewables will increase from 21% to 51.6%, and fossil fuels' share will decline from 52% to 27%.
The most important nuclear power story of 2015 was legislation enacted in the French Parliament in July that will reduce nuclear's share of electricity generation from 75% to 50% by 'around' 2025, and caps nuclear capacity at the current level of 63.2 GW.
The legislation also establishes a target of 32% of electricity generation from renewables by 2030, a 40% reduction in greenhouse gas emissions and a 20% reduction in overall energy consumption by 2030.
In April 2015, a report by ADEME, a French government agency under the Ministries of Ecology and Research, shows that 100% renewable electricity supply by 2050 in France is feasible and affordable.
French EPR reactor projects in **France and Finland** are three times over budget and many years behind schedule. As already noted, in April 2015 it was revealed that EDF's Flamanville EPR under construction in France has a weak pressure vessel and head, and that the same problem may afflict China's twin-EPR project with EDF at Taishan.
A January 2016 update to the World Nuclear Industry Status Report discusses the miserable state of the French nuclear industry:
"The French state-controlled AREVA, having announced an outlook of a further 'heavy loss' in 2015, was downgraded by credit-rating agency Standard & Poor's to B+ ("highly speculative"). On 29 December 2015, the company plunged to a new historic low on the stock market (€5.30 compared to €72.50 eight years ago).
"On 7 December 2015, Euronext ejected the French heavy weight Électricité de France (EDF), largest nuclear utility in the world and "pillar of the Paris Stock Exchange", from France's key stock market index, known as CAC40. One day later, EDF shares lost another four percent of their value, which led to a new low, a drop of over 85 percent from its 2007 level. ...
"The French nuclear industry's international competitors are not doing much better. AREVA's Russian counterpart Atomenergoprom as well as the Japanese controlled Toshiba-Westinghouse were both downgraded to 'junk' ('speculative') by credit-rating agencies during the year."

Next door in **Belgium**, ageing reactors at Doel and Tihange - shut down a year ago because of serious safety concerns over numerous leaks and, at Tihange, 16,000 reactor vessel cracks - are scheduled to start up shortly, triggering serious concern across Europe. An Avaaz petition to be delivered to Belgium by German Environment Minister Barbara Hendricks on Monday has already attracted almost 500,000 signatures.

In the **United States**, utilities announced two more reactor shut-downs in 2015: the FitzPatrick reactor in New York will be shut down in 2016, and the Pilgrim reactor in Massachusetts will be closed between 2017 and 2019.

Five reactors are under construction but a greater number have been shut down recently or will be shut down in the next few years. The last reactor start-up was in 1996. In August 2015 the Environmental Protection Agency released its final Clean Power Plan, which failed to give the nuclear industry the subsidies and handouts it was seeking.

A decade ago, the US Nuclear Regulatory Commission was flooded with applications for US$127 billion (€117b) worth of reactor projects. Now, obituaries for the US nuclear power renaissance are increasingly common.

The situation is broadly similar in the **United Kingdom** - the nuclear power industry there is scrambling just to stand still. It should be clear by the end of this year whether the extraordinarily expensive Hinkley C EPR project will go ahead. But the signs are not good for the project's backers: EDF was due to make its 'final investment decision' this week, but flunked out owing to its inability to raise the necessary £18 billion.

According to the World Nuclear Association, most of the UK's reactors are to be retired by 2023. If other projects prove to be as expensive and difficult as Hinkley C, it's unlikely that new nuclear capacity will match retirements.

In **Japan**, only two of the country's 43 operable reactors are actually operating. Perhaps half to two-thirds of the reactors will eventually restart. Five reactors were permanently shut down in 2015, and the six reactors at Fukushima Daiichi have been written off.

Before the Fukushima disaster, Tokyo planned to add another 15-20 reactors to the fleet of 55, giving a total of 70-75 reactors. Thus, Japan's nuclear power industry will be at most half the size it might have been if not for the Fukushima disaster.

Generation IV reactors to the rescue?

Rhetoric about 'super safe', 'best thing since sliced bread' Generation IV reactors will likely continue unabated. That said, critical reports released by the US and French governments last year may signal a slow shift away from Generation IV reactor rhetoric.

The report by the French Institute for Radiological Protection and Nuclear Safety (IRSN) - a government authority under the Ministries of Defense, the Environment, Industry, Research, and Health - states:

"There is still much R&D to be done to develop the Generation IV nuclear reactors, as well as for the fuel cycle and the associated waste management which depends on the system chosen."

IRSN is also sceptical about safety claims: *"At the present stage of development, IRSN does not notice evidence that leads to conclude that the systems under review are likely to offer a significantly improved level of safety compared with Generation III reactors ... "*

The US Government Accountability Office released a report in July 2015 on the status of small modular reactors (SMRs) and other 'advanced' reactor concepts in the US. The report concluded:

"While light water SMRs and advanced reactors may provide some benefits, their development and deployment face a number of challenges ... Depending on how they are resolved, these technical challenges

may result in higher-cost reactors than anticipated, making them less competitive with large LWRs [light water reactors] or power plants using other fuels ...
"Both light water SMRs and advanced reactors face additional challenges related to the time, cost, and uncertainty associated with developing, certifying or licensing, and deploying new reactor technology, with advanced reactor designs generally facing greater challenges than light water SMR designs.
"It is a multi-decade process, with costs up to $1 billion to $2 billion, to design and certify or license the reactor design, and there is an additional construction cost of several billion dollars more per power plant."
Even SMR boosters are struggling to put a positive spin on the situation. Launching a Nuclear Energy Insider report on SMRs, lead author Kerr Jeferies said: *"From the outside it will seem that SMR development has hit a brick wall, but to lump the sector's difficulties together with the death of the so-called nuclear renaissance would be missing the point."*
According to a US think tank, 48 companies in north America, backed by more than US$1.6 billion (€1.5b) in private capital, are developing plans for advanced nuclear reactors. But even if all that capital was invested in a single R&D project, it would not suffice to commercialise a new reactor type.
The UK government also sees a big future for SMRs and has even promised to spend £250 million on *"nuclear innovation and Small Modular Reactors"*. But it will face two big problems. First, the money won't go far. And second, nuclear power is already being outcompeted by wind and solar, which are getting cheaper all the time.
Dan Yurman notes in his review of nuclear developments in 2015: *"Efforts by start-up type firms to build advanced reactors will continue to generate a lot of media hype, but questions are abundant as to whether this activity will result in prototypes.*
"For venture capital firms that have invested in advanced designs, cashing out may mean licensing a design to an established reactor vendor rather than building a first-of-a-kind unit."
***Dr Jim Green** is the national nuclear campaigner with Friends of the Earth Australia and editor of the* Nuclear Monitor *newsletter, where this article was originally published. Nuclear Monitor is published 20 times a year. It has been publishing deeply researched, often strongly critical articles on all aspects of the nuclear cycle since 1978. A must-read for all those who work on this issue!*

Three reactors to be scrapped

February 11, 2016

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http://www.japantimes.co.jp/news/2016/02/11/national/kansai-electric-japan-atomic-power-move-plans-scrap-three-reactors/#.VrxnNlKDmot

JIJI
Kansai Electric Power Co. and Japan Atomic Power Co. will submit applications to the Nuclear Regulation Authority as early as Friday seeking approval for plans to scrap aging nuclear reactors in western Japan, it was learned Thursday.

The timetables for the **No. 1 and No. 2 reactors of Kansai Electric's Mihama plant** and for the **No. 1 reactor of Japan Atomic Power's Tsuruga plant** will outline the facilities and equipment to be dismantled and the length of time it will take to complete the work.
The dismantling operations are expected to take around 30 years for the Mihama No. 1 and No. 2 reactors and about 25 years for the Tsuruga No. 1 reactor, informed sources said. The three reactors, **all in Fukui Prefecture**, were decommissioned in April last year.
On Wednesday, **Kansai Electric and Japan Atomic Power concluded agreements with the Fukui Prefectural Government and the governments of the host municipalities** — the town of Mihama and city of Tsuruga. The agreements, which include regional revitalization measures, are the first of their kind in Japan.
Along with the three reactors, the No. 1 reactor at Kyushu Electric Power Co.'s Genkai plant in Saga Prefecture and the No. 1 reactor at Chugoku Electric Power Co.'s Shimane plant in Shimane Prefecture were decommissioned in April last year.
Kyushu Electric filed an application in December for NRA approval of its schedule to scrap the Genkai No. 1 reactor.

Worldwide more wind than nukes

February 20, 2016

Global wind power capacity tops nuclear energy for first time

http://www.japantimes.co.jp/news/2016/02/20/national/global-wind-power-capacity-tops-nuclear-energy-for-first-time/#.VshjTeaDmot

Kyodo
The capacity of wind power generation worldwide reached 432.42 gigawatts (GW) at the end of 2015, up 17 percent from a year earlier and surpassing nuclear energy for the first time, according to data released by global industry bodies.
The generation capacity of wind farms newly built in 2015 was a record 63.01 GW, corresponding to about 60 nuclear reactors, according to the Global Wind Energy Council based in Brussels. The global nuclear power generation capacity was 382.55 GW as of Jan. 1, 2016, the London-based World Nuclear Association said.
Both wind power and nuclear energy are being touted as alternatives to fossil fuel power as they produce fewer greenhouse gases.
Wind energy has captured renewed attention as technological innovation has considerably lowered its generation costs while nuclear power continues to suffer a backlash following the 2011 Fukushima meltdowns.
Wind power is the leading energy source in the transition from fossil fuels to renewables, the wind energy council said as it released the data last week.
China led all other countries in wind energy generation capacity with 145.10 GW. Beijing is promoting wind power to shift from coal and other fossil fuels to combat air pollution and global warming.

Coming in second behind China is the United States with 74.47 GW, followed by Germany with 44.95 GW, then India with 25.09 GW and then Spain with 23.03 GW. Japan produced 3.04 GW.

Greenpeace: 5 years and far from over

Source : Greenpeace
http://www.greenpeace.org/international/en/news/Blogs/nuclear-reaction/fukushima-nuclear-crisis-japan-radiation-research/blog/55623/

Five years on and the Fukushima crisis is far from over

Blogpost by **Shaun Burnie** - 24 February, 2016 at 20:00 1 comment

Five years ago the Rainbow Warrior sailed along the Fukushima coast conducting radiation sampling. Now it's back, and has Japan's ex-Prime Minister on board.

Scotland is over 9,000 km from Japan, but there's something the two countries have in common. Along the Scottish coastline, buried in riverbeds, and mixed into the Irish Sea, you can find significant radioactive contamination coming from the other side of the world. Yes, radioactive contamination. All the way from Japan.

Since the 1970s, Sellafield, a nuclear-reprocessing plant in northwest England has been contracted to process high level nuclear waste spent fuel from Japanese reactors. More than 4000 tonnes of spent nuclear fuel was shipped from Japan to Sellafield, including waste from Tokyo Electric Power Company (TEPCO), the owner of the Fukushima Daiichi nuclear plant. As result of reprocessing at Sellafield, more than 8 million litres of low level nuclear waste is discharged into the ocean every day. It's been labelled the "most hazardous place in Europe" - with levels of contamination in the fields, soils and estuaries at a level that can only be described as a nuclear disaster zone. In fact, the Irish Sea is arguably the most radioactively contaminated sea in the world

We're about to approach the five-year anniversary of the Fukushima Daiichi nuclear disaster, and this is a stark reminder that no matter where you are or how far away, nuclear power has a local and global impact.

I remember waking up to the news on March 11, 2011. Though I was at home in Scotland, I've never felt so connected to the people of Japan. Having spent decades with Greenpeace actively campaigning against nuclear power in Japan, I knew deep down that a catastrophic accident was only a matter of time. With media requests coming in thick and fast, I recall appearing on BBC World News live. In mid-interview, as I was talking about the specific threat at Fukushima, I was interrupted as the news crossed to Japan where Reactor 3 exploded.

Greenpeace Japan sent a team to the Fukushima evacuation zone to conduct independent radiation testing; and researchers on the Rainbow Warrior, kitted up in full body chemical suits, pulled floating seaweed from the surrounding area to use as samples. Our results were unfortunately as you would expect – high levels of contamination. Subsequently, we've also found radiation is still so widespread that it's unsafe for people to return across large parts of Fukushima.

Nearly five years later and I'm in Japan on-board the Rainbow Warrior - this time with the famously anti-nuclear former Prime Minister of Japan, Mr. Naoto Kan. It's truly an honour and privilege to hear him describe the first hours and days of the accident in March 2011, as well as show him the research that we are carrying out. As we sailed within 2km of the nuclear plant the feelings are both profound and surreal.

From the deck we've seen steel tanks holding hundreds of thousands of tons of contaminated water; the four reactors now shielded behind temporary structures in an effort to contain some of the radioactive material from being released into the atmosphere; and inside the reactors themselves lie hundreds of tons of molten reactor fuel for which there are no credible plans to deal with.

But there's another reason the Rainbow Warrior is here. A Greenpeace Japan research vessel is conducting underwater marine radiation surveys within a 20km radius of the Fukushima Daiichi plant, with the Rainbow Warrior acting as campaign ship. As with the radioactive contamination near my home in Scotland, Greenpeace is aiming to further the understanding of the impacts and future threats from nuclear power and in particular the Fukushima Daiichi nuclear accident.

For Mr Naoto Kan, who was Japan's leader when the disaster hit, this voyage is as much personal as it is political. In the years since 2011 he has spoken out publicly against the nuclear industry, standing alongside millions of Japanese people opposed to nuclear power – a far cry from the current "tone-deaf" Abe administration, which is desperately trying to save a nuclear industry in crisis. Opposed by the majority of citizens, and beset by enormous technical, financial and legal obstacles, it's an effort that I believe is doomed to failure.

But there's hope.

Like the many communities across the country that are switching to innovative renewable power projects, Mr Kan knows that nuclear should be buried in the past. Renewables in Japan are rising. In the 2015 fiscal year, solar power capable of generating an estimated 13 TWh was newly installed - more than the two Sendai reactors in southern Japan that were restarted that year can produce.

For Japan to go 100% renewable it must urgently formulate more ambitious targets; stop all planned investments in new coal power plants and finally abandon plans to restart its ageing reactors and remove the institutional and financial obstacles to renewable energy growth.

A nuclear free future is not only possible it is essential. Renewable energy is the only safe and secure energy for the people of Japan and the world. .

Shaun Burnie is a senior nuclear specialist with Greenpeace Germany.

Akio Matsumura: Our lessons from Fukushima

Our Lessons from Fukushima: New Concerns for the Future

March 6, 2016Environment, Japan, Nuclear

français

Akio Matsumura

This week people across the world are commemorating the fifth anniversary of the worst nuclear power accident in history, which occurred at the Fukushima Daiichi Power Plant in Japan on March 11, 2011.

A woman is seen at a temporary housing complex covered in snow that accommodates nuclear evacuees from Okuma, a town inside the exclusion zone next to Tokyo Electric Power Co's (TEPCO) tsunami-crippled Fukushima Daiichi nuclear power plant, in Aizuwakamatsu, Fukushima prefecture, February 17, 2015. REUTERS/Toru Hanai

Many aspects of the crisis continue to affect human and environmental safety. There are still 178,000 evacuees in total (99,750 at Fukushima) who do not know when they can return home. 400 tons of contaminated water run into the sea every day. Frequent torrential rains wash away radioactive materials remaining at the site into the sea. 814,782 tons of contaminated water are stored at about 1,000 tanks, with more tanks built every month. The 7,000 workers at the site undertake dangerous tasks every day. The dedicated workers have solved many problems so far, but many continue to perplex managers and cleanup crews. No one approaches reactors 1, 2, and 3 due to strong radiation, and no scientific solution is expected for at least forty years. Unfortunately, future disruption cannot be discounted – the possibility of another strong earthquake in forty years is non-zero.

Since the Fukushima accident, we were fortunate to quickly receive opinions and recommendations across many fields. Nuclear scientists, medical doctors, military personnel, seismologists, biologists, oceanographers, volcanologists, journalists, spiritual leaders, parliamentarians, students and grass-root organizations, and public opinion leaders all weighed in. The horizontal perspective that emerged offered a different view than was possible from any single discipline, no matter how expert the practitioner. The Japanese benefited from these messages that cut through the confusion that pervaded the media at the time.

On the occasion of the 5th anniversary of the Fukushima nuclear accident, I would like to recall the early stages of the event, and share my own appraisal and recommendations from the lessons I have learned from this painful event.

In the first two weeks, experts and the public alike sought technical solutions. Panic grew when few were available. Did the cores meltdown? What was the appropriate distance to evacuate? How could we maintain the cooling systems for the reactors through multiple system failures? Are the ventilation systems working? Was this worse than Chernobyl? Can Self-Defense Force helicopters drop water on the spent-fuel pools of units 3 and 4?

It might be impossible to accurately describe the panic shooting through Japan's leaders and the public at the time. Government agencies and the utility in charge, the Tokyo Electric Power Company, were unprepared for the catastrophic nuclear disaster. The public blamed both parties, and they blamed each other, for poor communication and delays.

The confusion and panic were not limited to Japan, but extended to the US government as well. There was a huge gap between the two governments' assessments of the damages of the six reactors, in particular of the fourth reactor, which because of coincidental maintenance was in a unique position. Mixed messages on safety and damage caused more panic: Japan's government decided 12.5 miles (20 km) was an appropriate evacuation zone while the US government settled on 50 miles (80km) for its citizens. The United Kingdom, France, Germany, and other countries told their citizens to consider leaving Tokyo, 125 miles away (200 km).

From the start, a few experts knew the crisis went beyond current technical solutions, but that any step forward would require more information. Early in the confusion, my good friend, the late Dr. Hans-Peter Durr, former Director of Astrophysics at the Max Planck Institute in Germany, called me to suggest I inform the Prime Minister of Japan that the Fukushima accident was much worse than Japan's government had let on. Although Japan had not admitted the core meltdown then, Hans-Peter knew that Fukushima had brought us to the edge of our scientific knowledge. He recommended Japan invite an independent assessment team of top nuclear scientists and structural engineers to develop a solution. I passed his urgent message on to the Prime Minister office and party leaders.

What was the scope of the problem? A year after the crisis and we still had little quantitative sense. One way to begin to get a sense was to know the number of spent fuel assemblies on site. TEPCO did not share this information, so I asked Ambassador Mitsuhei Murata to check discretely with inside sources. He informed us that the total number of spent fuel assemblies at the Fukushima Daiichi site, excluding the assemblies in the pressure vessels, was 11,421. Then I asked Robert Alvarez, former Senior Policy Adviser to the Secretary and Deputy Assistant Secretary for National Security and the Environment at the U.S. Department of Energy, an explanation of the potential impact of the 11,421 assemblies.

On April 3, 2012, Bob interpreted this number for us. The results were astounding. The Cesium-137 at the site was 85 times greater than at the Chernobyl accident.

While it would not necessarily go "boom" like a nuclear bomb, this amount of radiation had enormous destructive potential. People were shocked to find this out. The article quickly gained over one million readers and was shared virally through the Internet. There is no doubt that without the warnings by international scientists about the potential global catastrophe of the fourth reactor, Japan's government would not have made it a priority to remove the 1,535 fuel assemblies, which contained 14,000 times the radiation of the Hiroshima bomb.

Without experts from multiple fields, important information would have been remained with the government and nuclear utility, rather than with the public.

But even with this information, large aspects of the crisis and its cause are hidden if the focus remains technical. Mr. Kiyoshi Kurokawa, chairman of the National Diet of Japan Fukushima Accident Independent Investigation Commission, has a different, but definitive, perspective.

The earthquake and tsunami of March 11, 2011 were natural disasters of a magnitude that shocked the entire world. Although triggered by these cataclysmic events, the subsequent accident at the Fukushima Daiichi Nuclear Power Plant cannot be regarded as a natural disaster. It was a profoundly manmade disaster – that could and should have been foreseen and prevented. And its effects could have been mitigated by a more effective human response.

How could such an accident occur in Japan, a nation that takes such great pride in its global reputation for excellence in engineering and technology? This Commission believes theJapanese people – and the global community – deserve a full, honest and transparent answer to this question. What must be admitted – very painfully – is that this was a disaster "Made in Japan."
Its fundamental causes are to be found in the ingrained conventions of Japanese culture: our reflexive obedience; our reluctance to question authority; our devotion to 'sticking with the program'; our groupism; and our insularity.

For me, Fukushima taught that we live with new threats, and have been living with them for decades. I learned that a nuclear power plant accident can have an unimaginable impact over human life for centuries. The accident has caused untold harm to those whose lives were disrupted by the plant. If things had gone worse, what about the effect of 24,000 years of environmental harm on future generations?

It is one thing if the public had been aware of and accepted these risks when the plant was constructed. Unfortunately, this was not the case in Japan. Those in charge did not even accept these risks, not at the time of construction, nor at the time of the accident. Not even now.

TEPCO has admitted only last month, five years later, that it delayed two months in using the term "meltdown" at the site. Arnie Gundersen of Fairewinds and Mycle Schneider, author of the World Nuclear Industry Status Report, have indicated that it was obvious from the moment there were massive releases of fission gases that a meltdown was underway. But TEPCO's denial had an impact on how they handled the panic. As Dr. Helen Caldicott suggested, it was obvious that Japan's government should have evacuated women and children sooner and much farther away. Helen wrote for our blog: The Nuclear Sacrifice of Our Children : 14 recommendations to help radiation contaminated Japan. TEPCO and government authorities refused to hear the wake-up call, brushing off the warnings of many experts.

After five years of reflection, Fukushima has pointed me to new concerns with nuclear power plants. It is my important discovery from the Fukushima nuclear power accident that we failed to understand the radiation from the nuclear bombs and the radiation from the nuclear accident are little different in terms of the risk for human life. We have long accepted the dangers of attacks by state actors with nuclear weapons, and now we understand the threat of human error and natural disasters like earthquakes, tsunamis, and volcanoes, on nuclear power plants. What about attacks on nuclear power plants? Above all, I am concerned with terrorist attacks on nuclear power plants in volatile countries, especially Pakistan.

Prime Minister Nawaz Sharif and President Xi Jinping shake hands as China agrees to build more nuclear power plants in Pakistan.

The odds are high and increasing that a terrorist group will target one or more of the many nuclear power plants around the world. These as well as many other such plants remain insecure from various threats – and intelligence of some threats remains hard to share between governments. The United States could not warn Japan, a close ally, of some specific threats if they wanted to! Other nuclear threats, like a small suitcase-sized nuclear device exploding in Times Square, continue to give experts and presidents nightmares. Given the probability of these risks in the year ahead, regardless of whether we live in a democratic or authoritarian society it is surprising that the public has no information on the matter. As we saw in Fukushima, so much pain is caused by the sudden realization that we have been asked to live with risks that were hidden from us until it was too late.

Experts will and should do much of the work in defining, examining, and making recommendations for solutions on these risks. This responsibility increases as more nuclear power plants are built and planned – especially in China, India, the United Arab Emirates, Vietnam, and Indonesia. But an open conversation with the public brings many benefits for preventing attacks and accidents and reacting appropriately once they have occurred. Social media presents itself as a potential bridge between society and experts from many fields when a nuclear accident or attack occurs. Indeed, this could be a powerful tool to complement efforts of other organizations working hard to prevent nuclear disasters. Loss of control of information is difficult for any authority, but Fukushima and other scenarios like Ebola have shown the limits of top-down communication channels.

Politicians face many competing challenges and interests in their jobs as they lead society forward. Nuclear energy looks like a good fit for the challenges of climate change, for example. But no assessment can be considered correct or honest if the risks of any solution are not presented openly to all interested

parties, including the public. Fukushima has offered us an opportunity to have a wide-ranging debate on the challenges we face at the intersection of many human needs – carbon-free energy, safety, environmental health, human security, and preservation for future generations. These are issues that will define our human society for centuries to come – we should not miss the chance to discuss them with all the facts on the table.

A parting note: Sir Brian Flowers, a prominent British nuclear physicist, pointed out that if nuclear power plants had been built and deployed in Europe before WWII, then large parts of Europe would be uninhabitable today because of conventional warfare and conventional sabotage directed against those nuclear plants.

Minamisoma mayor (of the first non-nuclear city)

March 9, 2016

Minamisoma mayor sees future for Fukushima 'nonnuclear' city in energy independence

http://www.japantimes.co.jp/community/2016/03/09/voices/minamisoma-mayor-sees-future-fukushima-nonnuclear-city-energy-independence/#.VuEhtOaDmot

by Sarai Flores

The massive earthquake and tsunami of March 11, 2011, exacted a huge toll on Minamisoma, leaving hundreds dead or missing and much of the city of 70,000 people destroyed. However, the tragedy for the coastal city was just beginning.

Minamisoma's location 25 km north of Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant put it in the direct path of a sinister invisible danger after three of the plant's tsunami-hit reactors experienced nuclear meltdowns. More than 60,000 of the town's residents evacuated as fears grew over radiation that was released into the air from the crippled nuclear plant. Speaking to an audience five years later at a news conference in Tokyo, Katsunobu Sakurai, the mayor of Minamisoma, said his city has still not fully recovered from the nuclear disaster.

Amid calls to toughen safety measures in Japan's nuclear industry following the accident, all reactors across the country were subsequently halted. Last year saw the restart of three idled nuclear reactors in Fukui and Kagoshima prefectures after those facilities passed new tougher safety tests instituted in the wake of the disaster. Later this year, Tepco is hoping to reactivate two reactors at its mammoth Kashiwazaki-kariwa plant in Niigata Prefecture, which would be the company's first restarts since the Fukushima meltdowns.

"As a citizen and as a resident of an area affected by the nuclear power plant disaster, I must express great anger at this act," said Sakurai. "When we are looking at how all the affected areas of Japan, including Minamisoma, can rebuild following the disaster, it is necessary for all of Japan to change its way of

thinking, and its way of life too — to move to become a society like Germany, which is no longer reliant on nuclear power."

Sakurai briefly became one of the most famous faces of the 3/11 triple disaster after posting an 11-minute video on YouTube on March 24, 2011, begging for supplies and support for his town to prevent its people from starving to death.

Five years on, the city's population has rebounded to 57,000, 80 percent of its pre-3/11 size, but many younger people of working and child-bearing age who fled have not come back. Families are afraid to return because of lingering worries about high radiation levels or fear that compensation from the government will be cut or withdrawn completely, Sakurai said. This is having social as well as economic implications, as the town is short of workers able or willing to work in kindergartens and day care facilities, for example.

"Our hope is for as many people as possible to be able to return to Minamisoma and also join or become involved in the ongoing recovery process," Sakurai explained. "However, we are also faced with the reality that, now that five years have passed since the disaster, particularly those from younger generations who have moved away from the area have built new homes and new lives in their places of evacuation, or in the places they have moved to."

In March of last year, Minamisoma declared itself to be a "nonnuclear city," something Sakurai says his city within the 30 km evacuation zone is the first in Japan to do. Turning to the use of solar and wind power in agricultural projects, in tandem with energy-saving measures, Sakurai is aiming for the city to be completely self-reliant in terms of energy by 2030.

"Within a situation where there is so much suffering around the world, what people around the globe are really hoping for are safe communities and safe societies in which they can live," said Sakurai. "Of course, this is the same for Minamisoma, and so having experienced this disaster, which we take very seriously, I would like to pledge to everybody that the city and I personally need to work to create an environment which is safe for people to live in," said Sakurai.

Your comments and story ideas: community@japantimes.co.jp

Japan to help Iran

May 20, 2016

Iran hopes quake-experienced Japan can help build nuclear plant

http://www.japantimes.co.jp/news/2016/05/20/national/politics-diplomacy/iran-hopes-quake-experienced-japan-can-help-build-nuclear-plant/#.Vz7LPeRdeot

JIJi

Iran expects Japan's cooperation in its nuclear power plant construction, Iranian Deputy Foreign Minister Seyed Abbas Araghchi said in Tokyo on Thursday.

Iran, a country with as many earthquakes as Japan, needs Japan's advanced nuclear plant construction technologies, Araghchi, a former ambassador to Japan, said at a news conference at the Japan National Press Club.
Araghchi said economic relations with Western countries have yet to return to presanctions levels.
Companies all around the world are paying attention to the Iranian market, Araghchi said, referring to high-speed railway and nuclear plant construction projects in the Middle Eastern country.
Countries reluctant to forge better economic ties with Iran could lose business opportunities, he said.
On Saudi Arabia, which broke off diplomatic ties with Iran in January, Araghchi said Tehran is calling for talks on a resolution, but Riyadh has yet to respond.
Asked about the forthcoming visit by U.S. President Barack Obama to Hiroshima, one of the two Japanese cities hit by U.S. atomic bombs in 1945, Araghchi said leaders of countries that used weapons of mass destruction in the past should apologize to the world in addition to Japan and Iran.
Both Japan and Iran are victims of weapons of mass destruction, Araghchi said, referring to the Iran-Iraq war in the 1980s.

Westinghouse to build 6 nuclear plants in India

U.S., India agree on Toshiba subsidiary's nuclear plant construction

http://mainichi.jp/english/articles/20160608/p2g/00m/0in/057000c

June 8, 2016 (Mainichi Japan)
WASHINGTON (Kyodo) -- The United States and India agreed Tuesday on a plan for a U.S. subsidiary of Toshiba Corp. to build six nuclear power plants in India under a bilateral nuclear pact.

- 【Related】Obama meets Indian PM, seeks implementation of climate pact

The agreement, reached by U.S. President Barack Obama and Indian Prime Minister Narendra Modi in Washington, was the first contract under a bilateral civil nuclear pact which took effect in 2008.
The agreement involving Westinghouse Electric Co., **Toshiba's U.S. nuclear power unit,** demonstrated "a shared commitment to meet India's growing energy needs while reducing reliance on fossil fuels," said a joint statement issued after the meeting of the two leaders.
The two countries will work toward finalizing the contractual arrangements by June 2017, it said.
Obama supported India's bid to join the Nuclear Suppliers Group, which supervises international trade in nuclear technology and related materials, according to the statement.

Parties very vague on energy future of Japan

July 3, 2016

Parties vague on atomic power pledges in run-up to Upper House election

http://www.japantimes.co.jp/news/2016/07/03/national/politics-diplomacy/parties-vague-atomic-power-pledges-run-upper-house-election/#.V3lba6Jdeot

JIJI

The election pledges issued by the top political parties show they are **divided and uninformed about how fast Japan should reduce its dependence on atomic power and what its energy goals for 2030 should be.**

As the pivotal July 10 Upper House election approaches, the parties clearly differ over the government's fiscal 2030 energy mix, which states that Japan will be procuring 20 to 22 percent of its electricity from nuclear reactors by that time.

Five years after the Fukushima disaster shattered Japan's nuclear safety myth, the ruling Liberal Democratic Party is promoting nuclear power as a stable, low-cost energy source, and says it intends to slowly reduce Japan's atomic dependency.

Komeito, its coalition ally, pledges to create a society that does not rely on nuclear power. Although it is opposed to building new reactors, it won't oppose the restarting of those idled in the wake of the triple core meltdown in Fukushima. Komeito also advocates a very gradual move away from nuclear energy.

The ruling coalition parties' positions reflect the government's goal: to lower Japan's dependency on atomic power around 6 points from 28.6 percent — the level it was at before the Fukushima disaster hobbled the industry in March 2011.

Both aim to bring new and old reactors online if they pass the Nuclear Regulation Authority's safety screenings, because more than 30 will be needed to achieve the government's targeted energy mix.

In the opposition camp, the Democratic Party has vowed to rid Japan of nuclear reactors by the 2030s. While the top opposition party will accept reactor restarts, its policy is to strictly maintain the 40-year basic operating limit on reactors. The DP believes its goal will be achievable if no new reactors are built.

The Japanese Communist Party and the Social Democratic Party flatly oppose restarting any nuclear reactors.

Another, Osaka Ishin no Kai, says reactors should not be restarted unless local agreements are enshrined in law as a precondition.

All of the major parties, however, refuse to elaborate on how they will ensure the expansion of alternative energy sources, which are being choked off by Japan's old and divided power grid.

In line with the government's target, the LDP and Komeito have promised to almost double the proportion of renewable energy to 22 to 24 percent by fiscal 2030. The DP's goal is 30 percent and the JCP's goal is 40 percent.

Since no party has provided hard details on how to further the use of renewable energy and what that will cost, voters need to watch whether the parties will offer any convincing explanations about their pledges during the campaign for the Upper House election.

Japan Atomic Power, Hitachi in Britain

Japan Atomic Power to join nuclear power business in Britain

http://mainichi.jp/english/articles/20160708/p2g/00m/0bu/003000c

July 8, 2016 (Mainichi Japan)
TOKYO (Kyodo) -- Japan Atomic Power Co., a constructor and operator of nuclear plants, said Thursday it has decided to enter the nuclear power business in Britain through an alliance with Hitachi Ltd.
Japan Atomic Power, Hitachi and its unit Horizon Nuclear Power Ltd. sealed an agreement the same day in Britain to cooperate in such areas as assessing construction costs and crafting plans toward the test operation of nuclear power reactors planned to be built in Britain.
Japan Atomic Power also said it will participate with the two other companies in the process of obtaining approval from the British government for the construction of nuclear power plants.
According to a statement released by Japan Atomic Power, it will join a project for the construction of two advanced boiling water reactors, scheduled to be built at the proposed Wylfa Newydd Power Station in North Wales.
"Taking advantage of the many years of operating experience (related to nuclear power reactors), and the know-how gained from that experience...we will help to ensure that Wylfa Newydd is built successfully," Japan Atomic Power President Mamoru Matsumura said.
After the plants are completed, Japan Atomic Power is expected to operate the nuclear power plants that Horizon Nuclear Power aims to start running from the early 2020s. Horizon Nuclear Power plans to construct four to six reactors in Britain in total.
Hitachi will be in charge of building the reactors and is eager to partner with Japan Atomic Power, as Hitachi does not have the know-how to operate nuclear power plants, sources familiar with the matter said.
Japan Atomic Power would become the first Japanese electric utility to engage in operating nuclear power reactors overseas, at a time when that business is sluggish in Japan following the 2011 Fukushima Daiichi nuclear disaster.
Amid lingering public concern over the restart of nuclear power plants at home, Japan Atomic Power is apparently trying to boost its revenue by expanding abroad.
The company, controlled chiefly by regional electric power companies in Japan, owns nuclear reactors in the country but all of them are currently offline.
The move is also in line with Prime Minister Shinzo Abe's policy goal of exporting nuclear power plant technology to other nations.
In 2012, Hitachi acquired Horizon Nuclear Power from a major German electric utility to expand its nuclear power business overseas.

July 7, 2016

Japan Atomic Power to join Hitachi's nuclear plant business in Britain

http://www.japantimes.co.jp/news/2016/07/07/business/corporate-business/japan-atomic-power-join-hitachis-nuclear-plant-business-britain/#.V39K3aJdeot

JIJI

Japan Atomic Power Co. will join Hitachi Ltd.'s nuclear power plant business in Britain, informed sources said Thursday.

The two companies will soon sign a cooperation agreement to make Japan Atomic Power the first Japanese power supplier to take part in an overseas nuclear power plant business in full scale.
Japan Atomic Power will become part of a project to build nuclear reactors in Britain, which is undertaken by Horizon Nuclear Power Ltd., a Hitachi unit in Britain, possibly engaging in licensing procedures for reactor construction.
Japan Atomic Power hopes that overseas operations will become a new source of revenue at a time when its nuclear reactors in Japan have been suspended following the 2011 core meltdowns at Tokyo Electric Power Company Holdings Inc.'s Fukushima No. 1 nuclear plant.
Hitachi, which has no experience as a nuclear plant operator, asked for Japan Atomic Power's cooperation over the British project.

Mainichi poll on future nukes

July 8, 2016

50% want nuclear power abolished in future: Mainichi poll

http://mainichi.jp/english/articles/20160708/p2a/00m/0na/018000c

Fifty percent of respondents in an online questionnaire released by the Mainichi Shimbun ahead of the July 10 House of Councillors election say that they are in favor of abolishing nuclear power plants in the future.
As of July 6, a total of 432,635 people had answered the questionnaire, which also lets people see how closely they are aligned with political candidates and parties.
When asked whether Japan needs nuclear power, 50 percent selected the answer, "It's necessary for the time being but should be abolished in the future." Another 31 percent picked "It's not necessary" while 16 percent said "it's necessary."
At the end of the survey, respondents are asked to select three issues that interest them the most. Twenty-one percent selected "nuclear power." The topics "constitutional revision," "revision of Article 9 (of the Constitution)," and "increasing the consumption tax" were also of high interest among users. Among those who picked nuclear power as a topic of interest, 58 percent said that nuclear power was not necessary, 30 percent said it should be abolished in the future, and 11 percent said it was necessary.
In a survey of candidates conducted by the Mainichi Shimbun, 52 percent of those standing for the Liberal Democratic Party answered that nuclear power was necessary, 62 percent standing for the Democratic Party and all those standing for Komeito said it should be abolished in the future, and all candidates for the Japanese Communist Party and Social Democratic Party said it was not necessary.
As those who say it should be abolished in the future permit the reactivation of reactors for the time being, it is therefore hard to say that nuclear power is becoming a major point of contention in the election.

Separately, 67 percent of respondents said Japan should never arm itself with nuclear weapons, while 21 percent said the issue should be considered in light of the international situation and 6 percent said Japan should start to consider the issue. Another 3 percent said Japan should possess nuclear weapons.
The questionnaire (in Japanese) can be found online at http://vote.mainichi.jp

"Look... 20 years down the road"

July 6, 2016

EDITORIAL: The power of a vote can affect Japan's nuclear energy policy

http://www.asahi.com/ajw/articles/AJ201607060033.html

July 6, 2016 at 13:40 JST
With brutal heat forecast for this summer, the government is not calling for power-saving efforts this year. This is a break from tradition that started in summer 2011 after the disastrous accident at the Fukushima No. 1 nuclear power plant, operated by Tokyo Electric Power Co., in March that year.
Only two nuclear reactors are currently running in Japan, both at the Sendai nuclear plant operated by Kyushu Electric Co. But the government determined that the nation's power supply will not fall short this summer, largely because energy-saving practices have become well-established in private homes and businesses over the last five years, including the widespread use of energy-efficient LED lighting.
Japan appears to have become less dependent on nuclear power generation since the Fukushima disaster. Nowadays, the subject is debated less frequently, and anti-nuclear demonstrators have shrunk in number. In the campaign for the July 10 Upper House election, too, the nation's nuclear policy is hardly a hot topic of debate for the ruling and opposition parties.
But we need to re-examine whether the government is moving toward maintaining or abolishing its current nuclear policy.
Looking 20 to 30 years ahead, The Asahi Shimbun has consistently advocated a "zero nuclear power generation society" in its editorials. Our basic thinking is to approve the restart of offline reactors for the time being when urgent power needs exist. But at the same time, high-risk and antiquated reactors should be decommissioned, starting with the oldest and the most dangerous.
Abe administration's piecemeal restart of reactors
Since the current Abe administration was inaugurated in December 2012, its track record has made the direction of its nuclear policy quite clear.
The administration initially stressed a "decrease in reliance on nuclear power generation." But within less than six months, it put the Nuclear Regulation Authority (NRA) in the forefront to justify a switch to the policy of "restarting nuclear reactors once their safety has been confirmed."
In the Basic Energy Plan of 2014, nuclear power is positioned as "an important base load power source." One year later, the administration announced its decision to formulate a policy that would make nuclear energy account for 20 to 22 percent of the nation's power supply in fiscal 2030. This target cannot be attained unless more than 30 nuclear reactors, out of the 54 that existed before the Fukushima disaster, are brought into operation.

In fact, starting with the Sendai reactors last summer, the government has been proceeding, bit by bit, with the restart of idle reactors. So far, four units have gone back on line. This month, the No. 3 reactor at the Ikata nuclear plant operated by Shikoku Electric Power Co. is scheduled to resume operations. Twenty reactors are currently under inspection.

Furthermore, the NRA has approved the extension of operations of the 40-plus-year-old No. 1 and No. 2 reactors at the Takahama nuclear plant, operated by Kansai Electric Power Co. Put plainly, even the "40-year rule," set for averting disasters by decommissioning old reactors, is about to lose teeth.

Abe stresses nuclear power as "a low-cost and stable energy source." But as deregulation in the power industry eliminates regional monopolies while electricity charges become less subject to rigid rate structures, nuclear power generation could actually become a burden to operators for the huge costs needed to maintain safety and dismantle old reactors.

For this reason, the government is coming up with what may be called new initiatives to protect the nuclear power industry.

The Ministry of Economy, Trade and Industry is working on a policy under which the government will buy electricity generated at nuclear power stations at a set price to encourage sustained investment in nuclear power generation.

Another plan under consideration is to decrease the financial responsibility of nuclear power plant operators for accident compensation and increase the government's responsibility instead. This goes in the opposite direction from industry deregulation.

Parties need to clarify positions on nuclear power

Many Upper House election candidates running on the ruling coalition ticket are keeping their opinions on nuclear power generation to themselves, leaving all policy decisions to the government. But some of the same candidates are also starting to call for the construction of new, safer reactors to counter the argument of people opposed to extended operations of old reactors.

Should the ruling coalition win the Upper House election, there is no doubt that it will add momentum to the Abe administration's move to return to nuclear power generation.

The opposition camp, with some minor exceptions, is united in opposing nuclear power generation. The Democratic Party and three other parties share the policy of "realizing a society that does not depend on nuclear power generation."

However, the parties differ in the method and speed with which they propose to reduce the nation's dependence on nuclear energy. While the parties are sharply focused on issues related to Abenomics, the national security legislation and constitutional revision, nuclear power generation tends to remain less discussed.

Will Japan keep relying on nuclear power? Or does it aim to eventually end this reliance by switching aggressively to sustainable energy development?

Because the answer spells a fundamental difference in the future of the nation's energy policy, every party owes it to the voting public to explain its position clearly and engage in serious debate.

In disaster-affected areas of Fukushima Prefecture, the government's evacuation orders are being lifted one by one, but there is a long way to go before the affected citizens can rebuild their lives. For them, the March 2011 disaster is still a dire reality they must face very day.

Looking at the future

For voters not directly affected by the nuclear disaster, five years may be enough time for their interest to wane.

But electricity is indispensable to everyone's daily life and work. An immediate and crucial political issue is how to secure the necessary infrastructure, and at what cost.

Since April, it has become possible for private households to choose their electricity supplier, giving people a greater chance to exercise their free will. Still, every ballot cast carries weight. The outcome of the Upper House election can either accelerate or put the brakes on the Abe administration's nuclear energy policy.

We need to look at 10 years and 20 years down the road, not just today and tomorrow, when we think about the nation's energy policy, especially regarding nuclear power.

--The Asahi Shimbun, July 6

Slowdown of solar boom

July 14, 2016

Sun no longer shines on Japan's solar boom as subsidies wane

http://www.japantimes.co.jp/news/2016/07/14/national/sun-no-longer-shines-japans-solar-boom-subsidies-wane/#.V4fRIqJdeov

by Chisaki Watanabe and Stephen Stapczynski
Bloomberg

Japan's solar boom is beginning to falter.

Until recently, the resource-poor nation has been one of the leading markets for photovoltaic (PV) units, helping to prop up an industry hurt by falling prices for the technology and policy changes. But four years after the introduction of generous incentives to promote clean energy in the wake of the March 2011 Fukushima nuclear disaster, data show the boom is losing steam.

The slowdown — after several years of rapid growth — threatens to undermine the government's push to find a clean alternative to nuclear power and dims what has been a bright spot for the global photovoltaic industry.

"As the declining volume of PV module shipments shows, the market is shrinking," said Takehiro Kawahara, an analyst for Bloomberg New Energy Finance.

Repeated tariff cuts and difficulty securing land and grid connections are among some of the reasons that have led to a drop in new applications to develop solar, Kawahara said.

For Japanese panel makers such as Sharp Corp. and Kyocera Corp., "the shrinking domestic market forces them to lower costs to remain in competition with international players or consider exiting the segment," he said.

Solar power-related bankruptcies are increasing, according to Teikoku Databank Ltd. The number of companies that went bust rose to 36 in 2015, from 17 in 2013 and 21 in 2014. Bankruptcies continue to accelerate, with 17 seen in just the first five months of 2016, Teikoku said.

Some question what Japan has got for all the money spent on promoting clean energy. While more solar energy is being produced, it still comprises a fraction of the nation's power generation mix.

The data, drawn from government and industry sources on solar's contribution to the power mix as measured by what is purchased and produced by the nation's 10 regional utilities, show the percentage has gone from about 0.4 percent in 2012 to about 3.4 percent in 2015.
Solar has grabbed the lion's share of what is known as feed-in tariffs — above-market rates awarded to producers of clean energy. With available land for solar in short supply and some utilities saying they cannot accept more intermittent solar power, that is a worry for some. Also, only about a third of the solar projects awarded the preferred rates have actually begun producing power.
The bulk of the clean energy capacity approved by the government under the FIT program since 2012 has been in solar, raising concern that the tariffs do not seem to have stimulated much in the way of other clean energy sources.
"Feed-in tariffs have proved there's potential for 80 gigawatts of solar in Japan," said Masaaki Kameda, secretary-general at the Japan Photovoltaic Energy Association, the country's solar lobby. "But to bring online this potential, various policies need to be applied continuously," he said.
The government has tightened rules for projects that have been delayed and plans to introduce an auction system for large-scale solar next year.
"Now that we know that solar power generation systems can certainly supply energy, it is important to find out how we can make the most of the generated power," Kameda said.
Prime Minister Shinzo Abe has tried to play it both ways — saying he's a supporter of clean energy, while also backing a continued role for nuclear and a big role for coal. Despite clouds over the nuclear industry and repeated failed attempts to get reactors back online, Japan's latest policy pronouncements see nuclear accounting for as much as 22 percent of Japan's power mix by 2030. Similarly, the government sees a bright future for coal at 26 percent.
Japan's solar market is expected to shift to rooftops. Between 2016 and 2040, Japan will add 94 gigawatts of new solar, including 65 gigawatts of rooftop PV, BNEF said in a report last month.
If Japan wants to achieve a much higher penetration of renewables, "an independent system operator would be necessary to ensure the grid connection approval process is neutral," said Kawahara.

Will Mitazono remain firm?

July 18, 2016

EDITORIAL: New Kagoshima governor must clarify stance on nuclear reactors

http://www.asahi.com/ajw/articles/AJ201607180019.html

Satoshi Mitazono, governor-elect of Kagoshima Prefecture, said during the election campaign, "Operations at the nuclear plant should be suspended temporarily for another (safety) check." The southern prefecture hosts the Sendai nuclear power plant, the only one currently operating in Japan.
The 58-year-old former TV Asahi Corp. commentator, who ran for office as a first-time, independent candidate, defeated incumbent Governor Yuichiro Ito, 68, who had approved the reactor restarts at the nuclear plant operated by Kyushu Electric Power Co.

Ito was seeking a fourth term. Many believe Mitazono won the election because of his criticism of how Ito had held the same office for so many consecutive terms.
But Mitazono's election pledge to temporarily halt the Sendai nuclear plant, in response to the recent series of strong earthquakes in neighboring Kumamoto Prefecture, was probably no less relevant, given the spreading anxiety among the public.
During the first week following the onset of the quakes, Kyushu Electric received 5,000 e-mails and phone calls asking for a halt to the Sendai reactor operations.
Immediately after he was elected, Mitazono reiterated that he will request a temporary suspension with Kyushu Electric, but he has yet to provide more details on the matter.
A temporary shutdown was certainly one of his election pledges, but he did not bring that to the fore during the campaign. Suspicion seems to be arising in the minds of Kagoshima Prefecture's public, including both proponents and opponents of nuclear energy.
The governor has no legal authority to shut down an active nuclear reactor. But the No. 1 and No. 2 reactors of the Sendai nuclear plant, which went back online in summer and autumn last year, are expected to go offline for routine inspections in autumn and winter.
Kyushu Electric does not need to obtain the governor's approval to reactivate the reactors once the checkups are over, but the utility cannot totally ignore the governor's intentions, which, therefore, will set higher hurdles for the reactor restarts.
Mitazono should continue to firmly talk about his own beliefs.
Some speculate he is probably working out strategies to deal with Kyushu Electric and the prefectural assembly, which upheld the nuclear restarts. But the first and most basic thing he must do is provide an explanation to the prefecture's public.
During the gubernatorial election campaign, Mitazono promised to shut down operations of the Sendai nuclear plant, conduct a check on its facilities and review the emergency evacuation plans. He also pledged to set up a panel of experts to discuss nuclear power issues.
The Kumamoto quakes, which caused many roads and bridges to collapse, were followed by aftershocks that gradually approached the Sendai nuclear plant. People in Kagoshima Prefecture were worried that an earthquake striking near the nuclear plant could tear up emergency evacuation routes.
Mitazono's pledge indicated a readiness to address those anxieties.
Niigata and Shizuoka prefectures are among the local governments that have already set up panels similar to the expert panel on nuclear power issues being floated by Mitazono.
Although the central government's Nuclear Regulation Authority is in charge of safety screenings of nuclear reactors being planned for restarts, **it is essential for local governments to play an active role in defending their own residents without leaving the matter up to experts.**
Given that Mitazono was elected after pledging to temporarily halt the nuclear plant, the incoming governor should explain his thoughts carefully and continue his efforts to ease the anxieties of Kagoshima Prefecture's residents.

Kaminoseki?

August 3, 2016

License renewed for new nuclear plant project in western Japan

http://mainichi.jp/english/articles/20160803/p2g/00m/0dm/058000c

YAMAGUCHI, Japan (Kyodo) -- The Yamaguchi prefectural government on Wednesday renewed a license for Chugoku Electric Power Co. to reclaim land for a new nuclear power plant in the western Japan prefecture, surprising and angering local residents opposed to the project.

Whether to extend the expired license for landfill work in the coastal town of Kaminoseki to build the Kaminoseki Nuclear Power Station had been a pending issue after the 2011 Fukushima nuclear crisis led to the suspension of the work. But the local government decided to grant permission, saying that the plant is positioned "within the country's energy policy."

The utility is unlikely to quickly restart the work due to local opposition, however. The local government's license renewal is also conditional: It said landfill work should not start until prospects of building plant facilities become clear.

But the latest development could open up substantial discussions on whether new reactors should be built in Japan, which the central government has largely avoided so far in consideration of antinuclear sentiment that has prevailed after the Fukushima nuclear power plant disaster.

Meanwhile, the government has already been pushing for the resumption of existing reactors that have met post-Fukushima safety requirements. On Wednesday, the No. 3 reactor at Kansai Electric Power Co.'s Mihama plant in Fukui Prefecture became the latest unit to have effectively cleared the state safety assessment.

Chugoku Electric was initially granted the landfill license in October 2008 for the two-reactor Kaminoseki nuclear complex on an island in the Seto Inland Sea.

The company began landfill work a year later, but progress was slow amid local protests and was suspended after the Fukushima crisis was triggered by a huge earthquake and tsunami that hit northeastern Japan in March 2011.

Just before the license was set to expire in October 2012, the utility applied for a three-year extension to the prefectural government. "We have not changed our idea that we need the Kaminoseki plant. We want to keep the license," a utility official said at the time.

Then Yamaguchi Gov. Shigetaro Yamamoto said the local government will "examine the issue appropriately" but did not make a decision, citing "special circumstances after the nuclear accident."

But on Wednesday, the prefectural government reversed course and permitted the extension of the license, though saying that landfill work should not begin until the utility has clear prospects of building plant facilities.

Chugoku Electric Vice President Akira Sakotani said the same day that there is currently no specific date set for building the facilities.

"We will seriously take to heart the request (by the prefectural government) and carefully consider (our response)," he said.

The license will be effective until July 6, 2019.

The decision of the prefectural government drew mixed responses from local residents.

"I can't believe the permission was given," said Toshiyasu Shimizu, 61, who heads a group of residents on an island several kilometers from the construction site.

But Naonori Koizumi, a 58-year-old member of a group supporting the construction project, said, "I don't think work will immediately resume, but the town is depopulating and graying. I hope nuclear power will make this town richer."

Philippines nukes conference

September 2, 2016

Philippines conference discusses nuclear power in Asia-Pacific region

http://www.japantimes.co.jp/news/2016/09/02/business/philippines-conference-discusses-nuclear-power-asia-pacific-region/#.V8lekaJddLM

Kyodo

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MANILA – A three-day international conference on the prospects of nuclear power in the Asia-Pacific region has wrapped up in Manila, finding the stigma-laden source of energy to be increasingly relevant in the region because of its continuing development and rising population, and the growing campaign for lowering carbon emissions amid threats of climate change.

"The prospects for nuclear power in the Asia-Pacific region are not only promising. Moreover, it is relevant and will continue to remain so in the coming years," Maria Zeneida Collinson of the Philippines' Foreign Affairs Department, who chaired the conference, said in her summary statement late Thursday.

"Nuclear energy could contribute to sustainable development by meeting rising energy demands and, at the same time, mitigating climate change," she added.

The conference, which was organized mainly by the International Atomic Energy Agency, gathered more than 60 participants from 15 countries.

Among the topics discussed was the role of nuclear energy in a low carbon future, how to develop a nuclear energy policy and the legal framework for nuclear power, the prospects of small modular reactors in the region, developing a policy and strategy for spent fuel and radioactive waste management, and developing the environmental impact assessment process.

"A high nuclear scenario in the Asia-Pacific takes into account more potential newcomer states such as Indonesia, Malaysia and Thailand, in addition to Vietnam," Collinson said.

Of the 30 countries in the world that currently operate nuclear power plants, six are in the Asia-Pacific region: China, India, Iran, Japan, Pakistan and South Korea.

"This Asia-Pacific region has one of the fastest economic and growth rates in the world. Hence, it follows that the demand for affordable and sustainable energy sources is expected to rise. Thus, as IAEA Deputy Director-General Mikhail Chudakov pointed out, our region is expected to be the driver of nuclear energy in the future," Collinson said.

In an interview at the opening of the conference on Tuesday, Chudakov said the prospects of nuclear power remain high despite the nuclear accidents of Three Mile Island, Chernobyl and Fukushima, with 10 plants put into operation last year, and the same number expected to run also this year.

Collinson said the conference touched on these accidents by learning lessons from them.

"No one country can just start creating nuclear power because, especially after the accidents of Three Mile Island, Chernobyl and Fukushima, (it showed) that the whole world is connected," Chudakov said in his closing remarks Thursday.

Collinson said the conference revealed that the key challenges to the development of a high nuclear scenario in the region are public acceptance and safety concerns, nuclear waste issues, large up-front investment, and uncertainty in government support.

Citing as one example the revived interest of the Philippine government under the new administration of President Rodrigo Duterte in nuclear power, having built one plant in the 1970s only to be mothballed when it was ready for licensing a decade later due to politics and fears caused by the Chernobyl nuclear disaster in Ukraine, Collinson said Energy Secretary Alfonso Cusi is now actively holding public discussions about the matter.
"For me, the most important is that understanding by our people about what nuclear energy, nuclear power is all about. Having understood that, we can form our own opinion as to whether we really want this, will this be good for the Philippine nation. So, that's No. 1: public acceptance," Collinson said.
Chudakov said some of the advantages of nuclear power are the reliability of supply, and predictability of price over a long period, something that former Philippine Energy Secretary Zenaida Monsada acknowledged.
"If we pursue the nuclear power plant project, we would have increased investments in the country, that will generate jobs and government revenue. If we have more sufficient, reliable power, we can have more investments in manufacturing that will help improve the economy," Monsada said at the closing session of the conference.
Chudakov said that while the decision to put up nuclear power plants is a sovereign one, the IAEA stands ready to assist in the undertaking.

Izumida will not run in gubernatorial election

August 31, 2016

Niigata Pref. nuclear power opponent governor won't stand for re-election

http://mainichi.jp/english/articles/20160831/p2a/00m/0na/008000c

NIIGATA -- Gov. Hirohiko Izumida has retracted his announcement that he will run in the upcoming gubernatorial election to seek a fourth term.

- 【Related】Nuclear watchdog finds 3 nuclear plants guilty of 'malicious' safety violations

Since Izumida has adopted a cautious stance toward the restarting of the Kashiwazaki-Kariwa Nuclear Power Plant in Niigata Prefecture, his decision not to run in the election will likely have a huge impact on the issue. All seven reactors at the power station, owned by Tokyo Electric Power Co., have been idle since March 2012 in the wake of the 2011 Great East Japan Earthquake, tsunami and the ensuing crisis at the Fukushima No. 1 nuclear plant.
The campaign for the Oct. 16 Niigata gubernatorial election is to kick off on Sept. 29.
Izumida's decision not to run in the election is linked to his criticism of a report in the Niigata Nippo regional daily over a dispute involving a subsidiary of a shipping company funded by the prefectural government.

In an interview with news organizations, Izumida said, "It's important to have prefectural residents know the facts, but I feel my appeal never reached the residents. Even if I requested the newspaper to correct its report, the daily would never do so, which prompted me to abandon running in the race."
At a prefectural assembly session in February this year, Izumida announced that he would run in the gubernatorial election to seek a fourth four-year term. However, his retraction of his candidacy leaves Nagaoka Mayor Tamio Mori, 67, who heads the Japan Association of City Mayors, as the only person who has announced his candidacy.
It came to light this past July that Japan Shipping Exchange Inc., an arbitration organization, had ordered a shipping company's subsidiary funded by the prefectural government to pay 160 million yen to a South Korean company following a dispute over the purchase of a ferry.
The Niigata Nippo published a series of articles holding the Niigata Prefectural Government responsible for the case.
In response, the prefectural government has dismissed the accusations saying, "The daily's coverage is incorrect," and repeatedly urged the newspaper to correct its reports.
The Niigata Nippo is set to release a statement to express its views on the case.

Nuke collaboration with Iran

September 13, 2016

Iran welcomes Japanese reactors if 'lucrative commercial support' is included: Tehran nuke chief

http://www.japantimes.co.jp/news/2016/09/13/business/iran-welcomes-japanese-reactors-lucrative-commercial-support-included-tehran-nuke-chief/#.V9ea5DVdeov

Kyodo
TEHRAN – Iran is ready to buy nuclear reactors from Japan if any proposed sales are accompanied by "lucrative commercial support," according to the head of the Atomic Energy Organization of Iran.
"Of course if we receive any suggestion or any proposal from Japan that would sound very interesting to us, we would certainly be ready to enter negotiation in that domain, Ali Akbar Salehi said in an exclusive interview with Kyodo News on Sunday.
But Salehi said Iran has not raised the matter with the Japanese side yet.
"Japan is a very cautious country so we have to wait until things evolve. So we are not in a hurry. Whenever the Japanese are ready, we are ready," he said.
Russia and China have already stabilized their positions as suppliers of nuclear equipment to Iran, which has a long-term plan to produce 20,000 megawatts of nuclear electricity by setting up 20 more nuclear power plants.
Last weekend saw Iran and Russia break ground to construct two new nuclear power plants valued at $10 billion, while Chinese companies are also keen to construct nuclear power plants in Iran, offering financial support, according to Salehi.
Some European countries "initially have started talks with Iran" in this domain, but no agreements have been reached yet, he said.

After operating a Russian-built and supported 1,000-megawatt power plant in southern Iran since 2012, and starting construction of two new ones with Russian help, Iran is going to construct new small power plants on its southeastern coast.

“Iran’s fourth power plant that we are going to build will be located in the Makran region of southern Iran. Chinese have already visited that region for site selection, but we have not come yet to a final agreement,” he said.

According to Salehi, about seven years ago, Japanese officials had shown interest in cooperating with Iran to construct new power plants.

However, international concerns over Iran’s nuclear development program led them to adopt a more conservative position of preferring to restart talks after the problems are resolved.

That transpired in July 2015 when Iran finalized a landmark deal with six major powers — France, Germany, Russia, China, Britain and the United States — with the aim of limiting its nuclear program in return for an end to crippling economic and banking sanctions.

“Now we have the nuclear deal behind us, but we have not seen any indication as to whether Japan’s government or industry (will) enter negotiation with us,” Salehi said.

In the meantime, he said, there is still scope for Iran and Japan to expand their cooperation on nuclear safety, specifically the training of Iranian experts in the so-called “3S’s” — namely safeguards, safety and security — a topic that the European Union is also interested in.

Salehi said “everything is going well in this domain.”

Since a memorandum of understanding was signed between Foreign Minister Fumio Kishida and his Iranian counterpart, Javad Zarif, in Tehran last October, Iran and Japan have been exchanging experts to increase the level of security and safety at Iran’s nuclear facilities.

To that end, Salehi said, “Japan has expressed interest in setting up a ‘center of excellence’ in Iran on safety issues and so did the EU … so there may be a trilateral cooperation between Iran, the EU and Japan in this matter.”

“We anticipate that we will be learning more than the Japanese learning from us. There is lot we can learn from Japan because they have a lot of experience in running a nuclear plant for so many decades and the very valuable (experiences) that they have accumulated during the unfortunate Fukushima incident,” he added.

One of the major advantages Iran gained with last year’s nuclear deal was joining the international nuclear market.

Just several months after the deal was inked, Iran was able to sell 32 tons of heavy water to the United States. Negotiations on selling the same to Germany, France and Russia are ongoing, with a deal expected to be clinched with the latter.

The Iranian nuclear chief also showed interest in selling heavy water stockpiles to Japan.

Japan's nuclear fuel project: What future?

September 21, 2016

Decommissioning of Monju reactor would affect nuclear fuel cycle project

http://mainichi.jp/english/articles/20160921/p2a/00m/0na/013000c

The government's decision to consider decommissioning the trouble-plagued Monju prototype fast-breeder reactor, because the state can no longer shoulder the heavy financial burden, will inevitably affect the nuclear fuel cycle project, in which spent nuclear fuel is reprocessed and reused.

- 【Related】Gov't to discuss fate of Monju reactor, option of scrapping eyed
- 【Related】Monju fast-breeder reactor operator insiders say project is a failure: survey
- 【Related】Editorial: Time to permanently shut down Monju nuclear reactor

A source close to the government lamented that the government's efforts to coordinate views over whether to continue the Monju project hit a snag as the Education, Culture, Sports, Science and Technology Ministry stuck to the continuation of the Monju project.

"Officials at the Education, Culture, Sports, Science and Technology Ministry only said, 'It'd be a problem if Monju were to be scrapped,' but failed to do anything. What has the ministry done so far?" the source said.

The dispute started when the Nuclear Regulation Authority (NRA) advised the ministry in November 2015 to replace the government-backed Japan Atomic Energy Agency (JAEA) with a new entity as the operator of the fast-breeder reactor.

The technology ministry considered a new organization to operate Monju on the assumption that the reactor would be maintained. The ministry set up a study panel comprised of experts and compiled a report on the issue before the May 2016 deadline set by the NRA.

However, the report stopped short of specifying a new operator but only mentioned the requirements that a new operator must meet.

Based on the report, the ministry explored the possibility of splitting the division that operates and manages Monju from the JAEA and setting up a new corporation to take over the role with cooperation from the private sector, including power companies.

However, businesses have expressed a reluctance to cooperate with such a plan.

A high-ranking official of the Economy, Trade and Industry Ministry, which is responsible for energy policy, coolly reacted to the proposal shown by the technology ministry, which had failed to show an outlook for replacing the Monju operator even after the deadline set by the NRA. "Such a plan would never have been accepted," the official said.

After the technology ministry's study panel issued the report, calls within the industry ministry urging that Monju be decommissioned began to gain momentum.

The senior industry ministry official explained, "If Monju were to be retained, it could spark criticism of the entire nuclear fuel cycle project, which would adversely affect our duty to develop fast breeders and restart idled nuclear power plants."

Monju, which is the core of the government's nuclear fuel cycle project, is a prototype reactor to conduct tests aimed at putting fast-breeder reactors into practical use, and comes under the jurisdiction of the technology ministry. However, the industry ministry is responsible for establishing fast reactor technology aimed at commercializing such a reactor.

Those calling for decommissioning Monju mainly cite the massive amount of costs to maintain the reactor.

According to government sources, Monju needs to meet the new regulatory standards established by the NRA following the crisis at the tsunami-hit Fukushima No. 1 Nuclear Power Plant before the prototype fast-breeder reactor can be restarted. Specifically, drastic refurbishment work on the reactor, including reinforcement of the facility to make it quake resistant, must be conducted. Furthermore, a factory in the

Ibaraki Prefecture village of Tokai, which produces fuel for Monju, also needs to be drastically refurbished. Experts say it would take at least 10 years and cost taxpayers an additional amount of some 580 billion yen to restart the reactor.

As for the reason for aiming to maintain Monju at such huge costs, the technology ministry claimed, "Data gained from operating Monju can be used to build a next demonstration reactor, and is necessary to seamlessly continue the nuclear fuel cycle project."

However, the industry ministry dismissed the claim. "The costs of maintaining Monju would be almost equal to the costs of building a new demonstration reactor. Since the design of Monju is old, there is no need to spend such a huge amount of taxpayers' money to maintain the reactor," an industry ministry official said.

The Cabinet Secretariat played a key role in efforts to coordinate between the two ministries, but the ministries remained at odds over the matter.

However, the convening of an extraordinary Diet session on Sept. 26 was drawing near while the technology ministry failed to show a breakthrough.

A top official in the administration of Prime Minister Shinzo Abe insisted that the executive branch should clarify its position on Monju before the extraordinary Diet session to avoid being grilled by opposition parties over the issue during deliberations.

The Cabinet Office, which is dominated by bureaucrats loaned from the industry ministry, overwhelmed the technology ministry and began considering decommissioning the reactor.

Even if the government decides to decommission Monju, it intends to continue the nuclear fuel cycle project, in which uranium and plutonium extracted from spent nuclear fuel is reused.

Officials are aiming to build a next demonstration reactor and eventually commercialize the nuclear fuel cycle project by using the Joyo demonstration reactor in the Ibaraki Prefecture town of Oarai, which is older than Monju, or conducting joint research with France at ASTRID, a new fast breeder that France is planning to build. However, there are no prospects of breaking the deadlock in the fuel cycle project.

Under the basic energy plan, which the Cabinet approved in June 2010, a new demonstration reactor would be activated by 2025 and the first reactor for commercial use be put into operation by 2050. However, the schedule was effectively scrapped following the outbreak of the Fukushima nuclear crisis. The industry ministry and other government bodies will reschedule the plan, but the project will inevitably be greatly delayed.

Regarding the use of ASTRID, critics within the government say it is difficult to establish Japan's own nuclear fuel cycle technology by relying heavily on overseas technology.

If fast-breeder reactor technology can not be put into practical use in the foreseeable future, the core of the nuclear fuel cycle project would turn to the use of mixed-oxide (MOX) fuel consisting of reprocessed plutonium and uranium. However, it remains to be seen if the project will progress steadily.

The Federation of Electric Power Companies of Japan had planned to use MOX fuel in 16 to 18 commercial nuclear reactors across the country, but the plan is being delayed in the aftermath of the nuclear disaster. The No. 3 unit at Shikoku Electric Power Co.'s Ikata plant in Ehime Prefecture is the only nuclear reactor that uses such fuel.

Operations at Oma Nuclear Power Plant in Aomori Prefecture, which can run solely on MOX fuel, are expected to begin in fiscal 2024, two years later than initially planned. As a result, how Japan should consume surplus plutonium will pose a challenge to the international community.

Nevertheless, the government is sticking to the nuclear fuel cycle project partly because of the Japan-U.S. agreement on peaceful uses of nuclear energy, which allows Japan to reprocess spent nuclear fuel. The accord is expected to be automatically renewed when it expires in July 2018. However, if Monju, which is

supposed to consume a great deal of MOX fuel, is to be decommissioned and little progress is made on the consumption of MOX fuel in atomic power stations in Japan, Washington could voice opposition to automatically renewing the bilateral agreement.
Japan has so far stockpiled 47.9 metric tons of surplus plutonium both in the country and overseas. It remains to be seen how the next U.S. administration, which will be formed following the November presidential election, will respond to the matter.
"The decommissioning of Monju is separate from the nuclear fuel cycle project," stressed a senior official of the Economy, Trade and Industry Ministry as he insisted that Monju be split from the fuel cycle project.

Ikata new mayor steamroll anti-nuclear rival

October 3, 2016

Nuclear-power advocate elected Ikata mayor in landslide

http://www.japantimes.co.jp/news/2016/10/03/national/nuclear-power-advocate-elected-ikata-mayor-landslide/#.V_IKaMldeos

Kyodo, Staff Report
An advocate of atomic power plants has steamrolled his anti-nuclear rival in the Ikata, Ehime Prefecture, mayoral election, garnering more than seven times as many votes as his opponent.
Sunday's election followed the resignation of the former mayor, who had backed the recent restart of the Ikata nuclear power plant's No. 3 reactor.
The previous mayor resigned in August after being hospitalized.
New Mayor Kiyohiko Takakado, a 58-year-old former member of the prefectural assembly, had the backing of the former mayor and all 16 members of the town's assembly. During the campaign he vowed to continue the policies of his predecessor, Kazuhiko Yamashika.
His rival, 59-year-old Naohito Nishii of the Japanese Communist Party, had urged the town not remain dependent on nuclear power. He was backed by the JCP's local chapter as well as anti-nuclear citizens' groups.
Nishii was trounced in the election, garnering just 765 votes to Takakado's 5,451 in a race with 71.45 percent voter turnout.
"I will completely carry out safety measures for the nuclear power plant," Takakado said after his victory was assured. "I will also tackle the issues of the town's aging population and depopulation."
Shikoku Electric Power Co. reactivated the Ikata plant's No. 3 reactor in August. It was the first time in more than five years that the reactor was switched on since it was suspended for a routine safety inspection in April 2011.
It is the only reactor in Japan currently burning mixed uranium-plutonium oxide (MOX) fuel. It was the nation's fifth reactor that was rebooted under the stricter safety regulations introduced in July 2013 based on the 2011 catastrophe at the Fukushima No. 1 plant operated by Tokyo Electric Power Co. Holdings Inc.
Besides Ikata, the only nuclear plant currently in operation in Japan is Kyushu Electric Power Co.'s Sendai facility in Kagoshima Prefecture.

Yamashita, the former mayor, resigned Aug. 29 after being hospitalized in April.
The Ehime Shimbun reported at the time that he had suffered a stroke that resulted in him having problems speaking.

"They can eliminate nuclear power, so why don't they?"

October 19, 2016

Ex-PM Koizumi: 'Why doesn't gov't eliminate nuclear power?'

http://mainichi.jp/english/articles/20161019/p2a/00m/0na/019000c

MATSUMOTO, Nagano -- Former Prime Minister Junichiro Koizumi on Oct. 18 commented on the victory of an anti-nuclear newcomer in the Oct. 16 Niigata gubernatorial election, asking why the government isn't giving up nuclear power when it can.
The newly elected governor, Ryuichi Yoneyama, has expressed a cautious view on the restart of the Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture.
"He beat a candidate backed by the Liberal Democratic Party (LDP), Komeito and the Japanese Trade Union Confederation, and it was an unexpected upset. I guess that the public has come to understand that nuclear power plants are dangerous, not safe," Koizumi said during an address in the Nagano Prefecture city of Matsumoto.
He underscored the impact of the election, saying that if the opposition parties jointly field candidates in the next House of Representatives election and make the elimination of nuclear power plants the main focal point, "There's no telling how the LDP will end up."
Koizumi said that while he was in power, he believed the opinions of experts and thought that nuclear power plants were necessary. But his view on nuclear power changed in the wake of the Fukushima nuclear disaster.
"With the Fukushima nuclear disaster, I realized that the descriptions of (atomic power) as safe, clean and low-cost were all lies."
The former prime minister said he started efforts to eliminate all nuclear power plants in Japan after realizing the mistake and wanting to correct it and make amends. At times during his address, Koizumi raised his voice in earnest like he did when he was prime minister.
"They (the government) can eliminate nuclear power, so why don't they?" he asked. "It's time to turn a predicament into a chance."

Taiwan: No more nukes by 2025

October 23, 2016

Taiwan to end nuclear power generation in 2025

By SATOSHI UKAI/ Correspondent

Taiwan's fourth nuclear power plant in New Taipei City in the northern part of the island. Its construction has been suspended due to an anti-nuclear movement that has intensified since the Fukushima nuclear disaster. (Asahi Shimbun file photo)

TAIPEI--In a rare move for power-hungry Asia, the Taiwanese government has decided to abolish nuclear power generation by 2025 to meet the public's demand for a nuclear-free society following the Fukushima nuclear disaster.

Taiwan's Executive Yuan, equivalent to the Cabinet in Japan, approved revisions to the electricity business law, which aim to promote the private-sector's participation in renewable energy projects, on Oct. 20.

"Revising the law shows our determination to promote the move toward the abolition of nuclear power generation and change the ratios of electricity sources," said President Tsai Ing-wen.

The government plans to start deliberations on the revised bill in the Legislative Yuan, or the parliament, in the near future, with the goal of passing it within this year.

Movements toward a nuclear-free society are active in Europe. For example, Germany has decided to abolish nuclear power generation by 2022.

On the other hand, China and India are increasing nuclear power generation to meet the growing demand for electricity. In Taiwan, nuclear power accounted for 14.1 percent of all the electricity generated in 2015. At present, three nuclear power plants are operating.

However, the March 2011 accident at the Fukushima No. 1 nuclear power plant heightened public opinion against nuclear power generation. In response to the sentiment, Tsai, who assumed the presidency in May with a vow of establishing a nuclear-free society, led the government's effort to abolish nuclear power.

Like Japan, Taiwan is hit by many earthquakes. The three nuclear power plants currently in operation will reach their service lives of 40 years by 2025. The revised bill will clearly stipulate that operations of all the nuclear plants will be suspended by that year. The stipulation will close the possible extension of their operations.

The government is looking to solar power and wind power as the pillars of renewable energies. It aims to increase their total ratio among all electricity sources from the current 4 percent to 20 percent in 2025. However, meeting the goal assumes that electricity generated by solar power will increase 24-fold in 10 years. Because of that, some people harbor doubts on the viability of the plan.

“A hurdle to overcome to achieve the goal is very high,” said an electric power industry source.

World Nuclear Industry Status Report 2016

http://www.worldnuclearreport.org/The-World-Nuclear-Industry-Status-Report-2016-HTML.html

In addition to the usual, global overview of status and trends in reactor building and operating, as well as the traditional comparison between deployment trend in the nuclear power and renewable energy sectors, the 2016 edition of the *World Nuclear Industry Status Report (WNISR)* provides an assessment of the trends of the economic health of some of the major players in the industry. Special chapters are devoted to the aftermath of the Chernobyl and Fukushima disasters.
Read online or download the PDF version.

The World Nuclear Industry Status Report 2016 (HTML)

Wednesday 27 July 2016

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Paris, London, Tokyo, July 2016

Nuclear pact with India

November 1, 2016
Japan to sign nuclear pact with India
http://www3.nhk.or.jp/nhkworld/en/news/20161101_03/

Japan will sign an agreement on nuclear energy technology with India during a visit by Prime Minister Narendra Modi scheduled to start on November 10th.

The agreement will be Japan's first such deal with a non-signatory of the Nuclear Nonproliferation Treaty. It will allow Japan to export nuclear power technology to India.

Japanese Prime Minister Shinzo Abe met with Modi in India last December and they came to a basic agreement regarding the deal.

The two governments have been negotiating the details of the agreement and the date of the signing.

There is concern in Japan about forming a deal with India, which has conducted nuclear tests.

The pact is expected to include a provision that prohibits the technology from being used for military purposes. If India conducts further nuclear tests, the deal would likely be suspended.

Japan has similar deals with 14 countries and territories.

Japan, India to sign energy pact on condition of no nuclear tests

THE ASAHI SHIMBUN
http://www.asahi.com/ajw/articles/AJ201611010047.html
Japan and India will sign a nuclear energy pact in mid-November that allows Tokyo to opt out if the South Asian nation tests its nuclear weapons, sources said.
The agreement, the first by Japan with a nation that has not ratified the Nuclear Nonproliferation Treaty, will be signed when Indian Prime Minister Narendra Modi visits Japan later this month, a high-ranking Foreign Ministry official said.
The agreement will enable Japan to export its nuclear energy technology for private-sector use in India. But the sources said wording in the pact will give Japan, which has long pushed for nuclear disarmament and nonproliferation, the option of ending cooperation if India conducts a nuclear test.
At a meeting in New Delhi in December 2015, Prime Minister Shinzo Abe and Modi agreed in principle to sign a nuclear energy agreement. However, Abe told his Indian counterpart, “We will discontinue cooperation should India conduct a nuclear test.”
Diplomats of the two nations have since held discussions on the agreement.

Japanese diplomats asked for wording that could be interpreted to mean Japan can cease cooperation in the event of an Indian nuclear test after the bilateral agreement takes effect.
Although Indian officials were hesitant about such wording because of concerns it could constrain India's national security policy, they also showed an understanding toward the Japanese position.
The two nations are currently hammering out the final wording of the agreement. There is a possibility that the terminology will be vague enough to allow both nations to interpret the agreement in a way that is closer to their own national interests.

Japan-India Pact

http://thewire.in/78479/india-japan-relations-nuclear-deal/

Nuclear Deal, Infrastructure Projects and Handling China: What to Expect From Modi's Japan Visit

By Pallavi Aiyar on 08/11/2016 • Leave a comment

There are several points still up for discussion before the India-Japan nuclear accord becomes a reality, including Japanese apprehensions on India misusing nuclear technology.

Tokyo: Indian Prime Minister Narendra Modi's upcoming two-day visit to Japan takes place at a time when Asia's second largest and third largest economies are increasingly finding common strategic ground. The November 11-12 meeting will be the third annual summit between Modi and Shinzo Abe, his Japanese counterpart. A long-anticipated nuclear civilian energy deal is the likely headline to emerge. But a raft of other issues are also on the agenda, including measures to give bilateral economic ties a fillip, defence cooperation, infrastructure projects both in India and third countries like Iran, as well as the sensitive, but crucial, issue of dealing with China's expanding presence in the region.

Nuclear negotiations

The nuclear treaty will not only pave the way for Japan to export nuclear technology to India's vast market, it is also a necessity for enabling India's nuclear deals with the US, France and other countries. Key elements of nuclear reactors, including safety components and the domes of nuclear power plants, are a near-Japanese monopoly. Any deal would be significant for firms like GE-Hitachi, Toshiba's Westinghouse Electric Company and Mitsubishi-Areva.

Negotiations over the nuclear accord have been ongoing since 2008, following US-led efforts to facilitate India's access to civilian nuclear energy technologies, despite India not being a signatory to the nuclear non-proliferation treaty. The 2011 Fukushima nuclear disaster in Japan temporarily halted discussions. These have since restarted, but there remain strong concerns in Japan over the possible misuse by India of nuclear technology transfers.

There will, therefore, almost certainly be key provisions in any deal aimed at allaying Japanese apprehensions, most likely a provision to cancel or suspend the accord in the event of India breaking its self-imposed moratorium on nuclear testing. This has been a Japanese demand since the two sides began their negotiations seven years ago. India, which successfully kept such an explicit condition out of its

nuclear cooperation agreement with the US in 2007 (and with every other nuclear partner since then), has so far been reluctant to tie termination of the agreement to a nuclear test by the country.

According to Hisanori Nei, professor and nuclear energy expert at Tokyo's National Graduate Institute for Policy Studies**, Japan will permit Indian power producers to reprocess spent fuel at designated facilities** on condition that the country accepts comprehensive inspections by the International Atomic Energy Agency. But this is something that will be difficult for India to agree to.

A final sticking point is the question of **liability in the event of a nuclear accident**. "It is difficult to imagine that the nuclear sector is a total outlier to the general chaos of the business operating environment in India," explained Jeff Kingston, the director of the Asian studies programme at Tokyo's Temple University. Modi has been seeking to address the concerns of nuclear vendors on the matter of liability. It's not clear yet that he's done enough.

Kingston believes that Abe should be able to push a nuclear accord with India through the parliament by early 2017. He doubts there will be much political opposition, despite the fact that there are many, even within the prime minister's own Liberal Democratic Party, who are against nuclear energy. (Polls indicate that up to 70% of the Japanese population is opposed to developing nuclear power.)

Like Kingston, most experts in Japan are optimistic that despite the challenges, the deal will be struck. **Abe will sell it to a nuclear-sceptic Japanese parliament and public by embedding it in the larger context of Japanese-India ties.** Geo-strategic benefits, India's large export market and investment opportunities will be the sweeteners.

"I don't think public opinion will be an obstacle," said Nei, explaining that the accord did not loom large in public discourse in Japan. "The media might cover it for a week or so, and then it will be easily forgotten."

Economic ties

Economic ties will be the other main focus of the summit. Modi wants to boost India's economic growth by upgrading infrastructure, strengthening manufacturing and developing a network of "smart" cities – all of which would benefit from Japanese investments and technology. For his part, Abe is trying to fire up a Japanese economy that has been stuck in a holding pattern for two decades. India with its large market and growing middle-class can provide new sources of exports and investment opportunities for Japan.

Yet, despite this natural fit, economic ties are not as robust as might be expected. India-Japan trade in 2015-2016 was only $14.51 billion, a decrease of 6.47% over the previous year. In contrast, India-China trade was worth over $70 billion, while Japan-China trade is at about $350 billion. Trade with India is just 1% of Japan's total foreign trade. And although Japan is the largest bilateral donor for India, over the past three years Japanese firms have invested more in countries like Vietnam and Indonesia rather than India.

Abe's government has outpaced China in investment pledges to India, promising to funnel about 3.5 trillion yen ($29 billion) in infrastructure loans, financing and public and private investment. New Delhi has also has set up a special office to promote investments from Japan. At their first summit meeting in 2014, the two leaders vowed to double direct investment within five years.

Against this backdrop, there will likely be announcements of some new investments at this week's meeting, in addition to the mega-infrastructure projects in India that Japan is already an investor in, such as the Ahmedabad-Mumbai High Speed Rail, the Western Dedicated Freight Corridor and the Delhi-Mumbai Industrial Corridor.

However, as Hiroshi Hirabayashi, president of the Japan-India Association and former ambassador to India, put it, "there are too many negative stories from Japanese investors in their experience in India." He cited a litany of cases from the unhappy merger of pharma heavyweights Ranbaxy and Daiichi Sanyko, to NTT Docomo's sour experience with Tata Teleservices and Mitsubishi Chemical's decision to pull out of a massive proposed investment in West Bengal.

According to Hirabayashi, while Modi's visit cannot be expected to solve bilateral problems between companies, he can help to address issues of legality and broad-business policy. The main outcome of the summit, according to the former ambassador, will not be concrete economic problem solving, as much as positive atmospherics.

The symbolism of the visit acquires special significance against the evolving geo-strategic cartography of the region, in particular, Beijing's rising clout and territorial claims. China is expanding its deep-water naval presence and asserts sovereignty over disputed areas of the East and South China Sea and Indian Ocean region, parts of which Japan also claims. India has its own territorial dispute with Beijing along the 4,000-km land boundary they share.

Closer ties between Japan and India are viewed with apprehension in Beijing. According to Japanese news reports, the visit will see India purchasing 12 US-2i amphibious aircraft from manufacturer ShinMaywa Industries at a price tag of between $1.5 and $1.6 billion. The aircraft sale will be one of Tokyo's first arms deals since Japan lifted its 50-year ban on weapons exports in 2014. It will be a first for Japan, which has traditionally been reticent to supply Japanese-made military hardware to other countries. The purchase is certain to rile Beijing, which sees any military closeness between Japan and India as a potential threat. Tokyo and New Delhi already participate in annual joint military exercises along with the US.

Kingston points out that while India continues its policy of hedging, keeping up bilateral ties with both Japan and China, New Delhi is "tilting" closer to Japan than was previously the case. However, although Japan would like to see India make a strong statement of support on its claims against China in the East China Sea, it is unlikely that Modi will do so, beyond a possible reference to upholding the rule of law in settling disputes.

A final area for discussion at the summit might be the furthering of cooperation in infrastructure projects with incidental implications for China. One example is potential Japanese investment in India's development of the Chabahar Port project in Iran, something Tokyo has expressed interest in. This would work towards counteracting the Chinese dominance of infrastructure projects in India's neighbourhood and would help elevate New Delhi's political and economic profile in the region.

Modi and Abe have had a long courtship. Much has been written about the affinity between the two leaders. When the Japanese prime minister signed up for Twitter, Modi was famously the first world leader he followed. If the nuclear deal, in particular, is finally inked this week, it will go some way in demonstrating that their courting is heading towards a firm commitment.

November 7, 2016

Significant headway' on final text before PM Narendra Modi's Japan visit

http://indianexpress.com/article/business/business-others/civil-nuclear-cooperation-agreement-significant-headway-on-final-text-before-pm-narendra-modis-japan-visit-3740653/

During the last meeting between the two prime ministers in New Delhi last December, it was announced that the two sides have agreed "in principle" on inking the civil nuclear agreement.

Negotiations on a final text of the proposed Civil Nuclear Cooperation Agreement between India and Japan have made "significant headway", with both sides learnt to be working overtime on the technical details ahead of Prime Minister Narendra Modi's visit to Japan on November 11-12.
During the last meeting between the two prime ministers in New Delhi last December, it was announced that the two sides have agreed "in principle" on inking the civil nuclear agreement. The details that the two sides are trying to forge a consensus on include **the contentious issue of reprocessing of spent fuel**. Officials involved in the exercise indicated that **Japan is open to somewhat softening its stance on allowing the reprocessing of spent nuclear fuel from Japan-made reactors, something that could have a significant bearing on the progress of the two atomic projects under discussion involving American nuclear vendors — GE-**Hitachi **and** Toshiba**-Westinghouse**.
If Japan were to go ahead and ink a nuclear deal with India, it could be a crucial determining factor as the two US reactor vendors, as well as a range of other global nuclear reactor manufacturers, source the most critical equipment in a reactor — the calandria or reactor vessel — from Japanese heavy forging major Japan Steel Works (JSW). **Experts point to the fact that the transfer of Japanese technology to India for civilian use requires a nuclear pact, but Tokyo has so far desisted from initiating one as India has not signed the Nuclear Non-Proliferation Treaty (NPT).**
Globally, apart from Japan's JSW, there are just three major heavy forging capacities in operation worldwide that can fabricate large single-piece pressure vessels for nuclear reactors — Creusot Forge (a subsidiary of France's Areva group), Russia's OMZ Izhora and Chinese state-owned firm China First Heavy Industries. But **JSW dominates the nuclear forgings business, accounting for an estimated 80 per cent of the world market for large forged components for nuclear plants and owns the world's only plant capable of producing the central part of a large-size reactor's containment vessel in a single piece from a 600-tonne ingot, which reduces radiation risk.**
All the global suppliers are booked with orders for at least the next five years as the most critical issue for accelerating nuclear power plant construction is the availability of heavy engineering plants to make the reactor components, especially for units of over 1,000 MWe (mega watt electric).
While Toshiba-Westinghouse's AP1000 pressure vessel closure head and three complex steam generator parts can only be made by JSW, the Japanese firm has advance orders from GE-Hitachi for fabricating components for its ABWR and ESBWR range of boiling water reactors.
JSW also has the distinction of supplying the pressure vessels for Areva's first two 1650 MWe EPR projects in Finland and France. Reactor vendors prefer large forgings to be integral, as single products, but it is possible to use split forgings that are welded together. These welds then need checking through the life of the plant.
An NPCIL official said the process of bridging the difference over the substantive issues on the proposed India-Japan nuclear agreement in on and that both countries had made significant progress in the negotiations on civil nuclear cooperation. JSW had set up a marketing office in India in 2009 through a subsidiary — JSW India Pvt Ltd.

November 1, 2016
Japan to sign nuclear pact with India
http://www3.nhk.or.jp/nhkworld/en/news/20161101_03/

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The pact is expected to include a provision that prohibits the technology from being used for military purposes. If India conducts further nuclear tests, the deal would likely be suspended.

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Japan, India to sign energy pact on condition of no nuclear tests

THE ASAHI SHIMBUN
http://www.asahi.com/ajw/articles/AJ201611010047.html
Japan and India will sign a nuclear energy pact in mid-November that allows Tokyo to opt out if the South Asian nation tests its nuclear weapons, sources said.
The agreement, the first by Japan with a nation that has not ratified the Nuclear Nonproliferation Treaty, will be signed when Indian Prime Minister Narendra Modi visits Japan later this month, a high-ranking Foreign Ministry official said.
The agreement will enable Japan to export its nuclear energy technology for private-sector use in India. But the sources said wording in the pact will give Japan, which has long pushed for nuclear disarmament and nonproliferation, the option of ending cooperation if India conducts a nuclear test.
At a meeting in New Delhi in December 2015, Prime Minister Shinzo Abe and Modi agreed in principle to sign a nuclear energy agreement. However, Abe told his Indian counterpart, “We will discontinue cooperation should India conduct a nuclear test.”
Diplomats of the two nations have since held discussions on the agreement.
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IAEA approves of Kazakhstan (experience in nukes)

IAEA Praises Kazakhstan's Preparations For Nuclear Programme
http://www.nucnet.org/all-the-news/2016/11/08/iaea-praises-kazakhstan-s-preparations-for-nuclear-programme

Policies & Politics
8 Nov (NucNet): Kazakhstan has developed a considerable base of knowledge and experience in nuclear activities, but should develop "a comprehensive report" that summarises the assessment of all nuclear infrastructure issues, an International Atomic Energy Agency (IAEA) Integrated Nuclear Infrastructure Review (INIR) mission concluded. The eight-day mission reviewed the country's infrastructure development for a nuclear power programme and highlighted a number of areas of potential improvement. Kazakhstan should ensure that key responsibilities and options with respect to spent fuel and radioactive waste management are developed, the INIR mission said. Kazakhstan needs to develop a plan for establishing a competent owner/operator and continue the assessment of its legal and regulatory framework for any nuclear power programme. The IAEA said that due to a desire to reduce reliance on fossil fuels, diversify primary energy sources and curtail greenhouse gas emissions, Kazakhstan is considering the potential role for nuclear power in its energy mix. The INIS team identified three good practices that would benefit other countries considering the introduction of nuclear power: early assignment of responsibilities for the development of the future owner/operator; use of a non-governmental organisation to carry out stakeholder involvement activities; use of a government commission and an expert working group to review the initial site survey and to take into account lessons learned from the March 2011 Fukushima-Daiichi accident in Japan. "Kazakhstan has undertaken several studies over a number of years and has developed a good understanding of all the infrastructure issues described in IAEA guides to the development of national infrastructure for nuclear power," said team leader Milko Kovachev, head of the IAEA's nuclear infrastructure development section. The IAEA said Kazakhstan, the world's largest uranium producer, is developing capabilities to implement all stages of the front end of the nuclear fuel cycle. It has a well-developed scientific research base, including three research reactors in operation and several other nuclear installations. It also has 25 years of experience operating the Aktau BN-350 fast breeder reactor, which is currently under decommissioning. More than 80% of electricity in Kazakhstan is currently produced from fossil fuels.

Abe, Modi sign nuclear deal

November 12, 2016

Japan, India sign agreement on civil nuclear power

THE ASSOCIATED PRESS
Japan signed a pact Friday in which it agreed to sell India civil nuclear power equipment and technology, as the Japanese nuclear industry seeks markets overseas because of shrinking business at home since the 2011 Fukushima disaster.

Japanese Prime Minister Shinzo Abe and his Indian counterpart, Narendra Modi, also agreed during talks to advance business and security cooperation.
The nuclear pact, though limited to peaceful commercial use, is controversial because India has not signed the Nuclear Non-Proliferation Treaty. It has raised concerns in Japan about a risk of the country's technology being diverted to India's nuclear weapons program.
The pact allows India to reprocess fuel and enrich uranium, though highly enriched uranium that can be used to make nuclear weapons is not permitted without written agreement by Japan.
The two leaders insisted the agreement will contribute to peaceful use of clean energy, and Japanese officials said Tokyo will scrap the deal if India conducts a nuclear test.
"This agreement sets a legal framework to assure that India acts responsibly for the peaceful uses of nuclear energy," Abe said, adding that it gets India to effectively participate in the non-proliferation treaty framework. "It is also in line with Japan's position to promote non-proliferation to create a world without nuclear weapons."
Modi praised the signing as "a historic step in our engagement to build a clean energy partnership" that will help India "combat the challenge of climate change."
Anti-nuclear groups denounced the agreement, citing threats to safety and regional peace and increased risk of proliferation.
Energy-hungry India wants to increase nuclear power generation to support its strong economic growth. The country has signed similar nuclear agreements with France, Russia, Britain and the United States.
Abe's pro-business government seeks to export nuclear power plants to counter shrinking sales at home since the Fukushima nuclear disaster, and has discussed similar deals with Vietnam and Turkey.
Vietnam was a strong candidate for Japanese nuclear technology exports, but it announced this week that it is scrapping plans for two nuclear power plants because of slowing demand for electricity and the declining price of other sources of energy.
Exports of infrastructure, including high-speed railway systems, are part of Abe's growth strategy.
Japan is set to participate in an upcoming Indian rapid railway system, but the scope of its role is still being negotiated. Design work for the railway system, to link Mumbai and Ahmedabad in western India, is to start in December and construction is set to begin in 2018. Abe expressed hope that Japan wins extensive portion of the project.
On Saturday, Abe will escort Modi on a Japanese shinkansen "bullet" train to visit a railway factory in Kobe in western Japan.
Japan and India also agreed to step up defense cooperation amid increased assertiveness by China in the region. Tokyo is seeking to export defense equipment and technology to India. But an agreement on a long-hoped-for sale of US-2 rescue aircraft, produced by Japan's ShinMaywa Industries, was not finalized because of differences over pricing and other conditions.

November 11, 2016
Abe, Modi sign nuclear power deal

http://www3.nhk.or.jp/nhkworld/en/news/20161111_36/

The prime ministers of Japan and India have signed an agreement that will allow Japan to export nuclear power technology to India.

Japanese Prime Minister Shinzo Abe and his Indian counterpart, Narendra Modi, signed the deal in Tokyo

on Friday.

Under the agreement, nuclear-related technology from Japan will only be used for peaceful purposes. It also calls for exchanging information on nuclear materials and equipment for nuclear power plants.

The agreement includes a provision for halting cooperation to prohibit the technology from being used for military purposes.

The Japanese government says separate documents also confirm that the cooperation will be stopped if India's activities run counter to its 2008 announcement of a suspension of nuclear tests.

This is Japan's first such deal with a non-signatory of the Nuclear Non-Proliferation Treaty.

In international affairs, the prime ministers agreed that attempts to unilaterally change the status quo are unacceptable, and they confirmed the importance of the rule of law. This appears to be a reference to China, which has been increasing its maritime activities.

They also agreed that India aims to open a high-speed railway in the western part of the country by 2023. The country has decided to use Japan's Shinkansen bullet train technology for the project.

The agreement also states that 30,000 Indian engineers will be trained over the next 10 years with the help of Japanese firms. These engineers will then train workers at Indian factories.

Abe told a joint news conference the nuclear agreement is a legal framework that will ensure India uses nuclear power responsibly. He noted that the accord will lead to the country effectively joining the international non-proliferation regime.

Modi said the agreement is a historic step in building a clean energy partnership between the 2 countries, and it is focused on using nuclear power for peaceful purposes.

Modi and Abe will inspect a plant that manufactures Shinkansen bullet trains in western Japan on Saturday, the final day of the Indian prime minister's visit.

Tochigi governor relected

November 21, 2016

Tochigi governor lands fourth term, beats JCP-backed foe of nuke waste plan

http://www.japantimes.co.jp/news/2016/11/21/national/politics-diplomacy/incumbent-lands-fourth-term-tochigi-governor-beats-jcp-backed-foe-nuke-waste-plan/#.WDLFYH2Dmos

Kyodo
UTSUNOMIYA, TOCHIGI PREF. – Tomikazu Fukuda has been re-elected to a fourth term as governor of Tochigi Prefecture, defeating a newcomer supported by the Japanese Communist Party.
Fukuda, 63, backed by Komeito and the local chapter of the Liberal Democratic Party, won Sunday's race with support from commerce and agricultural organizations.
He pledged to promote local businesses and enhance child-rearing support.
The 64-year-old challenger, Toshiharu Kobayashi, stressed he would demand the central government exclude a town in Tochigi from a list of candidate sites for nuclear waste disposal.

Japanese companies to invest in Areva

December 8, 2016

Mitsubishi Heavy, Japan Nuclear Fuel to invest in France's Areva

http://www.japantimes.co.jp/news/2016/12/08/business/corporate-business/mitsubishi-heavy-japan-nuclear-fuel-invest-frances-areva/#.WEqhm32Dmos

Kyodo
Mitsubishi Heavy Industries Ltd. and Japan Nuclear Fuel Ltd. are making final arrangements to invest tens of billions of yen in atomic energy company Areva, which is being bailed out by the French government, sources close to the matter said Thursday.
Through the investment, the heavy machinery manufacturer and the spent-fuel reprocessing firm hope to improve technical cooperation with Areva on decommissioning reactors and reprocessing nuclear fuel.
Areva has been reeling from weak global demand since the 2011 Fukushima disaster triggered a slump in the nuclear power industry.
Areva is being bailed out by the French government, which has been asking Mitsubishi Heavy to invest since last year.
MHI President Shunichi Miyanaga had said that investing in Areva, which has expertise in decommissioning procedures and fuel reprocessing, would benefit Japan as it faces the prospect of decommissioning more aging nuclear reactors amid high public concern over nuclear safety.
A major Chinese nuclear power company is also considering investing in the state-owned group.
Mitsubishi Heavy is also planning to invest in Areva's plant-building arm in hopes of winning orders to build nuclear power plants in emerging economies where demand is growing.
The heavy machinery maker and Areva are already involved in a joint venture to develop nuclear plants with advanced reactors.

Nukes not an answer to global warming

Why nuclear energy is not an answer to global warming

Talk from Dr. Alex Rosen, Medact-Conference
On December 9th, Dr. Alex Rosen, Vice-President of IPPNW Germany, was invited to talk on the subject of nuclear energy and climate change at the MedAct Conference "Healthy Planet - Better World". The subject of his talk was "Why nuclear power ist not an answer to global warming". In it, he argued that nuclear power was not a good investment and that the true and long-term costs and effects of nuclear power far outweigh its potential short-term benefits. He named the detrimental effects of uranium mining and nuclear waste on the environment an on public health and listed the most relevant studies on the effects of uranium mining and civil nuclear energy on childhood leukemia, lung cancer and other radiation-related diseases. He explained the underestimated risks of nuclear catastrophes and talked about the nuclear legacy that we are leaving to future generations. He also cited studies showing that nuclear energy is in fact irrelevant when it comes to the reduction of greenhouse gas emissions or alleviating climate change. The inextricable links between nuclear power and nuclear weapons, brought to light in the common interests between the civil nuclear industry and the British Trident nuclear submarine program recently was also discussed, as were the attempts of the nuclear lobby to create fake citizen groups and NGO's in order to greenwash its business model. His presentation ended with an outlook to what could be described as a real energy revolution: modern energy conservation and efficiency methods, combined with 100% renewable energy generation, feeding flexible, distributed, community-based smart grid systems that would offer energy autonomy and independence of fossil and nuclear fuel imports. The main arguments of his talk can be found in the attached document.

"Why nuclear energy is not an answer to global warming"by Dr. Alex Rosen
Link to PDF :
http://www.ippnw.eu/commonFiles/pdfs/Atomenergie/Why_nuclear_energy_is_not_an_answer_to_global_warming.pdf

Govt to continue nuclear fuel cycle project despite everything

December 22, 2016

Gov't set to continue nuclear fuel cycle project despite Monju closure

http://mainichi.jp/english/articles/20161222/p2a/00m/0na/014000c

The government formally decided at a meeting of Cabinet ministers concerned with nuclear energy on Dec. 21 to decommission the trouble-plagued Monju prototype fast-breeder nuclear reactor in Tsuruga, Fukui Prefecture.

- 【Related】Japan decides to scrap trouble-plagued Monju prototype reactor
- 【Related】Plan to decommission troubled Monju reactor meets local criticism

Over 1 trillion yen in taxpayers' money has so far been invested in the reactor -- the core facility in the government's nuclear fuel cycle project in which spent nuclear fuel is reprocessed and reused in nuclear reactors.

Nevertheless, Monju, operated by the government-affiliated Japan Atomic Energy Agency (JAEA), will be shut down after being in operation for a total of only 250 days since the reactor reached criticality for the first time in 1994.

Still, the government, which is poised to continue the nuclear fuel cycle project, also agreed at the Dec. 21 meeting to draw up a road map by 2018 toward developing a fast reactor for the project.

In other words, the government is moving toward its "next dream" even without clarifying the cause of the failure of what they called "dream nuclear reactor" Monju and who is responsible for the fiasco.

"It's extremely important to maintain the nuclear fuel cycle project and promote the development of a fast reactor," Chief Cabinet Secretary Yoshihide Suga told a news conference following the decision.

However, continuation of the project will likely pose a challenge. The government's nuclear fuel cycle project involves two cycles -- one centered on a fast-breeder reactor and the other in which mixed-oxide (MOX) fuel, nuclear fuel made from reprocessed plutonium and uranium, is used in nuclear plants.

With the decision to decommission Monju, the cycle involving a fast-breeder reactor has failed. At the same time, the government has failed to smoothly press forward with the cycle involving the use of MOX fuel since most nuclear power plants have been idled since the outbreak of the Fukushima nuclear crisis in March 2011. The No. 3 reactor at Shikoku Electric Power Co.'s Ikata plant is the only nuclear reactor using MOX fuel, which is currently in operation.

A spent nuclear fuel reprocessing plant in Aomori Prefecture is undergoing safety screening by the Nuclear Regulation Authority (NRA), and pools holding spent nuclear fuel at atomic power stations across the country are filled to 70 percent of their capacities on average. Japan's stockpile of plutonium, which can be converted to use in nuclear weapons, has kept growing. By the end of 2015, the plutonium Japan possessed domestically and overseas had amounted to 47.9 metric tons.

The development of a fast reactor poses technological challenges. While a breeder reactor is designed to increase the amount of plutonium, the government emphasizes that a fast reactor that it is aiming to develop will play the role of an "incinerator" for nuclear waste such as by reducing the volume of high-level radioactive waste.

However, no experiment has been conducted on a fast reactor using actual radioactive waste. Hirofumi Nakamura, head of JAEA's planning and coordination division, acknowledged that the technology has not even reached the stage prior to putting it into practical use.

Serious questions persist about the feasibility of a fast reactor for economic reasons, and such a reactor is often dubbed as "modern alchemy."

The basic structure of a fast reactor and that of a breeder reactor are basically the same with the only differences being fuel types and arrangements. Therefore, a fast reactor, which is supposed to play the role of an incinerator for spent nuclear fuel, could be converted into a breeder reactor that produces plutonium.

A senior official of JAEA admits that "there is room for converting a fast reactor into one that breeds (plutonium)."

A fast reactor can be put into practical use after the development and production of experimental, prototype and then demonstration reactors. The government participates in the joint development of ASTRID, a French demonstration fast reactor. However, it remains unclear whether data and knowledge gained from the project in France, which is rarely hit by earthquakes, can be utilized in quake-prone Japan.

France is aiming to begin to operate the fast reactor in the 2030s, but the necessary funds for the project have only been allocated up to 2019. Questions remain as to whether Japan, which has aborted its project

involving Monju, a prototype reactor, can be involved in a project to develop an upper-tier demonstration reactor.
Even those within the governing coalition are calling for caution in Japan's involvement in the joint development project in France. "Japan shouldn't ride on someone's (France's) back," said Hiroshi Hase, former education, culture, sports, science and technology minister.
NRA Chairman Shunichi Tanaka dismissed the feasibility of a demonstration reactor. "I understand that a demonstration reactor isn't realistic," Tanaka told a news conference on Dec. 21.

UK and Japan's nuke agreement

23.12.2016_No254 / News in Brief
UK And Japan Sign Nuclear Cooperation Agreement
http://www.nucnet.org/all-the-news/2016/12/23/uk-and-japan-sign-nuclear-cooperation-agreement

Plans & Construction
23 Dec (NucNet): The UK and Japan have signed an agreement that significantly expands cooperation in the nuclear energy sector and paves the way for Japanese companies to build nuclear plants in the UK, the Department for Business, Energy & Industrial Strategy said in a statement. The agreement also covers cooperation in the areas of decommissioning and decontamination and it is anticipated that the deal will give UK companies with advanced technologies greater access to projects at the Fukushima-Daiichi nuclear station, where three of the six reactors suffered meltdowns after the March 2011 earthquake and tsunami. The agreement was signed in Tokyo on 22 December 2016 by Hiroshige Seko, the Japanese trade and industry minister, and Greg Clark, the UK business and energy secretary. The agreement is the first of its kind for Japan, while Mr Clark described it as “vital” to the UK's industrial strategy and the development of clean energy sources. One of the key components of the agreement is the proposals to build new reactors in the UK. Two Japan-led consortia, Horizon and NuGen, are developing plans to build new nuclear projects in the UK. Horizon, bought by Hitachi from a German company in 2012, has delivered the outline of a project at Wylfa Newydd in Wales, and has plans to build as many as six reactors in the UK. Toshiba joint venture NuGen is planning the Moorside nuclear station in Cumbria, northwest England, and is considering additional projects. The first of the three Westinghouse AP1000 reactors at Moorside is targeted to come online in the mid-2020s.
Related reports in the NucNet database (available to subscribers):

- UK’s NuGen Signs Land Contract For Moorside Reactors (News in Brief No.137, 14 July 2015)

Can Fukushima No.2 plant continue to exist?

January 3, 2017
Fate of Fukushima No. 2 nuclear plant remains unknown

http://www.japantimes.co.jp/news/2017/01/03/national/fate-fukushima-no-2-nuclear-plant-remains-unknown/#.WGvMV32Dmos

JIJI

The government is struggling to decide the future of Tepco's Fukushima No. 2 nuclear power plant, which has been suspended since the March 2011 disaster.

There have been increasing calls for decommissioning the power plant located just a few kilometers south of the wrecked Fukushima No. 1 installation.

The government has been finding it difficult to reach a clear conclusion on Fukushima No. 2's fate, as it and Tokyo Electric Power Company Holdings have been busy dealing with its older counterpart that suffered three reactor meltdowns following the March 2011 earthquake and tsunami.

On Dec. 21, the Fukushima Prefectural Assembly voted unanimously to adopt a resolution calling on the central government to decommission the No. 2 plant "at an early date," arguing that the facility is an obstacle to the prefecture's recovery from the 3/11 disasters.

A temporary halt to the cooling system for a spent fuel pool at the No. 2 plant caused by an earthquake in November rekindled fears of another meltdown crisis.

In 2011, the prefectural assembly adopted a petition calling for decommissioning all reactors in Fukushima.

The assembly has also adopted a series of written opinions demanding the decommissioning of the No. 2 plant, which is located in the towns of Naraha and Tomioka.

Demands from local communities "have been ignored by the central government," one person said.

The central government's official position is that whether to decommission the plant is up to Tepco.

As the government has already lifted the state of emergency for the No. 2 plant, it has no authority to decide the decommissioning under current regulations.

If an exception were made, the central government could receive a barrage of requests for decommissioning reactors all over the country, sources familiar with the situation said.

"Such a situation would destroy Japan's whole nuclear policy," a senior official at the Ministry of Economy, Trade and Industry said.

Some people have called for creating a special law on decommissioning Fukushima No. 2, but others have raised concerns that such a step could infringe on Tepco's property rights, the sources said.

Some officials in the central government have said that no one believes the No. 2 plant can continue to exist.

Prime Minister Shinzo Abe and his Cabinet have left room for making a political decision on dismantling the facility, saying that the plant can't be treated in the same way as other nuclear plants due to fear among Fukushima residents of another nuclear accident.

Since the government effectively holds a stake of more than 50 percent in Tepco, it can influence the company's policy as a major shareholder.

But Tepco now needs to focus on dealing with the No. 1 plant. A senior company official said that it "cannot afford to decide on decommissioning, which would require a huge workforce."

The main opposition Democratic Party plans to pursue a suprapartisan law that would urge Tepco to decide to decommission the plant at an early date.

"While understanding calls for early decommissioning, we have no choice but to wait for the No. 2 plant's four reactors to reach the end of their 40-year lifetimes," a lawmaker of the ruling Liberal Democratic Party said.

The four reactors launched operations between April 1982 and August 1987.

Govt wants roundtable discussions on reorganising the power industry

January 3, 2017

Gov't mulls 'roundtable' meetings to spur power industry reorganization

http://mainichi.jp/english/articles/20170103/p2a/00m/0na/012000c

The Economy, Trade and Industry Ministry is considering holding "roundtable" discussions with top executives of major power companies on measures to restructure their business ties with beleaguered Tokyo Electric Power Co. (TEPCO) and set up operations overseas, it has been learned.

The industry ministry wants to help pave the way for the power industry to restructure and consolidate by setting up a forum in which major utilities can exchange views on the realities of domestic and overseas markets as well as management reforms. The move will effectively have the government play mediator in the reorganization of the power industry.

The move comes after a ministry expert committee on reforming TEPCO and issues related to the tsunami-hit Fukushima No. 1 nuclear plant proposed on Dec. 20 that the government play a "catalytic" role in the realignment of the power industry. In response, TEPCO plans to hash out a new management restructuring plan this month or later. The roundtable is expected to be set up around the time that TEPCO comes up with its new restructuring scheme.

One of the expert panel's proposals is for TEPCO to establish a "consortium" with other utilities on its power transmission and nuclear power projects at an early date. The proposal is intended to facilitate the realignment and consolidation of the power industry as part of moves to rationalize TEPCO's measures to cover the costs of dealing with the Fukushima nuclear accident. The expert panel projected that these costs would swell to 21.5 trillion yen from an earlier estimate of 11 trillion yen. The proposal also draws on TEPCO's plan to move its thermal power business to JERA Co., a joint venture with Chubu Electric Power Co.

The industry ministry is considering plans including publicly soliciting prospective partners for TEPCO. However, major power companies remain cautious, with a senior official at one major utility saying, "Our own company's profits will be used to deal with the nuclear accident." The utility roundtable meeting is the industry ministry's attempt to help resolve this and other issue. The roundtable idea is also in line with the TEPCO's opinion that "as long as TEPCO is aiming to reorganize at a national level, we want to have an opportunity for all companies to meet and discuss things," as a TEPCO executive said.

While domestic power demand has stagnated due to energy-saving efforts and the declining birthrate, the industry is faced with a shifting market overseas, where demand continues to rise. According to an International Energy Agency (IEA) forecast, while Japan's domestic electricity consumption will rise only slightly from 950 billion kilowatt-hours in 2014 to 980 billion kilowatt-hours in 2030, overall global consumption will rise from 19.8 trillion kilowatt-hours to 27.9 trillion kilowatt-hours.

Through the roundtable, the industry ministry is keen to help boost utilities' entry into overseas markets by facilitating industry rationalization to strengthen their businesses at home. However, as the power industry may not respond well to having reorganization foisted on it by the government, the ministry

plans to flesh out the scheme carefully. As a senior utility official said, "It is essential to set up a contact point for private entities first and leave the matter to them thereafter."

Nuclear revival?

January 4, 2017

Long-promised nuclear revival has run out of steam

http://www.theecologist.org/blogs_and_comments/commentators/2988485/longpromised_nuclear_revival_has_run_out_of_steam.html
Paul Brown

A legacy of lies and covered-up accidents has left nuclear energy with a serious credibility gap, writes Paul Brown. But poor safety is only the beginning of the industry's problems. With 'new improved' reactor designs all running late and way over budget, any nuclear revival can only be sustained at massive, unaffordable taxpayer cost.

For the last 35 years not a single nuclear power station in the west has been built to time or on budget, undermining the claim that nuclear power can compete with other fuels on price: without government subsidy, nuclear power cannot survive.

There have been three well-documented major nuclear accidents in the last 60 years, each one accompanied by official lies and cover-ups.

There have been other less well-known serious accidents that have been so effectively hushed up that decades later there are only the sketchiest details available.

The legacy of these disasters is a deep distrust of the industry by many voters. In some leading industrial countries this has led to governments being forced to abandon nuclear power altogether, while others face such strong opposition to new stations being built that they have abandoned the idea, although they still keep the old ones operating, at least for now.

This chequered history of the industry matters. It has caused a global split. While many scientists and politicians concerned about climate change believe that nuclear power is vital if governments are to meet their commitments to curb dangerous global warming, just as many do not.

The opposition is based on the belief that the industry has lost all integrity and credibility and that renewables are a cheaper, safer and all-round better bet. This view is reinforced by the inability of the industry to deal with its waste. Renewables can easily be recycled, but nuclear waste remains dangerous for thousands of years, leaving future generations to pay for it.

But it is the three major disasters that are at the root of this fierce debate. They happened over a span of 60 years, and all had different causes. But all followed a familiar pattern.

From Windscale to Fukushima

The first was at Windscale in north-west England in 1957, when a plutonium-producing reactor caught fire. The second was Chernobyl on the border of Ukraine and Belarus in 1986: the top blew off one of the

reactors and there was a serious fire. The third was at Fukushima in Japan in 2011, when an earthquake and a tsunami caused meltdowns at three reactors.

All three accidents had startling similarities in the official reaction. In each case the governments involved, the nuclear regulators and plant owners tried to hide the scale of the disaster from the public who were most in danger. In each case this resulted in unnecessary exposure of the population to harmful radiation.

Second, the possible long-term health effects to the people involved were hotly disputed. In each case this took the form, both at the time and ever since, of governments and the industry playing down the health risks.

There is still an argument about whether the Windscale fire caused a leukaemia cluster in children in the neighbourhood. After Fukushima, governments and the industry claim, very few or no deaths at all resulted. Expect the argument to continue for decades.

Third has been the underplaying of the enormous cost and intractable nature of trying to clean up the mess. For example, people who are evacuated are told the move is only temporary, when it could last for decades, possibly generations.

Again, the official estimate for' compensation' for the Fukushima accident rose from ¥5.4 trillion (£40bn) to ¥8 trillion (£70bn), a fact only slipped out at the end of November 2016, nearly five years after the accident.

Technically insurmountable

In each case, even after the Windscale accident 60 years ago, the clean-up of the actual nuclear pile that caught fire has several times started and then been abandoned as too difficult. They are not expected to be completed for decades.

There is no hope of cleaning up Chernobyl or Fukushima this century. A new concrete shell over Chernobyl to replace the existing crumbling structure should be in place by 2017 at a cost of €2.1 billion - but this is designed only as a temporary structure, to last 100 years.

Governments tried hard to cover up what happened. At Windscale, the British government subsequently admitted it had deliberately covered up the seriousness of the accidents to keep its nuclear weapons programme on track.

In Chernobyl's case it was the sky-high radiation readings from as far away as Scandinavia and Germany that led the Soviets to admit what had happened. Thirty years later the real health effects of the accident are hotly disputed.

Thousands of children have had their thyroids removed and there have been many birth defects and cancers. Belarus, worst hit by the disaster, is anxious to play down the long-term effects to avoid frightening potential foreign investors in the country.

The nuclear industry has been trying hard to put all this in the past. In response to public concerns it has come up with a whole series of 'safer' designs for nuclear power stations. As a result, some countries like Finland and Britain are encouraging the building of a new generation of French, Japanese, Chinese and American designs.

Nuclear power can only survive on taxpayer handouts

This time, however, it is not just safety that is at issue. For the last 35 years not a single nuclear power station in the west has been built to time or on budget. It undermines the claim that nuclear power will be able to compete with other fuels on price. It has repeatedly been shown that, without government subsidy, nuclear power cannot survive.

The latest evidence for this is the two new power stations being built in Finland and France, at Olkiluoto and Flamanville. Both are nearly 10 years behind schedule and have more than doubled in cost.

The original claims that the price of the electricity the stations would produce would be competitive cannot be true. Wholesale prices must already have more than doubled before a single watt of power has been produced.
Financial markets have also just witnessed the astonishing financial meltdown that has hot Toshiba, which has seen its market capitalisation fall by over $6 billion as a result of massive losses and growing liabilities in its CB&I Stone & Webster and Westinghouse nuclear construction subsidiaries. From 14th December to today, Toshiba's share price has fallen from ¥468 to ¥277 as news of problems with its flagship AP1000 nuclear reactor, and huge time and cost over-runs at construction sites in the US and China, has emerged.
Yet, despite this track record, the nuclear industry hopes to keep on growing and claims it is expecting to do so - and many governments continue to pour money into research and development. They do so in the hope that one day nuclear power will provide a safe and economically viable method of producing electricity.
So far, however, there is no sign of the long-predicted nuclear renaissance. The costs of a safe design continue to increase as the industry and governments attempt to live down the legacy of misleading the public for the last 60 years.
It seems that if the climate is to be saved from overheating, we shall have to do this without the aid of new nuclear power.

Japan unfit for nuclear projects

January 25, 2017

After years of setbacks, Japanese unfit for nuclear energy projects

http://mainichi.jp/english/articles/20170125/p2a/00m/0na/006000c

According to a well-known joke about the national traits of Europeans, it is heaven if the chefs are French, the engineers are German and the bankers are Swiss and it is hell if the chefs are British, the engineers are French and the bankers are Italian."

- 【Related】Editorial: Toshiba must clarify how it suffered staggering losses
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As for the Japanese? They appear not suited to a particular field -- nuclear energy. And that is no joke. The development of nuclear technology as part of national policy and by private nuclear businesses has repeatedly experienced failure, causing problems to numerous people and wasting a massive amount of money.
Mutsu, Japan's first and only nuclear-powered ship which was launched in the early 1970s, suffered a radiation leakage and was decommissioned in 1992 after having only four experimental runs.

The government decided late last year to decommission the prototype fast-breeder reactor Monju in Fukui Prefecture, which has hardly been in operation for more than 20 years following a fire triggered by a sodium leak broke out at the facility in 1995.
Construction work on a spent nuclear fuel reprocessing plant in Rokkasho, Aomori Prefecture, got underway in 1993, but its completion was postponed 23 times and there are no prospects that it will be put in operation in the foreseeable future.
Roughly 5 trillion yen has so far been spent on nuclear projects in Japan.
In March 2011, a serious accident occurred at Tokyo Electric Power Co.'s Fukushima No. 1 Nuclear Power Plant after the complex was hit by a massive tsunami triggered by the Great East Japan Earthquake. Over 80,000 residents from areas near the atomic power station are still living outside the affected areas as evacuees. The costs of dealing with the nuclear crisis have already surpassed 20 trillion yen.
Meanwhile, Toshiba Corp. has added a new page to the negative history of Japan's nuclear development.
In 2006, Toshiba acquired Westinghouse Electric Co., a U.S. nuclear plant company, for over 600 billion yen. The deal was criticized as too costly, but Toshiba wanted to control the world nuclear power market. Toshiba's president at the time was upbeat about the takeover saying, "We'll conduct business aggressively."
Nevertheless, Toshiba will likely suffer nearly 1 trillion yen in losses from the deal because the electronics giant failed to find hidden problems involving its U.S. nuclear power unit. The world nuclear power market has shrunk since the outbreak of the Fukushima nuclear crisis. Following revelations that it had padded its profits through accounting irregularities, Toshiba downsized its workforce by more than 10,000 people, but its rehabilitation efforts are still insufficient. Its financial difficulties have even put the company's survival in jeopardy.
Physicist and technology commentator Kiyoshi Sakurai, who is well versed in technical problems and accidents involving nuclear plants, warned in a past Mainichi Shimbun interview, "Only a handful of those concerned with a certain project loudly underscore the significance of the project. These people could self-righteously go too far without understanding the project's objectivity or necessity."
His remarks remind the public of a past silly war (World War II).
More sadly, it is feared that Japanese people traumatized by the atomic bombing tend to stick to the peaceful use of atomic energy and have lost the capacity for calm and rational judgment.
After reviewing the above, one can see that Japanese people are unfit for nuclear energy development projects. (By Hideaki Nakamura, Editorial Writer)

90% "low carbon" but with nukes

February 1, 2017
Japan may aim for 90% low-carbon energy sourcing
https://www3.nhk.or.jp/nhkworld/en/news/20170201_13/

Japan's environment ministry is to call for an ambitious new low-carbon energy target.
Officials will recommend that Japan produce more than 90 percent of its energy from low-carbon sources, **including nuclear power,** by 2050.

Japan will present a plan to the United Nations by 2020 as required by the 2016 Paris Agreement on climate change. Experts including a panel appointed by Japan's environment ministry are drawing up the plan.

The ministry says the draft plan will include a call for Japan to source the vast majority of its electricity from renewable sources such as solar and wind. Nuclear power, a low-carbon energy source, will also be included in the 90 percent target.

The plan would be far more ambitious than a previous government target set 2 years ago. That called for about 40 percent low-carbon sourcing by 2030.

The new plan will also recommend research into emissions trading systems and carbon taxes on fossil fuels.

This is likely to be opposed by bulk consumers of fossil fuels, such as the steel and electric power industries.

Nukes enormously risky...financially

February 4, 2017

Dream of cheap, clean nuclear power is over

http://www.japantimes.co.jp/opinion/2017/02/04/commentary/world-commentary/dream-cheap-clean-nuclear-power/

by Noah Smith
Bloomberg
NEW YORK – For much of my life, I loved the idea of nuclear power. The science was so cool, futuristic and complicated, the power plants so vast and majestic. I devoured science fiction novels like “Lucifer’s Hammer,” where a plucky nuclear entrepreneur restarts civilization after a comet almost wipes us out. I thought of accidents like Three Mile Island and even Chernobyl as stumbling blocks to a nuclear future.
Then, in 2011, two things happened. First, a tsunami knocked out the Fukushima No. 1 nuclear plant, forcing a mass evacuation and costing Japan vast sums of money. Second, I learned that progress in solar power had been a lot faster and steadier than I had realized. I started taking a closer look at whether nuclear was really the future of energy. Now I’m pretty convinced that my youthful fantasies of a nuclear world won’t come true anytime soon.
Safety is part of the problem — but a much smaller part than most people realize. The Fukushima nuclear crisis caused an enormous area to be evacuated. But recent research shows that the reaction might have been overdone — radiation levels for people exposed to the leak was substantially less than many had thought.

Meanwhile, countries are getting better at burying their nuclear waste. Finland is excavating a storage area deep underground that will hold radioactive waste safely for 100,000 years. France, which gets a lot of its energy from nuclear plants, also stores waste deep underground.

So nuclear hazards, while significant, are probably less than many believe. And compared with fossil fuels — which turn whole cities into toxic deathtraps, foul the atmosphere with gigatons of carbon and can lead to huge oil spills — nuclear looks downright clean.

The biggest problem with nuclear isn't safety — it's cost. The economics of nuclear are almost certain to keep it a marginal part of the energy mix, especially in the United States.

Many energy sources involve relatively small upfront costs. To increase solar power, just build more panels. Fracking also has lower fixed costs than traditional oil drilling. But nuclear's fixed costs are enormous. A new nuclear plant in the U.S. costs about $9 billion to build — more than 1,000 times as much as a new fracking well, and more than 3,000 times as much as the world's biggest solar plant.

Raising $9 billion is a daunting obstacle. It's more money than Apple Inc., America's most valuable company, borrowed in 2016. The plucky young entrepreneur raising enough money to build his own nuclear plant in "Lucifer's Hammer" was pure fantasy; in reality, nuclear plants get build by giant corporations such as General Electric Co. and Toshiba Corp., with huge assistance from the government in the form of loan guarantees.

It's hard to raise money for projects with giant fixed costs and long horizons for repayment, because they're inherently risky. If something goes badly wrong with the project, all of that upfront money is lost. If competition makes a project uneconomical in five or 10 years in the future, the financiers will take a big loss. It's very hard to make predictions of more than a few years, especially about competing technologies.

For nuclear power, that's the main risk — rapid advances in competing technologies. Solar power is already cheap and is plunging in price, while energy storage is also becoming much more affordable. If these trends continue, a nuclear power plant that's economical today will be out-competed in a few years. In other words, there will be no way the owner could recover the fixed costs.

What's worse, nuclear doesn't look like it's getting any cheaper. A recent paper by the Breakthrough Institute shows that in most countries, nuclear costs haven't changed much in recent decades:

Constant or rising nuclear construction costs, matched with dramatically falling solar and storage costs, mean that anyone who ponies up the $9 billion to build a nuclear plant today is taking a gargantuan risk.

Another source of risk is safety — not the well-known threats of accidents and storage leaks, but the unknown unknowns. If terrorists figure out how to bomb nuclear plants, or hackers find ways to invade their software and cause them to melt down, the destruction could be catastrophic. But no one really knows how likely or remote those threats will be a decade from now. And even if those risks can be prevented, doing so will probably cause large unanticipated costs.

So nuclear power hasn't become the futuristic dream technology the old science fiction novels envisioned. Instead, it's a huge, risky government-subsidized corporate boondoggle. Someday we may have fusion power or small, cheap fission reactors, and the old dream of nuclear will be realized. But unless one of those breakthrough technologies comes to fruition, nuclear isn't the power of tomorrow.

Noah Smith is an assistant professor of finance at Stony Brook University.

Areva reaches agreement with MHI and JNFL

February 3, 2017
03.02.2017_No25 / News in Brief

http://www.nucnet.org/all-the-news/2017/02/03/mhi-jnfl-to-buy-10-stake-in-areva-s-newco-nuclear-fuel-group

MHI, JNFL To Buy 10% Stake in Areva's NewCo Nuclear Fuel Group

Uranium & Fuel

3 Feb (NucNet): French nuclear group Areva said today it had reached an agreement with Japan Nuclear Fuel Limited (JNFL) and Mitsubishi Heavy Industries (MHI) to buy a combined 10% stake in nuclear fuel group NewCo for €500m ($538m).

The state-owned company also said that the capital of NewCo – which is being split off from Areva in a government-led rescue – remains open to other strategic investors.

Shareholders of parent company Areva SA and NewCo were expected vote on two capital increases for the companies today.

Last month EU anti-trust regulators cleared the French government's restructuring of Areva.

The European Commission said French plans to grant a capital injection of €4.5bn to Areva were in line with EU state aid rules.

In April 2016, France notified the Commission of a restructuring plan to restore its competitiveness.

The plan provides for various divestments, in particular the group's nuclear reactor business.

Areva, which is 86.5% owned by the French state, will instead focus its activities on the nuclear fuel cycle.

France plans to help Areva bear the cost of restructuring by injecting public capital of €4.5bn.

In September 2016, Areva began the transfer of its nuclear fuel cycle activities to NewCo.

Related reports in the NucNet database (available to subscribers):

- EU Clears State Capital Injection For Restructuring Of France's Areva (News in Brief No.8, 11 January 2017)

Toshiba's woes an opportunity for Japan to change energy policy?

February 15, 2017

Toshiba's woes weigh heavily on government's ambition to sell Japan's nuclear technology

http://www.japantimes.co.jp/news/2017/02/15/national/toshibas-woes-weigh-heavily-governments-ambition-sell-japans-nuclear-technology/#.WKQrfvKDmos

by Eric Johnston
Staff Writer

OSAKA – Toshiba's announcement that it will write down nearly ¥712.5 billion in losses involving its U.S. nuclear unit, Westinghouse, is seen as a major setback for the government's strategy of selling Japanese nuclear power technology abroad.

Over the past four years, Prime Minister Shinzo Abe, the Ministry of Economy, Trade, and Industry, and nuclear power players, such as Toshiba/Westinghouse, General Electric-Hitachi and Mitsubishi Heavy Industries, have promoted Japanese nuclear reactor technology worldwide.

Attempts to increase exports came even as concern within Japan grew over nuclear safety following a triple meltdown at the Fukushima No. 1 plant in the wake of the March 11, 2011 earthquake and tsunami. The efforts also came as questions were being raised about the total cost of nuclear power compared with other energy sources.

Japanese firms have attempted, with little success, to sell their technologies in countries as diverse as France, Vietnam, India, Turkey, Hungary, Poland, Slovakia, the Czech Republic and the United Arab Emirates. In June 2016, Toshiba said its goal was to win orders for 45 or more nuclear reactors overseas by 2030.

But Tuesday's announcement by Toshiba came a few weeks after the company announced it would not take any new construction orders for nuclear reactors, and that it would focus instead on maintenance and decommissioning operations.

That decision effectively ended a decade-long effort by Toshiba, which began when it acquired a majority stake in Westinghouse in 2006, to make nuclear reactors a viable export business.

It follows greater than projected construction costs for four Westinghouse AP1000 next-generation nuclear reactors in the U.S. that have run billions of dollars over budget and are three years behind schedule. Original plans called for their startup around 2019 but that could be delayed.

Yoshimitsu Kobayashi, chairman of the Japan Association of Corporate Executives, told reporters at a regular news conference on Tuesday that promoting nuclear reactor exports was a necessary strategy, but one that needed to be reviewed.

"The nuclear power industry requires huge amounts of money for safety," Kobayashi said.

"Given such high costs, we have to think about whether just one company can succeed. We have to keep strong technology in Japan, but we need to rethink how to create a union of private firms" in the nuclear business, he said.

But with Toshiba's problems and the growing use worldwide of other, cheaper energy sources, including some renewables, anti-nuclear groups see an opportunity for Japan to change its basic policy.

"The Japanese government's nuclear export policy was built on a combination of a poor understanding of the global energy market and self-delusion, said Shaun Burnie, a senior nuclear specialist at Greenpeace Germany who is currently based in Japan.

"The sooner the government and industry realize there is no future for nuclear power either domestically or in exports, the sooner they can concentrate on the energy technology of the future — renewables."

Will Democratic Party distinguish itself from LDP on nukes?

February 17, 2017

Democratic Party delays decision on changing target date for abolishing nuclear power

http://www.japantimes.co.jp/news/2017/02/17/national/politics-diplomacy/democratic-party-delays-deciding-2030-target-make-japan-nuclear-power-free/
JIJI, Kyodo
The Democratic Party is split on whether to move up its target for ending the nation's reliance on nuclear energy by a few years to 2030.
The opposition party's leadership is facing resistance from its members and a key supporter, the Japanese Trade Union Confederation (Rengo), which includes an electric power industry union.
The DP on Thursday began deliberations on the matter at a meeting of its energy and environment panel that brought together some 70 members.
More than 20 people made remarks, with about half expressing opposition to the idea, including former education minister Yoshiaki Takaki.
Until now, the DP had been aiming to end Japan's reliance on nuclear energy within the decade after 2030. It had also accepted that some nuclear plants could be restarted under certain conditions.
The party is now leaning toward moving up the target date as it hopes to underscore its differences with Prime Minister Shinzo Abe's Liberal Democratic Party and strengthen cooperation with the Japanese Communist Party, the Social Democratic Party and the Liberal Party.
A source close to DP President Renho said it has become difficult to highlight positions different from the LDP because the Abe administration has copied some of its policies, such as "equal pay for equal work" and a state-backed scholarship program.
Thus, to distinguish itself from the LDP, the leadership has judged it necessary to change its position on when to abolish nuclear energy. Abe said nuclear is an "important base-load power source" even after the 2011 triple core meltdown at the Fukushima No. 1 power plant.
The Abe administration, however, also claims it would like to reduce the nation's dependence on nuclear as much as possible.
But in the face of resistance, the DP is expected to delay the decision until it sets its platform for the next House of Representatives election. At a news conference Thursday, Renho acknowledged there would be a delay.
"We maintain the belief that we want to show our view at the party convention" on March 12, she said.
Also on Thursday, Renho met with Rengo President Rikio Kozu to discuss the key nuclear policy target, where she failed to win his support.
Rengo also postponed a planned regular meeting with DP executives that was slated for Friday.
On Friday, she met with officials of the Federation of Electric Power Related Industry Worker's Unions of Japan, also a Rengo member, where she sought its cooperation but declined to comment on whether she succeeded.

Democratic Party faces rift over advancing target to rid Japan of nuclear power

http://mainichi.jp/english/articles/20170217/p2a/00m/0na/010000c

The largest opposition Democratic Party (DP) held a meeting of its energy and environment research committee on Feb. 16 to accelerate debate on advancing its target of making Japan a nuclear power-free nation in 2030 instead of sometime in the 2030s.

The DP leadership under President Renho plans to unveil the objective as a centerpiece of a party convention on March 12, but proponents of nuclear energy within the party balked. The Japanese Trade Union Confederation (Rengo), the party's major backer, directly conveyed its complaint about the nuclear power-free target to Renho on Feb. 16.

During the research panel meeting, one lawmaker after another expressed dissatisfaction over moving up the nuclear power-free target year, saying, ''Is it OK for the party's executives by themselves to make a decision on such an important issue? The party could break up.'' Renho and more than 60 DP lawmakers attended the meeting.

Koichiro Gemba, head of the panel, said after the meeting, ''There were many opinions about discussing the issue more fully.'' He added that he was not sure what the party leadership can say about the controversial nuclear policy at the party convention.

The internal rift came to the fore earlier this month when Gemba, acting on the intentions of Renho and other party executives, told a meeting of the energy and environment research committee that the party will spell out the 2030 target year in a draft nuclear power-free bill in light of ongoing energy and electricity-saving efforts. The DP leadership is particular about the target because it wants to re-emphasize its nuclear power-free campaign by advancing an end to nuclear power from its earlier target of sometime in the 2030s, as championed in the party's plank for the 2012 House of Representatives election.

But Gemba's remarks about advancing the target to the year 2030 surprised proponents of nuclear energy and those skeptical about ending Japan's dependence on nuclear power within the party. House of Councillors member Masao Kobayashi, a former member of the Federation of Electric Power Related Industry Workers Union of Japan, and others told DP Secretary-General Yoshihiko Noda on Feb. 9, ''If we review (the target) based on a foregone conclusion, it would cause confusion within the party.''

Repercussions have also reverberated through supporting labor unions. Rengo President Rikio Kozu met with DP chief Renho on Feb. 16 and expressed concern, saying, ''DP must not waver over its policy. Simply moving up the goal even without a road map for ending reliance on nuclear power sometime in the 2030s would be a big blow to the DP.'' Rengo postponed Feb. 17's scheduled regular meeting with the party.

But Renho has been in contact with various labor unions to win their understanding of the 2030 target. She told a news conference on Feb. 16 that she still hopes to declare an end to Japan's nuclear power in 2030 at the party convention on March 12, a day after the sixth anniversary of the 2011 Great East Japan Earthquake, tsunami and subsequent Fukushima nuclear disaster.

End of new build for largest nuclear builder

February 2, 2017

Toshiba-Westinghouse: The End of New-build for the Largest Historic Nuclear Builder

https://www.worldnuclearreport.org/Toshiba-Westinghouse-The-End-of-New-build-for-the-Largest-Historic-Nuclear.html

On 28 January 2017, Japanese media reported that Toshiba will not take any new nuclear reactor orders, "a move that would effectively mark its withdrawal from the nuclear plant construction business". Toshiba, owner of Westinghouse—no other company built more nuclear plants in the world— "will focus on maintenance and decommissioning operations".

Three days later, on 31 January 2017, the Wall Street Journal confirmed that "Toshiba Corp. plans to stop building nuclear power plants", a decision that "could have widespread ramifications for the future of the nuclear-power industry", and reported that Toshiba's chairman, Shigenori Shiga, and Danny Roderick, a Toshiba executive and head of Westinghouse, are expected to step down by mid-February 2017.

The decision to withdraw from the business of constructing nuclear reactors is mainly due to liabilities arising from multi-billion dollar cost overruns on two U.S. reactor construction projects in Georgia and South Carolina. First indications from Toshiba on losses were disclosed in December 2016. The crisis has in part been been triggered by an accounting and legal dispute between the nuclear division Westinghouse Electric Company LLC and Chicago, Bridge and Iron (CB&I) over the valuation of the nuclear construction company CB&I Stone and Webster. Westinghouse purchased Stone and Webster from CB&I in 2015.

On 24 January 2017, Standard & Poor's Global Ratings cut Toshiba's credit rating deeper into junk status, downgrading it to CCC+ ("substantial risks"), down one notch from the previous B- ("highly speculative"). Both ratings are considered non-investment or "junk" level. Japan's securities watchdog recommended that Toshiba be fined a record 7.37 billion yen US$60.5 million for overstating profits, while it is already being sued by shareholders over damages brought about by stock losses.

In future, Toshiba's nuclear division is planning to concentrate on designing nuclear reactors due to the difficulties in forecasting construction costs. The decision followed an emergency board meeting in Tokyo to discuss the survival of one of Japan's major companies, with the President of Toshiba explaining that the decision "will eliminate the risk from the construction business". In June 2016, the incoming President of Toshiba had recommitted to the company's aim to win orders for 45 or more nuclear reactors overseas by 2030, however, it now appears to abandon that goal.

U.S. Nuclear Plants At Centre of Crisis

The Vogtle and Summer plants are at least three years behind schedule and billions of dollars over budget. The AP1000 reactor projects are managed by CB&I Stone and Webster, a subsidiary of Westinghouse Electric Company LLC, which was purchased by Toshiba in 2006. In mid-February 2017, Toshiba is expected to declare a deficit of about 700 billion yen ($6.1 billion).

As of September 2016, the total cost of the Vogtle project was reported **as US$21 billion, more than US$7 billion above initial estimates. With regards to VC Summer, in October 2016, after a review of the project, Westinghouse and the reactor owners South Carolina Electric and Gas Company (SC&G) agreed on a new contract with a higher projected cost of US$14 billion, about 43 percent higher than the US$9.8 billion price tag announced in 2008.**

The latest start dates of June 2019 and June 2020 for Plant Vogtle, are unlikely to be attained, raising the prospects of further costs.

The 2017 losses greatly exceed Toshiba's projections announced in 2016. In April 2016, Toshiba announced that it expected to have US$2.3 billion in impairment losses, in recognition that it had overpaid for Westinghouse and its falling revenues. Toshiba's fiscal year estimate for sales revenue from the nuclear firm is US$3.1 billion in 2015/6 — US$540 million below what it was in November 2015 and US$180 million below what the company projected in March 2016.

Toshiba bought the Westinghouse nuclear group from British Nuclear Fuels Limited (BNFL) in 2006 for US$4.1 billion. At the time the acquisition was hailed as bringing together the "powerful combination of Toshiba and Westinghouse's respective strengths, complementary technologies and businesses, [which] will position Toshiba as the world's leading nuclear power group, with an unrivaled business range extending to both BWR [Boiling Water Reactor] and PWR [Pressurized Water Reactor] systems."

Accounting and Valuation Dispute – Write Down of Goodwill

In October 2015, Westinghouse signed a purchase agreement to acquire CB&I Stone & Webster Inc., the nuclear construction and integrated services businesses then owned by CB&I. Westinghouse President and CEO Danny Roderick said the agreement "supports our company's strategic global growth framework, and expands our capabilities". Westinghouse and its affiliates became the sole contractor for construction of Vogtle-3 and -4, owned by Georgia Power, and V.C. Summer-2 and -3 reactors owned by SC&G.

CB&I have charged that Westinghouse reneged on promises to wipe out all the construction company's liabilities tied to the Vogtle and VC Summer projects. The dispute relates to the value of the net working capital of the CB&I Stone and Webster nuclear construction business. As explained in an analysis from Reuters, Toshiba had claimed that it was owed US$2.15 billion by CB&I. Net working capital is a measure of the financial strength of a business, defined as its current assets minus its current liabilities. When Westinghouse bought Stone and Webster, the sale agreement included a target figure for net working capital to ensure that the financial position of the business would not change materially from the time the deal is signed to when it closes. The two companies agreed that CB&I would not be paid any money, when the deal closed, and instead would receive earning going forward. An independent auditor was brought in to calculate the net working capital of CB&I Stone & Webster. Prior to Westinghouse's purchase of Stone and Webster, CB&I channeled US$1 billion to Stone & Webster between June 2015 and December 2015, when the sale agreement with Westinghouse entered into force. CB&I sees the net working capital mechanism as a way to be compensated for continuing to support the unit after the deal signed. But Westinghouse changed the calculations on Stone and Webster's net working capital and argued that "CB&I's methodology did not adhere sufficiently to Generally Accepted Accounting Principles (GAAP)", while "CB&I maintained that it has stuck to the accounting methodology it used before and Westinghouse previously accepted".

The nuclear power plant construction unit's liabilities affect not just the net working capital calculations, but also the valuation of the unit. Toshiba initially estimated the 'goodwill' resulting from the purchase of CB&I Stone and Webster at around US$87 million, which has now morphed into several billions of dollars. Clearly, as an intangible asset, the goodwill estimated by Toshiba was massively overvalued failing to take into account the rising cost of materials and goodwill to complete Vogtle and VC Summer, leading to the

company's assets worth being less than expected. In April 2016, Toshiba reported the write down of goodwill as likely to be US$2.3 billion, now revised downward further by several billion.

On 5 December 2016, the Delaware Chancery Court found in favor of Westinghouse and dismissed the filing of CB&I, and found that the parties' purchase agreement required an independent auditor to resolve the dispute. CB&I filed an appeal on 7 December 2016.

"We focused on the nuclear business
among all of our energy businesses,
but this will change…
This will entail a review of our overseas
(nuclear) business."

Satoshi Tsunakawa
President, Toshiba Corp.
27 January 2017

Implications for Toshiba-Westinghouse's Worldwide Nuclear Ambitions

The Toshiba crisis raises significant implications for planned projects worldwide, as well as undermining a central tenet of Japanese government economic policy of promoting nuclear reactor exports. Over the decades, Toshiba, alone or in joint ventures, has built 20 reactors in Japan, none of which are operating (nine are closed and 11 in long-term outage) and Westinghouse has built 91 reactors globally, of which 67 are still operating, 12 are closed and four are in long-term outage. (See the Global Nuclear Power Database for details and locations).

Currently, in addition to the four AP1000 reactors under construction in the U.S., four are under construction at Sanmen and Haiyang in China. **As in the U.S., the Chinese projects have** suffered construction delays **and cost overruns, design changes and equipment failure.** The Sanmen cost overruns were the probable cause of the resignations at Toshiba in 2015. They are however, currently scheduled for grid connection of Sanmen-1 in 2017, three years behind schedule, with Haiyang-1 scheduled shortly thereafter.

Toshiba-Westinghouse has been actively seeking contracts for the construction of AP1000's worldwide, including in the U.K. and India.

The U.K. NuGen consortium, with a 60 percent share owned by Toshiba, and the balance with French company Engie, has plans to build three AP1000 reactors near the UK Sellafield site, with Generic Design Assessment for the AP1000 not yet concluded. As with nuclear projects worldwide, financing for the UK project is critical and so far not secured. The financial crisis at Toshiba is impacting the ability of the company to secure the financing it requires for the project. It has already made requests to Japanese insurers as well as some banks including Norinchukin Bank and has hired HSBC as advisor. In 2015, Toshiba had estimated a total cost of 1.5 trillion yen US$12.4 billion for the NuGen project. But industry analysts now believe the cost could be roughly double that due to higher-than-expected labor costs and revised safety standards. The current schedule of 2018 for finalizing financial plans for the 3.4 GW project appear unattainable at this stage.

Toshiba-Westinghouse has long touted the Indian market for exports, with ambitions to build twelve AP1000 in Andhra Pradesh and Gujarat. Despite Toshiba-Westinghouse and the Nuclear Power Company of India Limited (NPCIL) having signed a works agreement in 2013 no construction has begun at either sites and financing has still to be secured. Both, Toshiba-Westinghouse and GE-Hitachi have been reluctant to rush into the Indian market because there is a possibility that they could be facing compensation of billions of dollars in a case of an accident.

However, trade journal *Nucleonics Week* reported in January 2017 that Toshiba-Westinghouse were ready to sign a commercial contract to supply reactors to India without a final settlement of the nuclear liability issue. Analysis carried out by the Institute for Energy Economics and Financial Analysis (IEEFA) concluded that the Mithivirdi project, at Bhavnagar, in Gujurat in northwest India was not financially viable. Toshiba-Westinghouse has been desperately trying to secure financing for the reactor project, with the U.S. Exim Bank being a particular target. Toshiba-Westinghouse was seeking US$8-9 billion from Exim towards the cost of the project. However, U.S. Exim is not able to issue loan guarantees over US10$ million presently, due to a political dispute that has meant that only two of the five board members are currently in place. There is no clarity as to when or if this obstacle will be resolved, given that leading House Republicans are seeking to terminate the bank's very existence, with critical comments on the Bank made by President Trump prior to the election. Financing from the Japan Bank for International Cooperation—the international arm of the Japan Finance Corporation, and under the administration of the Ministry of Finance—while theoretically possible, will be further complicated by the latest crisis at Toshiba.
However, there is no point in continuing the difficult search for financing if the decision to exit nuclear construction altogether is officially confirmed. Toshiba-Westinghouse management is expected to provide the answer by mid-February 2017.

Nuke integration project delayed

February 23, 2017

Hitachi, Mitsubishi Heavy, Toshiba to delay nuclear integration project

http://mainichi.jp/english/articles/20170223/p2a/00m/0na/011000c

Hitachi Ltd., Mitsubishi Heavy Industries Ltd. and Toshiba Corp. have decided to delay the integration of their nuclear fuel businesses that was planned for spring due to reasons such as manufacturing hub-related problems and prolongation of a Japan Fair Trade Commission review.

- 【Related】Industry ministry's push behind move to integrate nuclear fuel businesses

Specifically, the three Hitachi, Mitsubishi and Toshiba affiliates that are involved in these integration talks are as follows: Global Nuclear Fuel-Japan Co., Mitsubishi Nuclear Fuel Co., and Nuclear Fuel Industries Ltd. -- of which U.S. company Westinghouse Electric Company LLC is a major shareholder.
Since the nuclear disaster in Fukushima in 2011, Hitachi, Mitsubishi and Toshiba have all struggled with their nuclear businesses, and each company is aiming to reduce costs in this area by integrating with one another in the hope that this will lead to increased efficiency. Also, it is planned that the three companies will invest equally into a holding company, which will oversee the fuel companies under their control.

According to a source close to the integration project, the three companies are in agreement that they will need to "scrap and build" some of the manufacturing bases that are currently held by the companies' fuel divisions. However, this will not be an easy process because the decision as to which base should be scrapped will inevitably result in job cutbacks.
In addition, earlier this month, Toshiba announced huge losses in excess of 700 billion yen in its nuclear unit in the U.S. Therefore, as the company tries to deal with its massive financial loss, it will inevitably face difficulty as it attempts to proceed with this integration project.
Furthermore, there have also been problems regarding the companies' failure to request a review by the Japan Fair Trade Commission that will be necessary in this case under Japan's Anti-Monopoly Act. There are other issues at hand, such as a possible requirement to support the export of nuclear fuel from overseas to Japan, and it is expected that the review will take several months.
The three companies have all been involved in the manufacturing of nuclear reactors, but the nuclear business environment has worsened, and Toshiba is currently in the midst of a financial crisis. A delay in this integration project could further increase the pressure on these companies' businesses.
In response to an interview with the Mainichi Shimbun, a PR representative from Mitsubishi Heavy Industries stated, "We are looking into various possibilities, including discussions with other companies. However, at this point in time, we do not have a fixed schedule regarding the integration."

See also : http://www.japantimes.co.jp/news/2017/02/23/business/hitachi-toshiba-mitsubishi-may-postpone-nuclear-fuel-business-integration-sources/

What future for US (new) nukes?

Background:
There has always been a lot of speculation and "hype" when it comes to the so-called nuclear renaissance. There are good reasons to be somewhat skeptical of the claim that there is a nuclear power renaissance under way in South Korea, Russia, India, and China, although there is no doubt that extravagant nuclear ambitions exist in those countries.
South Korea did have plans for stupendous expansion, to increase nuclear's share of generation to 60% by 2035. Eleven more reactors were scheduled to come on stream in the period 2012 to 2021. However, in 2013 the government submitted a reduced draft plan to parliament for nuclear output of up to 29% of generation capacity by 2035 — less than half of the original projection — following several scandals **related to falsification of safety documentation. Further cutbacks could well ensue.**

In India, there have been mass protests against the French-backed 9900 MW Jaitapur Nuclear Power Project **in Maharashtra and the Russian-backed 2000 MW** Kudankulam

Nuclear Power Plant **in Tamil Nadu. The state government of West Bengal state has also refused permission to a proposed 6000 MW facility near the town of Haripur that intended to host six Russian reactors. A** Public Interest Litigation **(PIL) has been filed against the government's civil nuclear programme at the Supreme Court. Whether the Government of India can realize its ambitious nuclear expansion plans is unclear.**

China froze new nuclear plant approvals following the 2011 Fukushima Daiichi nuclear disaster **in Japan. Subsequently there was a slow down in the Chinese nuclear program. No new approvals were made during 2014. In 2015 the EPR and AP1000 builds were reported to be running over two years late, mainly due to key component delays and project management issues. Again, while China has adopted ambitious plans for new reactors, it must be born in mind that nuclear power is just 3 percent of China's supply of electricity, and even the most ambitious plans will only raise that share to 6 percent.**

Gordon Edwards.
Canadian Coalition for Nuclear Responsibility (CCNR), Canada
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https://www.technologyreview.com/s/603647/meltdown-of-toshibas-nuclear-business-dooms-new-construction-in-the-us/

Meltdown of Toshiba's Nuclear Business Dooms New Construction in the U.S.

The collapse of the Tokyo company's nuclear development arm puts a likely end to new U.S. plants.

By James Temple, MIT Technology Review, February 17, 2017

Toshiba's dramatic exit from the business of building nuclear power plants lands another blow to a beleaguered sector, undermining new development and research on advanced reactor designs.
After acquiring a majority stake in Pittsburgh-based Westinghouse Electric in 2006 for $5.4 billion, the Tokyo technology conglomerate had high hopes for rolling out a new generation of safer, smaller, cheaper power plants, as well as a series of streamlined full-scale reactors. Four of the latter are under construction in the United States, representing the only new reactors currently being built in the country. But the company was bedeviled by cost overruns, technical problems, conflicts with contractors, and regulatory challenges that set those projects back by years.
On Tuesday, Toshiba projected a $6.3 billion write-down for its nuclear unit and said it was looking to unload its stake. "It looked like a big deal at the time, but it's turned into a mess," says Michael Golay, a professor of nuclear science and engineering at MIT. "And it's likely to have a very chilling effect."
Toshiba's four massive nuclear plants now under construction in the southern United States are AP1000 pressurized-water reactors, which use a simplified design that was supposed to accelerate construction.

But the Vogtle project in Georgia and the V.C. Summer project in South Carolina are both around three years behind schedule and, together, billions of dollars over budget.

The company said those projects will continue, but many energy experts believe Toshiba's decision to cease building new reactors spells the end of any nuclear construction in the United States for the foreseeable future. Analysts doubt Toshiba will find a buyer for its Westinghouse stake, or any willing construction partners to move ahead with dozens of additional plants it had once planned.

Toshiba's struggles reflect the slow demise of nuclear power in much of the world (see "Giant Holes in the Ground"). The industry has been plagued by the rising cost of construction, the low price of natural gas, the Fukushima disaster in 2011, and the stricter regulations and souring public perceptions that followed. Germany is scaling down its nuclear program, engineering powerhouses like GE and Siemens have pulled back from the market, and France recently engineered the takeover of the nuclear giant Areva to rescue it after a series of stumbles.

Many fear the slowdown will prevent nations from building enough capacity to avoid the growing risks of climate change. The International Energy Agency estimates that nuclear energy capacity needs to double by 2050 to keep worldwide temperatures from rising more than 2 °C. Absent a carbon-capture breakthrough or a miracle battery, there's no realistic plan for cutting greenhouse-gas emissions fast enough without far more use of nuclear, says Steven Chu, the former secretary of energy and a professor of physics at Stanford.

There is, however, something of a nuclear power renaissance under way in some parts of the world, including South Korea, Russia, India, and China. Worldwide, about 60 reactors are under construction and 160 are planned—enough to add almost half again today's capacity, accordingto the World Nuclear Association. China alone is building dozens of conventional nuclear plants and forging ahead with advanced reactor designs in hopes of becoming the world's leader in nuclear power.

Westinghouse's 1,100-megawatt AP1000 pressurized-water reactors were specifically designed to be safer and easier to build than traditional nuclear plants, in part by utilizing standardized components. But plant construction has been plagued by engineering setbacks as well as design revisions required by the Nuclear Regulatory Commission.

Some issues probably stemmed from mismanagement. But MIT's Golay says Westinghouse's problems underscore intrinsic challenges for any company attempting to develop nuclear power in the United States, including a lack of institutional expertise after decades of little construction, rigid regulatory oversight, and shrinking appetites among investors.

Getting nuclear projects moving forward again in the United States is likely to require some combination of supportive government policies and improved construction and deployment methods, says Mike Ford, a researcher at Carnegie Mellon who focuses on nuclear energy development.

Time for Japan to abandon nuclear power

March 8, 2017

Editorial: Reasons for Japan to dump nuclear power more obvious now than ever

http://mainichi.jp/english/articles/20170308/p2a/00m/0na/014000c

It has been nearly six years since the triple-meltdown at the Fukushima No. 1 nuclear plant. Two things seem symbolic of this time: the simultaneous lifting of evacuation orders for the Fukushima Prefecture village of Iitate and other nearby communities, and the recent glimpse of what appears to be melted nuclear fuel in the plant's No. 2 reactor.

One is significant for all those residents who had no idea when they would be able to return to their hometowns, and the other for how much we understand of what is going on inside the stricken Fukushima No. 1 plant reactors, which until recently had been very nearly nothing. Considering how things were going before, these developments can be considered a step in the right direction.

However, if we take a cold, hard look at the situation, there are facts that must be seen as equally representative of the current reality: that the disaster has stolen so much from so many, and that real recovery will be a decades-long struggle with reconstruction and plant decommissioning.

Any visitor to the Fukushima plant will get a keen sense of how demanding the work is to dismantle its ruined reactors. The area where full face masks are required has been significantly reduced, and working conditions have certainly been improved. However, there is still no target for removing the melted nuclear fuel from the reactors -- the greatest challenge to decommissioning -- and no prospect for setting one.

Last month, plant operator Tokyo Electric Power Co. (TEPCO) inserted a "scorpion" robot into the No. 2 reactor containment vessel, and tried to steer it to a spot right under the core. However, its path was blocked by piles of dark material, and in the end the robot was unable to determine the state of the reactor's nuclear fuel.

There are more than 800 workers at the Fukushima plant. Some have been exposed to excessive radiation due to unexpected tasks. They are barred from working inside the reactor buildings, where radiation is extremely high, and absorb higher doses just by getting near them.

Nevertheless, the state of the nuclear fuel in each reactor must be ascertained, and a plan must be devised to remove it.

The No. 1 and 3 reactors are thought to be in worse shape than the No. 2 reactor. The government and TEPCO are aiming to extract the fuel from all the reactors starting in 2021, but that is wildly optimistic. A drastic rethink of the entire decommissioning strategy and schedule -- including the development of the robots that will take on much of the work -- is likely needed.

The burdens placed on Japanese society by the nuclear disaster include the swelling financial cost of dealing with its aftermath.

The Ministry of Economy, Trade and Industry says that reactor decommissioning, victim compensation, decontamination and other nuclear disaster-related costs will hit 21.5 trillion yen -- twice the initial estimate. However, even this figure does not include the cost of disposing of the melted nuclear fuel among other expenses, and is thus certain to rise.

We also cannot overlook the creation of a new system to charge third-party power suppliers to cover part of the compensation costs -- a charge the power supply companies will pass on to their customers, thus effectively making a wide swath of Japanese society pay for TEPCO's compensation liabilities. There are also apparently plans to implement a similar system to cover the decommissioning costs for Japan's aged reactors.

It has been less than a year since the power supply market was opened to competition. Making not just the big utilities but also the new third-party electricity suppliers with no connection whatsoever to the nuclear power business pay for reactor decommissioning is a blow to the very heart of electricity market liberalization. The government's insistence that "nuclear power is comparatively cheap even including accident countermeasure costs" no longer holds water.

If the government is to demand the Japanese people take on this financial burden, it must admit that the "cheap nuclear power" line doesn't match the facts, and reroute Japan's power generation plan to a nuclear-free future.

Looking at the harsh realities of dealing with the Fukushima nuclear disaster, we cannot consent to the ongoing string of reactor restarts. Utilities have applied to the Nuclear Regulation Authority (NRA) to restart 26 reactors at 16 plants under standards drawn up in the wake of the March 2011 Fukushima meltdowns. Just three reactors have been put back on line so far, but 12 more at six plants have or are expected to pass NRA inspections. Among them are three reactors that have been in operation for 40-plus years.

A majority of Japanese citizens are opposed to the restarts, conflicting with the government's evident enthusiasm for getting reactors back on line despite its stated goal of reducing dependence on nuclear power.

Over the past six years, we have learned that Japan would not run short of electricity if it abandoned nuclear power. A more deeply rooted argument in favour of nuclear generation is that it is needed to combat global warming.

Certainly, replacing nuclear plants with fossil fuel-driven power generation would increase carbon dioxide emissions. It is impossible to ignore the negative effect this would have on global warming.

However, Japan's greenhouse gas emissions have in fact begun to dip slightly even as reactor restarts remain stalled. According to the Environment Ministry, fiscal 2015 greenhouse gas emissions were down 5.2 percent from fiscal 2005 levels, and 6 percent down from 2013 levels.

Japan is obliged by international treaty to reduce its greenhouse gas emissions by 3.8 percent from 2005 levels by fiscal 2020. The country has already met that commitment even without nuclear power.

Nevertheless, for Japan to strive for even greater reductions that it promised under the Paris Agreement, it must yet expand energy saving measures and renewable power generation.

Global investment in energy is shifting in force to renewables. According to the International Energy Agency (IAE), of the $420 billion U.S. invested in power generation in 2015, some $290 billion was put into renewables.

The prices of solar panels and wind turbines are falling fast, and offer a cheaper alternative to traditional thermal generation in an increasing number of cases.

The nuclear business is in decline in the developed world, as is evidenced by the deep troubles of Japan's Toshiba Corp. and France's Areva SA. At the same time, the renewable energy industry is growing by leaps and bounds.

If Japan shuts its eyes to this reality and continues to pour more of its resources into keeping nuclear power going than into renewable energy, it will likely be left behind by the rest of the world.

We have no choice but to carry the burden of the Fukushima nuclear disaster for decades to come. We will overcome this crisis, but we will need support.

To make sure we never have another nuclear disaster like the one in Fukushima, Japan should take the decision to abandon dependence on nuclear power. That would be the best support of all.

Time for Japan to abandon nuclear power (2)

March 9, 2017

EDITORIAL: 3/11 anniversary should compel reassessment of nuclear policy

http://www.asahi.com/ajw/articles/AJ201703090038.html

Six years after the 2011 Great East Japan Earthquake, which spawned a massive tsunami causing the reactor meltdowns at the Fukushima No. 1 nuclear power plant, the reconstruction of affected areas is still far from complete.

In particular, some 80,000 people are still living as evacuees from Fukushima Prefecture, where the crippled nuclear plant is located. There are no signs of regeneration in the devastated local communities around the plant.

Meanwhile, the damages from the nuclear disaster and the costs of cleaning up the mess keep ballooning. The harrowing situation notwithstanding, Prime Minister Shinzo Abe's government remains firmly determined to promote nuclear power generation as a vital "core power source" for the nation's energy future.

Is there any reasonable case for keeping Japan reliant on atomic energy despite the catastrophic accident the nation has suffered? Is nuclear power generation really a cheap source of power as the government and the electric power industry claim?

Swelling costs

Evacuees from Namie, a town in Fukushima Prefecture, voiced their anger and anxiety during a meeting held in February at a hall in Tokyo. The entire town had to be evacuated in the wake of the disaster.

"Although we have been told that the decontamination work is over, radiation levels have not fallen enough for us to return home," one evacuee complained at the meeting, organized by the municipal government to hold informal talks with local residents. Another demanded continued financial support from Tokyo Electric Power Co., the operator of the Fukushima plant. "We have been driven out of the town by the nuclear accident. TEPCO should continue paying the housing rents of residents who cannot return."

The evacuation order for central parts of Namie is set to be lifted at the end of March, allowing residents to return to their homes. But it is unlikely that many of the residents will actually do so. In Naraha and other areas where the evacuation orders have already been lifted, only around 10 percent of the residents have decided to live in their former homes again.

The horrible conditions inside the melted reactors are only beginning to become visible. When TEPCO recently deployed an inspection robot to look inside the No. 2 reactor at the plant, it found iron bars twisted by high temperatures and a sticky black lump. But the utility was forced to abort the inspection halfway by high levels of radiation, which would have killed a human in minutes, and sediment. No plausible idea has emerged about how to remove the melted nuclear fuel.

At the end of last year, the Ministry of Economy, Trade and Industry said the total costs of related compensation, decontamination and the decommissioning of the reactors will reach a staggering 21.5 trillion yen ($187.92 billion).

The enormous financial burden, twice as large as the previous estimate, will have to be shouldered by the public through hikes in electricity bills and taxes.
The accident has also caused certain non-economic damages that cannot be expressed by numbers, such as shattered lives and ruined communities. There is no way to measure the true scale of damage caused by the disaster.

Government sticking to pro-nuclear power policy

The government has begun to step up its policy efforts to prevent TEPCO from going under. It has announced a plan to force new electricity suppliers that have entered the retail power market following its liberalization to bear part of the burden of paying compensation for the next four decades. The costs of compensation have so far been covered by TEPCO and the other utilities operating nuclear power plants.
This new compensation-financing plan clearly reflects a policy of putting higher priority on the protection of nuclear power generation than on ensuring the benefits of the deregulation for consumers. It is designed to ease the burden on established utilities by passing part of the costs involved in nuclear power generation onto newcomers, which don't operate nuclear plants.
This outrageous plan underscores the grim reality that nuclear power generation is no longer sustainable without strong policy support from the government.
Still, the industry ministry insists that nuclear power maintains its cost advantage over other power sources even if the money needed to deal with the consequences of the Fukushima disaster is factored in. In making this case, the ministry refers to cost estimates announced in 2015. According to the estimates, the costs of producing electricity by building a new nuclear plant were lower than those of power generation at a thermal plant or a facility using renewable energy sources.
These estimates are used to promote the ministry's vision for the nation's energy supply in fiscal 2030, under which some 20 percent of total power consumption will be covered by nuclear power generation.
But a raft of questions have been raised about these estimates. Experts critical of nuclear power generation say the cost estimates are based on the assumption that nuclear plants can long be operated without any serious trouble. Estimates based on the records of past operations and actual costs required show nuclear power generation is more expensive, they say. The costs of constructing nuclear power plants have also increased globally after the Fukushima accident, they point out.
The ministry's cost estimates are also based on many other questionable assumptions. There is no established technology for the envisioned nuclear fuel recycling system, for instance. There are many variables concerning the process of establishing the system that could radically change the math.
Progress in the efforts to select the final disposal site for high-level radioactive waste has been glacial, leaving the crucial issue unsolved for many years.
These are issues that are also related to the existing nuclear power plants.
While upholding the policy of promoting atomic energy, the successive governments have been putting off tackling these and other sticky issues or taking stopgap measures at best.
This approach has reached its limitations.

Plan to phase out nuclear power needed

This happens to be a year in which the government is scheduled to make its regular, fundamental review of the nation's energy policy.
The government should take this opportunity to make rigorous fresh assessments of the costs, risks and advantages of various power sources including nuclear energy and incorporate them into the new policy.
It is vital to invite opponents of the government's nuclear power policy as well as proponents to take part in the work to ensure that the issues will be discussed from diverse perspectives.

Outside Japan, Germany and Taiwan have decided to phase out nuclear power generation. Some other industrial nations are shutting down nuclear plants ahead of schedule and pursuing goals to reduce their dependence on atomic energy.
For a society that places a premium on safety, nuclear power generation is becoming a hot potato because of many unsolved problems concerning accidents and nuclear waste.
The trend was set by the Fukushima disaster. The introduction of stricter safety standards and resultant cost increases have led to the current financial crisis at Toshiba Corp.
What the Abe administration should do is face up to the grim realities of nuclear power generation and pay serious attention to public concerns about plans to restart offline reactors. It then needs to make serious efforts to work out a specific plan to steadily lower Japan's dependence on nuclear power.
The prevailing logic of the closed community of people and organizations with vested interests in promoting nuclear power generation and the safety myth they successfully peddled set the stage for what transpired in Fukushima.
The government needs to look back on the six painful years following the nuclear disaster and embark on remaking its energy policy into a more reasonable and sustainable one.
--The Asahi Shimbun, March 9

"A much better country with zero nuclear plants" (Koizumi)

March 12, 2017

Ex-PM Koizumi repeats call for 'zero nuclear power plants'

http://mainichi.jp/english/articles/20170312/p2g/00m/0dm/056000c

SAPPORO (Kyodo) -- Former Prime Minister Junichiro Koizumi on Saturday repeated his call for Japan's complete departure from nuclear energy as the country marked the sixth anniversary of the Fukushima nuclear disaster.
"Nuclear power plants will become a negative legacy for future generations," Koizumi said at an event organized by a civic group in Sapporo.
The group is seeking the decommissioning of nuclear reactors at Hokkaido Electric Power Co.'s Tomari power station on Japan's northernmost main island.
"(Japan) can become a much better country with zero nuclear power plants, harnessing natural energy," Koizumi said, adding it will not be so difficult to replace nuclear energy with renewable energy if technological innovation advances.
After his speech, Koizumi criticized Prime Minister Shinzo Abe's policy which promotes restarting nuclear plants most of which remain offline and exporting nuclear reactors.
"If the prime minister said 'zero (nuclear power),' the situation will greatly change. I don't know why he can't understand this," Koizumi said.

DP nuclear phasing-out lacks ambition

March 12, 2017

At party convention, DP shies away from plan to phase out atomic power by 2030

http://www.japantimes.co.jp/news/2017/03/12/national/politics-diplomacy/party-convention-dp-shies-away-plan-phase-atomic-power-2030/#.WMUttvKlSot

by Tomohiro Osaki
Staff Writer

The Democratic Party on Sunday postponed adopting a bold target of slashing the nation's reliance on nuclear power to zero by 2030, shying away from what would have been a decisive declaration against Prime Minister Shinzo Abe's pro-nuclear stance.

At its annual convention, held in Tokyo, Renho, president of the struggling main opposition party, stopped short of upgrading its current goal of pursuing a nuclear-free Japan by the end of the 2030s.

Prior to the convention, media speculation was rife that she would advance the deadline by up to nine years to 2030 in a bid to demonstrate the DP's stronger commitment to eliminating the nation's reliance on nuclear power.

Such an ambitious target would have helped the DP, which grapples with a perennially low support rate of around 8 percent, position itself as a clearer alternative to Abe's Liberal Democratic Party, which is pushing for reactivation of nuclear reactors that have been offline following the March 2011 tsunami-triggered meltdowns at the Fukushima No. 1 power plant.

Her decision not to set the 2030 deadline for a nuclear-free society apparently reflects resistance from labor union Rengo, the DP's main support base, which counts among its participating unions the Federation of Electric Power Related Industry Worker's Union of Japan.

Nonetheless, Renho emphasized that the DP will not backtrack from its current anti-nuclear position, unveiling a plan to draft what she described as a bill promoting a "zero-nuclear" policy.

The DP leader, however, stopped short of clarifying a timeline for the submission of such legislation or elaborating on its content.

"As we brace for a Lower House snap election, we will draft the zero-nuclear bill to realize a departure from our current reliance on nuclear power as soon as possible," Renho told party members at the convention.

"We will envision a different future than that upheld by the current administration, which is promoting a return into nuclear reliance by blindly marching toward the reactivation of reactors."

During a news conference after the convention, Renho said an energy policy council headed by DP lawmaker Koichiro Genba will swiftly go about discussing details of the bill and hold meetings as frequently as possible.

High-ranking DP lawmakers also hewed to Renho's assertion that the DP remains as committed as ever to seeking the phaseout of nuclear power.

For one, former Prime Minister Naoto Kan, who was in office when the nuclear crisis struck the nation in 2011, offered staunch backing for the zero-nuclear bill.
Noting that nuclear industries worldwide are increasingly on the decline, Kan said such legislation "is in line with the global trend."
"A shift to renewable energy is the unavoidable choice for Japan," he said.
At the convention, Renho also renewed her party's vow to offer free education to children and boost female representation in the world of politics.

Nukes in crisis

March 14, 2017

Terminal Decline? Fukushima and the Deepening Crisis of Nuclear Energy

http://www.counterpunch.org/2017/03/14/terminal-decline-fukushima-and-the-deepening-crisis-of-nuclear-energy/
by Jim Green

Saturday March 11 marks the sixth anniversary of the triple-disaster in north-east Japan – the earthquake, tsunami and the Fukushima nuclear disaster.
And the news is not good. Scientists are wondering how on earth to stabilise and decontaminate the failed reactors awash with molten nuclear fuel, which are fast turning into graveyards for the radiation-hardened robots sent in to investigate them.
The Japanese government's estimate of Fukushima compensation and clean-up costs has doubled and doubled again and now stands at ¥21.5 trillion (US$187bn; €177bn).
Indirect costs – such as fuel import costs, and losses to agricultural, fishing and tourism industries – will likely exceed that figure.
Kendra Ulrich from Greenpeace Japan notes in a new report that *"for those who were impacted by the worst nuclear disaster in a generation, the crisis is far from over. And it is women and children that have borne the brunt of human rights violations resulting from it, both in the immediate aftermath and as a result of the Japan government's nuclear resettlement policy."*
Radiation biologist Ian Fairlie summarises the health impacts from the Fukushima disaster: *"In sum, the health toll from the Fukushima nuclear disaster is horrendous. At the minimum:*
+ Over 160,000 people were evacuated most of them permanently.
+ Many cases of post-trauma stress disorder (PTSD), depression, and anxiety disorders arising from the evacuations.
+ About 12,000 workers exposed to high levels of radiation, some up to 250 mSv
+ An estimated 5,000 fatal cancers from radiation exposures in future.
+ Plus similar (unquantified) numbers of radiogenic strokes, CVS diseases and hereditary diseases.
+ Between 2011 and 2015, about 2,000 deaths from radiation-related evacuations due to ill-health and suicides.
+ An, as yet, unquantified number of thyroid cancers.

+ An increased infant mortality rate in 2012 and a decreased number of live births in December 2011."
Dr Fairlie's report was written in August 2015 but it remains accurate. More than half of the 164,000 evacuees from the nuclear disaster remain dislocated. Efforts to restore community life in numerous towns are failing. Local authorities said in January that only 13% of the evacuees in five municipalities in Fukushima Prefecture have returned home after evacuation orders were lifted.
As for Japan's long-hyped 'nuclear restart': just three power reactors are operating in Japan; before the Fukushima disaster, the number topped 50.

A nuclear power 'crisis'?

Nuclear advocates and lobbyists elsewhere are increasingly talking about the 'crisis' facing nuclear power – but they don't have the myriad impacts of the Fukushima disaster in mind: they're more concerned about catastrophic cost overruns with reactor projects in Europe and the US.
Michael Shellenberger from the Breakthrough Institute, a US-based pro-nuclear lobby group, has recently written articles about nuclear power's *"*rapidly accelerating crisis*"* and the *"*crisis that threatens the death of nuclear energy in the West*".*
A recent article from the Breakthrough Institute and the like-minded Third Way lobby group discusses *"*the crisis that the nuclear industry is presently facing in developed countries*".*
'Environmental Progress', another US pro-nuclear lobby group connected to Shellenberger, has a webpage dedicated to the nuclear power crisis. Among other things, it states that 151 gigawatts (GW) of worldwide nuclear power capacity (38% of the total) could be lost by 2030 (compared to 33 GW of retirements over the past decade), and over half of the ageing US reactor fleet is at risk of closure by 2030.
As a worldwide generalisation, nuclear power can't be said to be in crisis. To take the extreme example, China's nuclear power program isn't in crisis – it is moving ahead at pace. Russia's nuclear power program, to give one more example, is moving ahead at snail's pace, but isn't in crisis.
Nonetheless, large parts of the worldwide nuclear industry are in deep trouble. The July 2016 *World Nuclear Industry Status Report* provides an overview of the troubled status of nuclear power:
+ nuclear power's share of the worldwide electricity generation is 10.7%, well down from historic peak of 17.6% in 1996;
+ nuclear power generation in 2015 was 8.2% below the historic peak in 2006; and
+ from 2000 to 2015, 646 gigawatts (GW) of wind and solar capacity (combined) were added worldwide while nuclear capacity (not including idle reactors in Japan) fell by 8 GW.

US nuclear industry in crisis

The US nuclear industry is in crisis, with a very old reactor fleet – 44 of its 99 reactors have been operating for 40 years or more – and no likelihood of new reactors for the foreseeable future other than four already under construction.
Last September*, Associated Press* described one of the industry's many humiliations: *"After spending more than 40 years and $5 billion on an unfinished nuclear power plant in northeastern Alabama, the nation's largest federal utility is preparing to sell the property at a fraction of its cost.*
"The Tennessee Valley Authority has set a minimum bid of $36.4 million for its Bellefonte Nuclear Plant and the 1,600 surrounding acres of waterfront property on the Tennessee River. The buyer gets two unfinished nuclear reactors, transmission lines, office and warehouse buildings, eight miles of roads, a 1,000-space parking lot and more."
Japanese conglomerate Toshiba and its US-based nuclear subsidiary Westinghouse are in crisis because of massive cost overruns building four AP1000 reactors in the US – the combined cost overruns amount to about US$11.2bn (€10.7bn) and counting.

Toshiba said in February 2017 that it expects to book a US$6.3bn (€5.9bn) writedown on Westinghouse, on top of a US$2.3bn (€2.1bn) writedown in April 2016. The losses exceed the US$5.4bn (€5.1bn) Toshiba paid when it bought a majority stake in Westinghouse in 2006.

Toshiba says it would likely sell Westinghouse if that was an option – but there is no prospect of a buyer. Westinghouse is, as *Bloomberg* noted, "too much of a mess" to sell. And since that isn't an option, Toshiba must sell profitable businesses instead to stave off bankruptcy.

Toshiba is seeking legal advice as to whether Westinghouse should file for Chapter 11 bankruptcy. But even under a Chapter 11 filing, *Reuters* reported, *"Toshiba could still be on the hook for up to $7 billion in contingent liabilities as it has guaranteed Westinghouse's contractual commitments"* for the US AP1000 reactors.

The Toshiba/Westinghouse crisis is creating a ripple effect. A few examples:

+ the NuGen (Toshiba/Engie) consortium has acknowledged that the plan for three AP1000 reactors at Moorside in the UK faces a "significant funding gap" and both partners reportedly want out of the project;
+ Georgia Power, 45.7% owner of the troubled Vogtle AP1000 project, recently suspended plans for another nuclear plant in Georgia; and
+ Toshiba recently announced its intention to pull out of the plan for two Advanced Boiling Water Reactors at the South Texas Plant, having booked writedowns totaling US$638m (€605m) on the project in previous years.

The French nuclear industry is in crisis

The French nuclear industry is in its "worst situation ever", former EDF director Gérard Magnin said in November 2016. The French government is selling assets so it can prop up its heavily indebted nuclear utilities Areva and EDF.

The current taxpayer-funded rescue of the nuclear power industry may cost the French state as much as €10bn (US$10.5bn), *Reuters* reported in January, and in addition to its *"dire financial state, Areva is beset by technical, regulatory and legal problems."*

France has 58 operable reactors and just one under construction. French EPR reactors under construction in France and Finland are three times over budget – the combined cost overruns for the two reactors amount to about €12.7bn (US$13.4bn).

Bloomberg noted in April 2015 that Areva's EPR export ambitions are "in tatters". Now Areva itself is in tatters and is in the process of a government-led restructure and another taxpayer-funded bailout.

On March 1, Areva posted a €665m (US$700m) net loss for 2016. Losses in the preceding five years exceeded €10bn (US$10.5 bn). A large majority of a €5bn (US$5.3bn) recapitalisation of Areva scheduled for June 2017 will come from French taxpayers.

On February 14, EDF released its financial figures for 2016: earnings fell 6.7%, revenue declined 5.1%, net income excluding non-recurring items fell 15%, and EDF's debt remained steady at €37.4bn (US$39.4bn). All that EDF chief executive Jean-Bernard Levy could offer was the hope that EDF would "hit the bottom of the cycle" in 2017 and rebound next year.

EDF plans to sell €10bn (US$10.5 bn) of assets by 2020 to rein in its debt, and to sack up to 7,000 staff. The French government provided EDF with €3bn (US$3.2bn) in extra capital in 2016 and will contribute €3bn towards a €4bn (US$4.2bn) capital raising this year.

On March 8, shares in EDF hit an all-time low a day after the €4bn capital raising was launched; the stock price fell to €7.78, less than one-tenth of the €86.45 high a decade ago.

Costs of between €50bn and €100bn (US$53-106bn) will need to be spent by 2030 to meet new safety requirements for reactors in France and to extend their operating lives beyond 40 years.

EDF has set aside €23bn (US$24.3bn) to cover reactor decommissioning and waste management costs in France – less than half of the €54bn (US$57bn) that EDF estimates will be required. A recent report by the French National Assembly's Commission for Sustainable Development and Regional Development concluded that there is *"obvious under-provisioning"* and that decommissioning and waste management will likely take longer, be more challenging and cost much more than EDF anticipates.

EDF is being forced to take over parts of its struggling sibling Areva's operations – a fate you wouldn't wish on your worst enemy. And just when it seemed that things couldn't get any worse for EDF, a fire took hold in the turbine room of one of the Flamanville reactors on February 9 and the reactor will likely be offline until late March at an estimated cost of roughly €1.2m (US$1.27m) per day.

Half of the world's nuclear industry is in crisis and/or shutting down

Combined, the crisis-ridden US, French and Japanese nuclear industries account for 45% of the world's 'operable' nuclear reactors according to the World Nuclear Association's database, and they accounted for 50% of nuclear power generation in 2015 (and 57% in 2010).

Countries with crisis-ridden nuclear programs or phase-out policies (e.g. Germany, Belgium, and Taiwan) account for about half of the world's operable reactors and more than half of worldwide nuclear power generation.

The Era of Nuclear Decommissioning (END)

The ageing of the global reactor fleet isn't yet a crisis for the industry, but it is heading that way.

The assessment by the 'Environmental Progress' lobby group that 151 GW of worldwide nuclear power capacity could be shut down by 2030 is consistent with figures from the World Nuclear Association (132 reactor shut-downs by 2035), the International Energy Agency (almost 200 shut-downs between 2014 and 2040) and *Nuclear Energy Insider* (up to 200 shut-downs in the next two decades). It looks increasingly unlikely that new reactors will match shut-downs.

Perhaps the best characterisation of the global nuclear industry is that a new era is approaching – the Era of Nuclear Decommissioning (END). Nuclear power's END will entail:

+ a slow decline in the number of operating reactors (unless growth in China can match the decline elsewhere);
+ an increasingly unreliable and accident-prone reactor fleet as ageing sets in;
+ countless battles over lifespan extensions for ageing reactors;
+ an internationalisation of anti-nuclear opposition as neighbouring countries object to the continued operation of ageing reactors (international opposition to Belgium's reactors is a case in point);
+ a broadening of anti-nuclear opposition as citizens are increasingly supported by local, regional and national governments opposed to reactors in neighbouring countries (again Belgium is a case in point, as is Lithuanian opposition to reactors under construction in Belarus);
+ many battles over the nature and timing of decommissioning operations;
+ many battles over taxpayer bailouts for companies and utilities that haven't set aside adequate funding for decommissioning;
+ more battles over proposals to impose nuclear waste repositories on unwilling or divided communities; and
+ battles over taxpayer bailouts for companies and utilities that haven't set aside adequate funding for nuclear waste disposal.

As discussed in a previous article in *The Ecologist*, nuclear power is likely to enjoy a small, short-lived upswing in the next couple of years as reactors ordered in the few years before the Fukushima disaster come online. Beyond that, the Era of Nuclear Decommissioning sets in, characterised by escalating battles

– and escalating sticker-shock – over lifespan extensions, decommissioning and nuclear waste management.

In those circumstances, it will become even more difficult than it currently is for the industry to pursue new reactor projects. A positive feedback loop could take hold and then the industry will be well and truly in crisis.

Nuclear lobbyists debate possible solutions to the nuclear power crisis

Michael Shellenberger from the Breakthrough Institute argues that a lack of standardisation and scaling partly explains the *"crisis that threatens the death of nuclear energy in the West".* The constant switching of designs deprives the people who build, operate and regulate nuclear plants of the experience they need to become more efficient.

Shellenberger further argues that there is too much focus on machines, too little on human factors:

"Areva, Toshiba-Westinghouse and others claimed their new designs would be safer and thus, at least eventually, cheaper, but there were always strong reasons to doubt such claims. First, what is proven to make nuclear plants safer is experience, not new designs. …

"In fact, new designs risk depriving managers and workers the experience they need to operate plants more safely, just as it deprives construction companies the experience they need to build plants more rapidly."

Shellenberger has a three-point rescue plan:

1/ 'Consolidate or Die': *"If nuclear is going to survive in the West, it needs a single, large firm – the equivalent of a Boeing or Airbus – to compete against the Koreans, Chinese and Russians."*

2/ 'Standardize or Die': He draws attention to the *"astonishing"* heterogeneity of planned reactors in the UK and says the UK *"should scrap all existing plans and start from a blank piece of paper"*, that all new plants should be of the same design and *"the criteria for choosing the design should emphasize experience in construction and operation, since that is the key factor for lowering costs."*

3/ 'Scale or Die': Nations *"must work together to develop a long-term plan for new nuclear plant construction to achieve economies of scale"*, and governments *"should invest directly or provide low-cost loans."*

Wrong lessons

Josh Freed and Todd Allen from pro-nuclear lobby group Third Way, and Ted Nordhaus and Jessica Lovering from the Breakthrough Institute, argue that Shellenberger draws the wrong lessons from Toshiba's recent losses and from nuclear power's *"longer-term struggles"* in developed economies.

They argue that *"too little innovation, not too much, is the reason that the industry is on life support in the United States and other developed economies"*. They state that:

+ The Westinghouse AP1000 represents a fairly straightforward evolution in light-water reactor design, not a radical departure as Shellenberger claims.
+ Standardisation is important but it is not a panacea. Standardisation and building multiple reactors on the same site has limited cost escalation, not brought costs down.
+ Most of the causes of rising cost and construction delays associated with new nuclear builds in the US are attributable to the 30-year hiatus in nuclear construction, not the novelty of the AP1000 design.
+ Reasonable regulatory reform will not dramatically reduce the cost of new light-water reactors, as Shellenberger suggests.

They write this obituary for large light-water reactors: *"If there is one central lesson to be learned from the delays and cost overruns that have plagued recent builds in the US and Europe, it is that the era of building large fleets of light-water reactors is over in much of the developed world.*

"From a climate and clean energy perspective, it is essential that we keep existing reactors online as long as possible. But slow demand growth in developed world markets makes ten billion dollar, sixty-year investments in future electricity demand a poor bet for utilities, investors, and ratepayers."

A radical break

The four Third Way / Breakthrough Institute authors conclude that *"a radical break from the present light-water regime … will be necessary to revive the nuclear industry"*. Exactly what that means, the authors said, would be the subject of a follow-up article.

So readers were left hanging – will nuclear power be saved by failed fast-reactor technology, or failed high-temperature gas-cooled reactors including failed pebble-bed reactors, or by thorium pipe-dreams or fusion pipe-dreams or molten salt reactor pipe-dreams or small modular reactor pipe-dreams? Perhaps we've been too quick to write off cold fusion?

The answers came in a follow-up article on February 28. The four authors want a thousand flowers to bloom, a bottom-up R&D-led nuclear recovery as opposed to top-down, state-led innovation.

They don't just want a new reactor type (or types), they have much greater ambitions for innovation in *"nuclear technology, business models, and the underlying structure of the sector"* and they note that *"a radical break from the light water regime that would enable this sort of innovation is not a small undertaking and will require a major reorganization of the nuclear sector."*

To the extent that the four authors want to tear down the existing nuclear industry and replace it with a new one, they share some common ground with nuclear critics who want to tear down the existing nuclear industry and not replace it with a new one.

Shellenberger also shares some common ground with nuclear critics: he thinks the UK should scrap all existing plans for new reactors and "start from a blank piece of paper". But nuclear critics think the UK should scrap all existing plans for new reactors and not start from a blank piece of paper.

Small is beautiful?

The four Third Way / Breakthrough Institute authors argue that nuclear power must become substantially cheaper – thus ruling out large conventional reactors *"operated at high atmospheric pressures, requiring enormous containment structures, multiply redundant back-up cooling systems, and water cooling towers and ponds, which account for much of the cost associated with building light-water reactors."*

Substantial cost reductions will not be possible *"so long as nuclear reactors must be constructed on site one gigawatt at a time. … At 10 MW or 100 MW, by contrast, there is ample opportunity for learning by doing and economies of multiples for several reactor classes and designs, even in the absence of rapid demand growth or geopolitical imperatives."*

Other than their promotion of small reactors and their rejection of large ones, the four authors are non-specific about their preferred reactor types. Any number of small-reactor concepts have been proposed. Small modular reactors (SMRs) have been the subject of much discussion and even more hype. The bottom line is that there isn't the slightest chance that they will fulfil the ambition of making nuclear power *"substantially cheaper"* unless and until a manufacturing supply chain is established at vast expense.

And even then, it's doubtful whether the power would be cheaper and highly unlikely that it would be substantially cheaper. After all, economics has driven the long-term drift towards larger reactors.

As things stand, no country, company or utility has any intention of betting billions on building an SMR supply chain. The prevailing scepticism is evident in a February 2017 Lloyd's Register report based on *"insights and opinions of leaders across the sector"* and the views of almost 600 professionals and experts from utilities, distributors, operators and equipment manufacturers.

The Lloyd's Register report states that the potential contribution of SMRs "is unclear at this stage, although its impact will most likely apply to smaller grids and isolated markets." Respondents predicted that SMRs have a "low likelihood of eventual take-up, and will have a minimal impact when they do arrive".

The Third Way / Breakthrough Institute authors are promoting small reactors because of the spectacular failure of a number of large reactor projects, but that's hardly a recipe for success. An analysis of SMRs in the *Bulletin of the Atomic Scientists* sums up the problems:

"Without a clear-cut case for their advantages, it seems that small nuclear modular reactors are a solution looking for a problem. Of course in the world of digital innovation, this kind of upside-down relationship between solution and problem is pretty normal. Smart phones, Twitter, and high-definition television all began as solutions looking for problems.

"In the realm of nuclear technology, however, the enormous expense required to launch a new model as well as the built-in dangers of nuclear fission require a more straightforward relationship between problem and solution. Small modular nuclear reactors may be attractive, but they will not, in themselves, offer satisfactory solutions to the most pressing problems of nuclear energy: high cost, safety, and weapons proliferation."

Small or large reactors, consolidation or innovation, Generation 2/3/4 reactors … it's not clear that the nuclear industry will be able to recover – however it responds to its current crisis.

Join the debate on Facebook

Dr Jim Green *is the national nuclear campaigner with* Friends of the Earth Australia *and editor of the Nuclear Monitor newsletter, where a longer version of this article was originally published.*

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Japan Atomic Power and Exelon

April 14, 2017

Japan Atomic Power, Exelon set up joint venture

https://www3.nhk.or.jp/nhkworld/en/news/20170414_26/

Japan Atomic Power has set up a joint venture with a US utility, Exelon, to strengthen its overseas operations. The move comes at a time when the nuclear business is facing difficulties as a result of the accident at the Fukushima Daiichi power plant in 2011.

The new company will advise operators on maintenance and efficient methods of power generation for nuclear plants that will be built overseas.

It will start off by assisting Japanese electronics firm Hitachi with its plan to build a nuclear facility in Britain.

The Managing Director of Japan Atomic Power, Takahiko Hida, will head the joint venture. He says the company plans to help with staffing and providing advice on the UK market.

Japan Atomic Power is currently not selling electricity.
It has 3 nuclear power plants in Japan, but their operations have been halted. One of the plants is ready to be decommissioned.

Towards nuke extinction?

April 14, 2017
Nuclear Giants Limp Towards Extinction
http://www.ecowatch.com/nuclear-energy-collapse-2360633461.html

By Paul Brown
14 April 2017 - Any lingering hope that a worldwide nuclear power renaissance would contribute to combating climate change appears to have been dashed by U.S. company Westinghouse, the largest provider of nuclear technology in the world, filing for bankruptcy, and the severe financial difficulties of its Japanese parent company, Toshiba.
After months of waiting, Toshiba still could not get its auditors to agree to its accounts this week. But it went ahead anyway and reported losses of nearly $5 billion for the eight months from April to December, in order to avoid being delisted from the Japanese stock exchange.
The company admitted it too could face bankruptcy, and is attempting to raise capital by selling viable parts of its business.
In a statement, it said: "There are material events and conditions that raise substantial doubt about the company's ability to continue as a going concern."
Nuclear Reactors
The knock-on effects of the financial disasters the two companies face will be felt across the nuclear world, but nowhere more than in the UK, which was hoping Westinghouse was about to start building three of its largest nuclear reactors, the AP 1000, at Moorside in Cumbria, northwest England.
The UK's Conservative government will be particularly embarrassed because, in late February, it won a critical parliamentary by-election in the seat that would be home to the Moorside plant, on the guarantee that the three reactors would be built—a pledge that now seems impossible to keep.
"I think the day of the large-scale nuclear power station is over," said Martin Forwood, campaign co-ordinator for Cumbrians Opposed to a Radioactive Environment. "There is no one left to invest anymore because renewables are just cheaper, and these prices are still going down while nuclear is always up."
Toshiba and Westinghouse are in deep trouble because the reactors they are currently building—the same design as the ones planned for Cumbria—are years late and billions of dollars over budget. Even if the companies can be refinanced, it seems extremely unlikely they would risk taking on new reactor projects.
Both the UK and Toshiba have looked to the South Korean nuclear giant KEPCO to take over the Moorside project, but the company is unlikely to want to build the Westinghouse design and would want to put forward its own reactor, the APR 1400.
This would delay the project for years, since the whole safety case for a new type of reactor would have to be examined from scratch.

But the company is already under pressure from within South Korea, where Members of Parliament have urged KEPCO not to take on a risky project in the UK. Twenty-eight members of the Republic of Korea's "Caucus on Post-Nuclear Energy" have called on KEPCO not to invest in Moorside.
The other nuclear giant present in Britain, the French-owned Électricité de France (EDF), is in serious difficulties of its own. It is already deep in debt and its flagship project to build a prototype 1,600 megawatt reactor at Flamanville in northern France is six years behind schedule and three times over budget at €10.5 billion.
Originally due to open in 2012, its start date is now officially the end of 2018, but even that is in doubt because an investigation into poor quality steel in the reactor's pressure vessel is yet to be completed.
Despite this, the company and the UK government are committed to building two more of these giant reactors in Somerset in southwest England, and have started pouring concrete for the bases to put them on. These reactors are due to be completed in 2025, but nobody outside the company and the UK government believes this is likely.
So, with troubles of its own, EDF is in no position to help Toshiba out of its financial difficulties. In the nuclear world, this leaves only the Chinese and the Russians who might be capable of taking on such a project.
The Russians will be ruled out on political grounds, and the Chinese are already helping out EDF with a large financial stake in the Somerset project. They also want to build a nuclear station of their own design at Bradwell in Essex, southeast England—another project that looks likely to take more than a decade to complete.

Vast Capital Costs

The problem for all these projects, apart from the vast capital cost and the timescales involved, is that the energy industry is changing dramatically. Solar and wind power are now a cheaper form of producing electricity across the world, and are less capital-intensive and quicker to build.
Despite the fact that there are more than 430 nuclear reactors in operation worldwide and the industry still has great economic and political clout, it is beginning to look like a dinosaur—too big and cumbersome to adapt to new conditions.
Nuclear power now produces about 10 percent of the world's electricity, while 40 percent is from coal and 23 percent from renewables. The rest is mainly from natural gas.
"Nuclear lobbyists are abandoning the tiresome rhetoric about a nuclear power renaissance," said Jim Green, national nuclear campaigner with Friends of the Earth Australia. "They are now acknowledging that the industry is in crisis."
"The crisis-ridden U.S., French and Japanese nuclear industries account for half of worldwide nuclear power generation," he continued. "Renewable energy generation doubled over the past decade, and strong growth, driven by sharp cost decreases, will continue for the foreseeable future."
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10 new reactors in India?

May 18, 2017

Indian Cabinet approves plans to build 10 reactors in bid to fast-track nuclear power quest

http://www.japantimes.co.jp/news/2017/05/18/business/indian-cabinet-approves-plans-build-10-reactors-bid-fast-track-nuke-power-quest/#.WR1VkdykKic

Reuters
NEW DELHI – India's Cabinet approved plans on Wednesday to build 10 nuclear reactors with a combined capacity of 7,000 megawatts, more than the country's entire current capacity, to fast-track its domestic nuclear power program.
The decision by Prime Minister Narendra Modi's government marks the first strategic response to the near collapse of Westinghouse, the U.S. reactor-maker that had been in talks to build six of its AP1000 reactors in India.
Westinghouse, owned by Japan's Toshiba Corp., filed for Chapter 11 bankruptcy in March after revealing billions of dollars in cost overruns at its U.S. projects, raising doubts about whether it can complete the India deal.
India has installed nuclear capacity of 6,780 MW from 22 plants and plans to add another 6,700 MW by 2021-22 through projects currently under construction. The 10 additional reactors would be the latest design of India's pressurized heavy water reactor.
"This project will bring about substantial economies of scale and maximize cost and time efficiencies by adopting fleet mode for execution," the government said in a statement.
"It is expected to generate more than 33,400 jobs in direct and indirect employment. With manufacturing orders to domestic industry, it will be a major step towards strengthening India's credentials as a major nuclear manufacturing powerhouse."
Westinghouse has said it plans to continue construction of its AP1000 plants in China and expects to bid for new plants in India and elsewhere, without elaborating on how it plans to do so.
Indian companies, such as Larsen and Toubro, Kirloskar Brother Limited and Godrej & Boyce welcomed the government's move.
Sanjay Kirloskar, chairman of Kirloskar Brother Limited, said, "Nuclear power plants will go a long way in reducing the perennial energy deficit," while Larsen and Toubro Director S.N. Roy called the move "bold and historic."

Swiss vote against nukes

May 22, 2017

Switzerland votes to phase out nuclear energy and switch to renewables

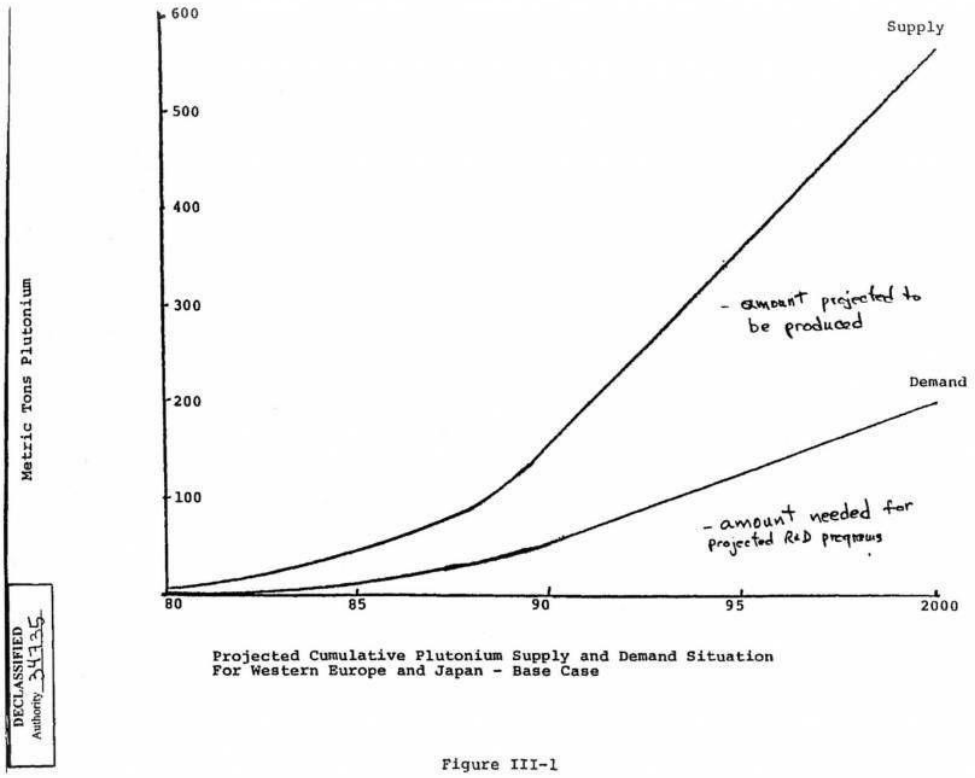
About a third of the country's electricity comes from nuclear reactors

By Chloe Farand, The Independent, May 22, 2017
http://tinyurl.com/lokqk88

Swiss voters have backed government plans to replace the power from ageing nuclear reactors with renewable energy.

A total of 58.2 per cent of voters supported the phaseout of nuclear energy in a binding referendum on Sunday. Under the Swiss system of direct democracy, voters have the final say on major policy issues.
The plan will provide billions of pounds in subsidies for renewable energy, ban the construction of nuclear plants and decommission the country's five existing ones, which produce about a third of the country's electricity.
The first nuclear power plant is earmarked for closure in 2019.
"This is a historic day for the country," Green Party parliamentarian Adele Thorens Goumaz told public broadcaster RTS.
"Switzerland will finally enter into the 21st century when it comes to energy."
The move echoes efforts across Europe to reduce dependence on nuclear energy and has been in the making following Japan's Fukushima disaster in 2011. Germany has announced it will close all nuclear plants by 2022 and Austria banned it decades ago.
The Swiss government wants to boost hydraulic power as well as solar, wind, geothermal and biomass.
Energy Minister Doris Leuthard, from the centre-right Christian Democratic Party, told reporters at a press conference: "The results shows the population wants a new energy policy and does not want any new nuclear plants. The law leads our country into a modern energy future."
The new law is expected to come into effect at the start of 2018 and Ms Leuthard said the plan would cost the average family about 40 francs (£31.64) more a year because a higher grid surcharge would help to fund renewable subsidies. *[40 Swiss francs = $41 US]*
But critics to the plan claimed the initiative would significantly increase electricity bills. The country's largest party, the populist Swiss People's Party, campaigned against the plan and claimed energy bills could ramp up by an additional 3,200 Swiss francs (£2,532) per four-person household a year. *[3200 Swiss francs = $3289 US]*
It said the energy transition will be too expensive, would trigger greater reliance on imported electricity and could disfigure the landscape with more wind turbines and solar panels.
Last November, Swiss voters rejected a plan to speed up the phaseout of coal power plants by limiting their operational lifespan to 45 years, which would have meant three of the five nuclear reactors would have had to close this year.
But most other parties and environmental groups hailed the result of the vote a success.
The new plan does not include a clear timetable for the phaseout of nuclear energy but it aims to cut average energy consumption per person per year by 16 per cent by 2020 and 43 per cent by 2035 compared to 2000 levels.
According to the ATS news agency, only 42.3 per cent of eligible voters cast a ballot in the referendum, a low turnout which yet falls within the average over the past two years.

Declassified US info on Japanese plutonium production



A declassified U.S. National Security Council document shows a projection of plutonium supply and demand for Europe and Japan in 2000. | COURTESY OF NATIONAL SECURITY ARCHIVE / VIA KYODO
June 9, 2017

Declassified papers reveal U.S. held debate on Japan's nuclear ambitions in 1970s

http://www.japantimes.co.jp/news/2017/06/09/national/history/declassified-papers-reveal-u-s-held-debate-japans-nuclear-ambitions-1970s/#.WTv7mdykJLM

by Eric Johnston
Staff Writer

OSAKA – Japan's push to establish a nuclear fuel recycling program and use the plutonium created in the process was the center of an intense debate in the U.S. government four decades ago, pitting those who wanted smooth relations with Tokyo against those who worried the plan might lead to the proliferation of sensitive nuclear technology and plutonium stockpiles.

Formerly classified U.S. State Department and National Security Council memos and cables posted Thursday show that Tokyo began pressing Washington in the late 1970s to let it reprocess spent nuclear fuel from U.S. reactors so the extracted plutonium could be used in the so-called fast breeder reactors Japan wanted to build.

The documents were made available by the nongovernmental Washington-based National Security Archive at George Washington University and the Nuclear Nonproliferation International History project at the Woodrow Wilson International Center for Scholars.

In a cable marked "Secret" and dated May 29, 1980, Jerry Oplinger, a staff member at the National Security Council, warned his colleagues that if Japan as well as Britain and France went through with plans to build fuel reprocessing plants, it would create new proliferation risks.

"Any one of these three projected projects would more than swamp the projected plutonium needs of all the breeder R&D programs in the world. Three of them will produce a vast surplus of pure, weapons-grade plutonium amounting to several hundred tons by the year 2000. Not only would that stockpile of separated plutonium constitute a danger in itself, it would eventually drive these nations, and those watching their example, into the recycle of plutonium in today's reactors for economic reasons," Oplinger wrote.

Others in the U.S. government at the time supported Japan's desire to experiment with plutonium. In an Aug. 29, 1979, U.S. State Department confidential memo, it was noted that Japan's then-minister of science technology Iwazo Kaneko had pressed Washington on the issue.

"He stressed that it was essential for Japan to make maximum use of plutonium, particularly fast-breeder reactors," the memo says.

Other officials, including Assistant Secretary of State Richard Holbrooke, argued in a memorandum dated June 4, 1980, that U.S. reluctance on Japan's reprocessing program would hurt bilateral trust. Ultimately, the U.S. would drop its opposition to the plans, but with some apprehension.

The debates occurred in the final stage of preparations for Japan's first reprocessing plant in the village of Tokai, Ibaraki Prefecture, which become operational in 1981, and reprocessed over 1,000 tons of used fuel for research purposes until 2006, when it no longer had any contracts for reprocessing.

In 2014, the Japan Atomic Energy Agency decided to shut down the plant. Last month, the agency said scrapping the facility over a 70-year period will cost an estimated ¥800 billion. The nation still has about 48 tons of plutonium stockpiled with about 11 tons held domestically and the remainder in Britain and France. Next year, the U.S. and Japan are expected to renegotiate an agreement, originally signed in 1988, to cooperate on nuclear power.

To wrest control of the nuclear market

June 18, 2017

With eye to grabbing slice of market, China focuses on developing small nuclear reactors
http://www.japantimes.co.jp/news/2017/06/18/business/eye-grabbing-slice-market-china-focuses-developing-small-nuclear-reactors/#.WUZimFFpyos

Reuters

SHANGHAI – China is betting on new, small-scale nuclear reactor designs that could be used in isolated regions, on ships and even aircraft as part of an ambitious plan to wrest control of the global nuclear market.

Within weeks, state-owned China National Nuclear Corp. (CNNC) is set to launch a small modular reactor (SMR) dubbed the "Nimble Dragon" with a pilot plant on the island province of Hainan, according to company officials.

Unlike new large scale reactors that cost upward of $10 billion per unit and need large safety zones, SMRs create less toxic waste and can be built in a single factory.

A little bigger than a bus and able to be transported by truck, SMRs could eventually cost less than one-tenth the price of conventional reactors, developers predict.

The global nuclear industry will require around $80 billion in annual investment over the coming decade as countries strive to meet climate and clean energy goals, the International Atomic Energy Agency (IAEA) forecasts, and China is keen to get its hands on a substantial chunk of any new business.

"Small-scale reactors are a new trend in the international development of nuclear power — they are safer and they can be used more flexibly," said Chen Hua, vice president of the China Nuclear New Energy Corp., a subsidiary of CNNC.

Beijing is now racing the likes of Russia, Argentina and the United States to commercialize SMRs, which include passive cooling features to improve safety.

Fukushima fallout

Following the triple meltdown at the Fukushima No. 1 reactor complex in 2011, the beleaguered nuclear industry has been focused on rolling out safer, large-scale reactors in China and elsewhere.

But these "third-generation" reactors have been mired in financing problems and building delays, deterring all but the most enthusiastically pronuclear nations.

The challenges of financing and building large, expensive reactors contributed to the bankruptcy of Toshiba Inc.'s nuclear unit, Westinghouse, and to the financial problems that forced France's Areva to restructure.

SMRs have a capacity of less than 300 megawatts (MW) — enough to power around 200,000 homes — compared to at least 1 gigawatt (GW) for standard reactors.

China is aiming to lift domestic nuclear capacity to 200 GW by 2030, up from 35 GW at the end of March, but its ambitions are global.

CNNC designed the Linglong, or "Nimble Dragon" to complement its larger Hualong or "China Dragon" reactor and has been in discussions with Pakistan, Iran, Britain, Indonesia, Mongolia, Brazil, Egypt and Canada as potential partners.

"The big reactor is the Hualong One, the small reactor is the Linglong One — many countries intend to cooperate with CNNC's 'two dragons going out to sea,' " Yu Peigen, vice president of CNNC, told a briefing in May.

Crowded field

Others are also pursuing the technology, with around 50 different SMR designs worldwide according to the IAEA. Russia leads the way on floating plants suitable for its remote Arctic regions, and construction underway on the world's biggest icebreaker.

U.S. firms including Westinghouse and Babcock & Wilcox have been developing their own SMRs, along with smaller startups like the Bill Gates-backed Terrapower.

CNNC is now working on offshore floating nuclear plants it plans to use on islands in the South China Sea, as well as mini-reactors capable of replacing coal-fired heating systems in northern China. Company scientists are even looking at designs that could be installed on aircraft.

Elsewhere in China, Tsinghua University is building a version using a "pebble bed" of ceramic-coated fuel units that form the reactor core, improving efficiency. Shanghai scientists are also planning to build a pilot "molten salt" reactor, a potentially cheaper and safer technology in which waste comes out in salt form.

The success of new small-scale reactors hinges on investors seeing new large-scale plants coming online and building on those successes, said Christopher Levesque, Terrapower's president.

"We're not competing with those folks, we're rooting for them," he told an industry forum in Shanghai last month.

China has had some overseas success already with its Hualong reactor, with Pakistan currently building a plant using the technology. The Hualong is also expected to gain regulatory approval in Britain after China helped finance the $24 billion Hinkley Point nuclear project there.

Keeping costs down

Officials acknowledge nuclear still struggles to compete with cheaper coal- or gas-fired power.

The OECD Nuclear Energy Agency estimates developers will need to build at least five SMRs at a time to keep costs down.

Taking into account much lower safety, environmental and processing costs, however, the agency said SMRs could be competitive with new, large-scale reactors — particularly in remote regions where the alternative is a costly extension of power grids.

"Given the delays and cost overruns associated with large-scale nuclear reactors around the world currently, the smaller size, reduced capital costs and shorter construction times associated with SMRs make them an attractive alternative," said Georgina Hayden, head of power and renewables at BMI Research.

Some developers believe basic SMR construction costs could eventually be cut to $2,000 to $3,000 per kilowatt, making it competitive with large third-generation plants and new, low-emission, coal-fired power.

"The cost of small reactors is a little higher than big reactors right now," CNNEC's Chen said on the sidelines of an industry expo in Beijing. "But we believe that alongside the further development and bulk production of this technology, costs will decline further."

South Korea vows to end nukes

June 19, 2017

Source : Financial Times
https://www.ft.com/content/40871236-45da-11e7-8519-9f94ee97d996

South Korea steps back from nuclear power

Pledge to scrap plans for new reactors marks overhaul for country's energy policy

by: Song Jung-a in Seoul

South Korea's president Moon Jae-in has vowed to scrap all existing plans for new nuclear power plants and cancel lifetime extensions for aged reactors, heralding a major overhaul for the country's energy policy.

It marked Mr Moon's second major announcement to change the country's power mix after ordering a temporary halt on eight of the country's older coal power plants soon after taking office last month, amid growing health concerns in one of the world's most polluted countries.

"We will abolish our nuclear-centred energy policy and move towards a nuclear-free era," Mr Moon said on Monday in the coastal city Busan, marking the closure of the country's first nuclear reactor built in 1977. "So far, the country's energy policy focused on low prices and efficiency. But this should change now with our top priority on public safety and the environment."

He added that the country would soon shut down another aged nuclear plant following a previous extension of its lifecycle, while hinting at halting the construction of two new nuclear reactors conditional upon a public consensus.

South Korea has the sixth-largest fleet of nuclear reactors in the world, generating about one-third of its energy needs from 25 reactors. But concerns over nuclear safety have intensified after Japan's Fukushima nuclear disaster in 2011 and a major earthquake in the country's southeastern city last year.
The new policy represents a break from the past administrations, which favoured cheaper but dirty coal power and riskier nuclear energy over more costly natural gas and clean renewables.
Worsening air pollution emerged as one of the main campaign issues in South Korea's recent election, with air pollution soaring to record highs in the first few months of 2017. Coal-fired power plants were blamed as one of the main culprits for worsening pollution.
South Korea operates 59 coal-fired power plants that supply nearly 40 per cent of the country's total electricity, but Mr Moon has promised to close those older than 30 years within his five-year presidential term and to not build new coal plants.
But experts caution that the shift could result in energy supply shortages and higher costs for the country that imports much of its energy from overseas. South Korea has the highest per capita electricity demand in Asia, although the country ranks among the top importers of coal, oil and gas in the world.
Former refugee, special forces soldier and human rights lawyer sets out on reform mission
"It is a step in the right direction but there is a question mark over how to address the potential supply shortfall and rising costs," says Kim Kyung-nam, professor at the Graduate School of Energy and Environment at Korea University.
Mr Moon has vowed to increase the portion of renewable energy to 20 per cent by 2030 and increase LNG-fired power production, even raising the possibility of reviving a deal to import natural gas from Russia through North Korean territory.
Renewable sources account for 6.6 per cent of the country's energy supply, the lowest among OECD countries, as their production has been damped by technological constraints, heavy regulations and weak demand.
The government plans to invest Won13.8tn ($12.2bn) this year in developing alternative energy sources in order to cut greenhouse gas emissions by 37 per cent by 2030 under the Paris climate agreement. It also plans to ease regulations and offer more incentives to spur clean energy production.
But experts worry that it could be challenging to increase clean energy production, given the lack of natural resources for the populous and mountainous country. This would mean higher energy costs for South Korean industries, which have enjoyed low electricity prices.
"If you get rid of nuclear energy, which is relatively low cost once built, and replace coal with more expensive LNG, that's going to translate into higher electricity prices, which could hurt domestic industries [and] it is not going to be popular," says Kerry-Anne Shanks at energy consultant Wood Mackenzie.
Experts also caution the government's anti-nuclear stance bodes ill for the country's ambition to export more reactors abroad. On the back of the thriving domestic industry, state-run utility Kepco has emerged as one of the few international players capable of successfully building nuclear reactors, unlike overseas rivals mired in cost overruns and construction delays.
"One of Kepco's biggest strengths is its track record in development of domestic nuclear capacity. Mr Moon's plans to suspend or scrap nuclear developments within South Korea could hurt this record." says Ms Shanks.
"A withdrawal of government support for nuclear development in South Korea would send a negative signal to foreign countries looking to purchase reactors."

New South Korean president
vows to end use of nuclear power

Moon Jae-in said he would lead country
towards a 'nuclear-free era' following
fears of a Fukushima-style meltdown

Justin McCurry ***in Tokyo, The Guardian,*** *Monday 19 June 2017*
https://www.theguardian.com/world/2017/jun/19/new-south-korean-president-vows-to-end-use-of-nuclear-power

South Korea's new president, Moon Jae-in, has vowed to phase out the country's dependence on nuclear power, warning of "unimaginable consequences" from a Fukushima-style meltdown.

Moon, a left-leaning liberal who won last month's presidential election by a landslide following the impeachment and arrest of Park Geun-hye, said he would increase the role of renewable energy and lead South Korea towards a "nuclear-free era".

Speaking at an event to mark the closure of the country's oldest nuclear plant, Kori-1, he said: "So far, South Korea's energy policy pursued cheap prices and efficiency. "Cheap production prices were considered the priority while the public's life and safety took a back seat. But it's time for a change.

"We will abolish our nuclear-centred energy policy and move towards a nuclear-free era. We will completely scrap construction plans for new nuclear reactors that are currently under way."

Moon added that he would not extend the operation of ageing reactors, many of which will come to the end of their lifespans between 2020 and 2030.

Weaning South Korea off nuclear power, however, could take decades, and there is expected to be opposition from construction companies, which have increased technology exports under Moon's nuclear-friendly predecessors.

The country was the fifth-largest producer of nuclear energy last year, according to the World Nuclear Association, with its 25 reactors generating about a third of its electricity.

The former president Lee Myung-bak saw nuclear as an important source of clean energy, while Park wanted to increase the number of reactors to 36 by 2029.

Moon recognised the role of nuclear power in South Korea's rapid economic development, but added that Japan's Fukushima disaster – which prompted the evacuation of tens of thousands of people – had convinced him that his country must look to new sources of energy.

"The country's economic status has changed, our awareness on the importance of the environment has changed. The notion that the safety and lives of people are more important than anything else has become a firm social consensus," he said.

Anti-nuclear campaigners have long warned of the potentially disastrous consequences of a meltdown at a nuclear plant in South Korea, where many reactors are close to densely populated areas.

The public's support for nuclear power has weakened since the 2011 Fukushima meltdown and a 2013 corruption scandal over fake safety certificates for reactor parts.

"The Fukushima nuclear accident has clearly proved that nuclear reactors are neither safe, economical nor environmentally friendly," Yonhap news agency quoted Moon as saying.

"South Korea is not safe from the risk of earthquakes, and a nuclear accident caused by a quake can have such a devastating impact."

He also plans to close at least 10 ageing coal-fired power plants before his term ends in 2022 and to boost renewables' share of the energy mix to 20% by 2030.

Korea's denuclearisation

June 24, 2017

China, U.S. agree aim of "complete, irreversible" Korean denuclearization
REUTERS
http://www.asahi.com/ajw/articles/AJ201706240089.html

BEIJING--China and the United States agreed that efforts to denuclearize the Korean Peninsula should be "complete, verifiable and irreversible", Chinese state media said on Saturday, reporting the results of high level talks in Washington this week.
"Both sides reaffirm that they will strive for the complete, verifiable and irreversible denuclearization of the Korean Peninsula," a consensus document released by the official Xinhua news agency said.
U.S. Secretary of State Rex Tillerson had said on Thursday that the United States pressed China to ramp up economic and political pressure on North Korea, during his meeting with top Chinese diplomats and defense chiefs.
China's top diplomat Yang Jiechi and General Fang Fenghui met Tillerson and Defense Secretary Jim Mattis during the talks. Yang later met with U.S. President Donald Trump in the White House, where they also discussed North Korea, Xinhua reported.
The consensus document also highlighted the need to fully and strictly hold to U.N. Security Council resolutions and push for dialogue and negotiation, which has long been China's position on the issue.
Military-to-military exchanges should also be upgraded and mechanisms of notification established in order to cut the risks of "judgment errors" between the Chinese and U.S. militaries, the statement also said.
Chinese state media described the talks, the first of their kind with the Trump administration, as an upgrade in dialogue mechanisms between China and the United States, following on from President Xi Jiping's meeting with Trump in Florida in April.
Xi and Trump are next expected to meet again in Hamburg during the G20 Summit next month.
A day last week's talks, President Donald Trump said China's efforts to use its leverage with North Korea had failed, raising fresh doubts about his administration’s strategy for countering the threat from North Korea.
The death of American university student Otto Warmbier earlier this week, after his release from 17 months of imprisonment in Pyongyang, further complicated Trump’s approach to North Korea.
China, North Korea’s main trading partner, has been accused of not fully enforcing existing U.N. sanctions on its neighbor, and has resisted some tougher measures.
Washington has considered further "secondary sanctions" against Chinese banks and other firms doing business with North Korea, which China opposes.

S. Korea to hold debate on whether to halt construction project

June 28, 2017

S.Korea to halt reactor project for public debate
https://www3.nhk.or.jp/nhkworld/en/news/20170628_02/
The South Korean government says it will suspend the construction of 2 nuclear reactors while the country holds a national debate on whether the work should go ahead.

The minister for the Office for Government Policy Coordination, Hong Nam-ki, announced this on Tuesday.

Hong said the office will set up a panel of experts from outside the energy sector to solicit the views of the public from an independent standpoint.

He also said the construction of the Shin Kori Number 5 and Number 6 reactors in Busan will stop while the panel conducts opinion polls and hold televised debates over the course of 3 months.

He added that a jury selected from members of the public will make the final decision on the issue.

The 2 reactors were nearly 30 percent complete as of last month. If the project is scrapped, compensation for construction companies and other costs would reach an estimated 2.3 billion dollars.

But Hong said it's desirable to create a social consensus and follow a public decision.

The move came after President Moon Jae-in vowed last week to move away from nuclear power.

South Korea suspends work on 2 reactors

July 14, 2017

S.Korea nuclear operator suspends work on reactors
https://www3.nhk.or.jp/nhkworld/en/news/20170714_29/
The operator of nuclear power plants in South Korea has decided to suspend work on 2 reactors.

The government earlier announced plans to start the process of deciding whether to continue with their construction.

The decision came on Friday at a meeting of the board of directors at Korea Hydro and Nuclear Power Company. It operates the Shin Kori nuclear power plant in Ulsan, where the Number 5 and Number 6 reactors are under construction.

The company estimates that the suspension will cost it about 87 million dollars, mainly in compensation for firms involved in the project.

The government says the 2 reactors were nearly 30 percent complete as of May. It estimates that if the project is scrapped, it will cost 2.3 billion dollars.

The government announced last month that the country will hold a national debate on whether the work should continue.

A panel of experts will be set up to discuss the matter for 3 months before a jury selected from members of the public will make a final decision.

President Moon Jae-in pledged last month to conduct a fundamental review of energy policy and move away from nuclear power. But unionized workers of the operating company and local residents say they want the project completed. Critics say it is unrealistic to cancel the project as it would significantly affect the steady supply of electricity and the national economy.

KEPKO: What future for exports?

July 13, 2o17

South Korea's Anti-Nuclear Push Casts Cloud Over KEPCO's Reactor Exports
https://www.nytimes.com/reuters/2017/07/12/business/12reuters-southkorea-nuclear-exports.html
By REUTERS
SEOUL — A decision by South Korea's new president to scrap plans for more domestic nuclear power plants will make it harder for the country to sell reactors to buyers overseas, experts warn.
State-run Korea Electric Power Corp (KEPCO) is building the first of four nuclear plants in the United Arab Emirates in an $18.6 billion deal, and is scouting for more business in Britain and other countries.
But many nuclear experts doubt South Korea's ability to export a technology it is ditching at home after President Moon Jae-in, who took office in May, said he would scrap plans to build new domestic reactors.
South Korea is the world's fifth-biggest user of nuclear energy and KEPCO, which has built more than 20 reactors at home, vies with the likes of France's EDF and Toshiba's Westinghouse unit in the niche but fiercely competitive nuclear export market.
"Exporting nuclear is an international competition, and Korea will look like a child fighting alone to win a game while others have support from a whole family," said Chung Bum-jin, a nuclear engineering professor at South Korea's Kyung Hee University.
The complexity of nuclear installations meant companies could not rely on past experience for building reactors, said Roh Dongseok, a senior nuclear power policy research fellow at the Korea Energy Economics Institute
"You also need a proven record to revise and upgrade nuclear design. Even if there's a slight change in nuclear design, it is considered as new technology and skills," he said.
Suppliers in Korea, who often produced only small quantities of components, could also face difficulties without the support of a domestic industry, added Chung.
KEPCO's international nuclear project team is working to keep its export business alive.

"We are focussing on the UK market, but also on Saudi Arabia, South Africa and Iran," said Jong-hyuck Park, chief nuclear officer at KEPCO at a recent industry event in London.
KEPCO is also in talks with Japan's Toshiba to buy a stake in Britain's NuGen nuclear project, aiming to use its own reactor design.
"The company (KEPCO) aims to finish the due diligence process by August or September.... and it will take more time to look into South Africa," said a source with direct knowledge of the matter who declined to be identified as he was not authorised to speak to media.
NuGen, planned for Moorside in northwest England, was thrown into doubt after Westinghouse declared bankruptcy and its partner in the project, France's Engie, pulled out.
A KEPCO spokesman said the company is awaiting government guidelines on nuclear exports.
The government's nominee as energy minister has yet to take up the post and it is not yet clear when the government will specify plans for the industry.
"If the South Korean government and industry show a commitment to its exports, it can have a viable and successful nuclear export programme to build on its UAE success," said George Borovas, global head of nuclear at law firm Shearman & Sterling.
(Reporting By Jane Chung; Additional reporting by Susanna Twidale in LONDON and Aaron Sheldrick and Osamu Tsukimori in TOKYO; Editing by Henning Gloystein and Richard Pullin)

Are nukes compatible with the Constitution?

June 24, 2017

EDITORIAL: Is nuclear power compatible with human rights in Constitution?
http://www.asahi.com/ajw/articles/AJ201707240022.html
One year has passed since an evacuation order was lifted on July 12, 2016, for most parts of the Odaka district of Minami-Soma, Fukushima Prefecture, which lies within a 20-kilometer radius of the crippled Fukushima No. 1 nuclear power plant.
Stores and schools in the district are gradually being reopened. Voices of high school students are heard echoing through the streets at times of the day when they go to school and return home. At the same time, though, many stores remain shuttered and grass is running wild in the yards of many houses.
City government figures show that Odaka was home to only 2,046 residents as of July 12, less than one-sixth of the corresponding figure at the time of the 2011 disaster at the nuclear plant, which is operated by Tokyo Electric Power Co. (TEPCO).
The nuclear disaster, triggered by the Great East Japan Earthquake and tsunami, deprived many people of their “lives as usual,” which should have been guaranteed under the Constitution of Japan.
DISASTER HIGHLIGHTED ESSENTIALS OF CONSTITUTION
Katsuaki Shiga, a 68-year-old fisherman, has given up hope of returning to Odaka.
His home, which he had just built near the coastline, was inundated by the tsunami. The home went dilapidated while he was banned entry to the premises in the wake of the nuclear disaster, and Shiga had no choice but to have it dismantled.

"(The disaster) changed not just my life but also the lives of all people in our community," Shiga said. "That made me think about the essentials of the Constitution, such as the right to life and fundamental human rights."

The government of Minami-Soma in May last year distributed a brochure containing the entire text of the Constitution to all households in the city.

Yasuzo Suzuki (1904-1983), a scholar of constitutional law who hailed from Odaka, included an explicit mention of the right to life in a draft outline of Japan's Constitution, which he worked out immediately after World War II ended in 1945.

"**The people shall have the right to maintain wholesome and cultured living standards**," the draft said, in a prelude to Article 25 of the current Constitution.

Katsunobu Sakurai, mayor of Minami-Soma, wanted the city's residents to cast their minds back to a starting point at a time when life had taken a sudden turn for the worse for many of them.

Several tens of thousands of inhabitants of Fukushima Prefecture remain evacuated either within or outside the prefecture's borders. Countless people have lost their longtime livelihoods or dwellings, which means their freedom to choose and change their residences and to choose their occupations (Article 22), along with their right to own or hold property (Article 29), were severely violated.

Many children were no longer able to attend schools in their hometowns, which means their right to an education (Article 26) was also compromised.

And most importantly, the tragedy drove many people into "disaster-related deaths."

"The nuclear disaster has made it impossible to maintain the sort of life that is described in the Constitution," Sakurai said emphatically. "That is unconstitutional, isn't it?"

CONSTITUTION AS PILLAR AND POST

The Fukui District Court in May 2014 issued an injunction against the planned restart of reactors at Kansai Electric Power Co.'s Oi nuclear plant in a lawsuit filed by residents living near the power-generating facility in Fukui Prefecture.

"The use of nuclear energy is meant to fulfill the socially important functions of generating electric power, but that is inferior in standing to the core part of personal rights in light of the Constitution," the court said in its decision.

Akiko Morimatsu said she was given hope by that court decision, which based itself on the Constitution.

The 43-year-old heads a group of plaintiffs from the Kansai region in a group lawsuit filed by evacuees from the nuclear disaster, who are demanding compensation from the central government and TEPCO.

Worried about her two young children's exposure to radiation, Morimatsu fled to Osaka from Koriyama, Fukushima Prefecture, although the area she was from was not under an evacuation order.

Voluntary evacuees like her, who constitute a minority, have had to face unfriendly eyes both in and outside of Fukushima Prefecture, and have received little help from administrative organs and scanty damage payments from TEPCO.

She said she wondered if she had made the right choice, and she took a fresh look at the Constitution, which she had studied in her student years. She thereupon found such statements as "all peoples of the world have the right to live in peace, free from fear and want" (preamble) and "all of the people shall be respected as individuals" (Article 13).

"This should be the pillar and post for me," Morimatsu said she thought.

She argued that it is up to individual freedom to choose between evacuating and staying, and that all individuals, no matter which option they have chosen, should be granted assistance that allows them to realize the sort of life that is guaranteed under the Constitution.

Seventy years after the Constitution came into force, people are still turning to the supreme law of Japan as a weapon in their fight to win back their "lives as usual." That reality should not be forgotten and should be taken seriously.

CHOICE IS UP TO THE PEOPLE

The use of atomic energy was seldom called into question in light of the Constitution before the Fukushima nuclear disaster occurred.

The development of nuclear power in Japan has been advanced in line with the Atomic Energy Basic Law, which was enacted in 1955, eight years after the Constitution took effect.

The law has the stated goal of the "improvement of the welfare of human society and of the national living standard" and says explicitly that the use of nuclear energy should be limited to "peaceful purposes."

"It used to be taken for granted that the use of nuclear power does not violate the Constitution," said Yoshikazu Sawano, a professor of Constitution studies with the Osaka University of Economics and Law. "The issue was seldom ever discussed within academic circles."

There is probably no doubt that nuclear energy, which can supply large amounts of electric power, has contributed to the economic development of Japan, a country poor in natural resources.

Once there is a nuclear accident, however, that puts the human rights of countless individuals at immediate risk. That danger used to be shrouded under a "safety myth" and was not fully understood by the public.

Even after the Fukushima nuclear disaster affected many people, the central government and electric utilities continue to adhere to their policy of promoting the use of atomic energy.

More than 4 million people are living within a 30-km radius of nuclear power plants across Japan where residents may face evacuation orders in the event of an accident.

The future path of Japan should be reviewed from the perspective of whether the continued use of nuclear power would allow the country to maintain society in a state envisaged by the Constitution.

A national referendum in Austria voted against activating a nuclear power plant, which led the Central European nation to pass a law against building nuclear plants in 1978. Public calls for a phase-out of nuclear power intensified following the 1986 disaster at the Chernobyl nuclear power plant in the former Soviet Union, and a ban on the use of atomic power was included explicitly in Austria's Constitution in 1999.

The right to choose the future path of Japan lies with every single member of the country's public, with whom sovereign power resides. There should be broader discussions that take into account of what has taken place during the latest period of a little more than six years.

--The Asahi Shimbun, July 23

No reference to new reactors in energy plan

August 2, 2017

Updated basic energy plan will not refer to new reactors

http://www.asahi.com/ajw/articles/AJ201708020026.html

THE ASAHI SHIMBUN

The government will avoid any reference to building new reactors or replacing aging facilities in its basic long-term energy policy, in light of persistent, public opposition to reliance on nuclear energy.

“There has been no development in circumstances that calls for a change of the outline" of the nation's basic energy policy, industry minister Hiroshige Seko said Aug. 1, indicating that the key parts of the existing plan will remain unchanged.
Whether to mention the construction of new reactors had been the focus of attention as the government prepares to undertake its latest review of the plan, which is conducted roughly every three years.
Although the current plan, crafted in 2014, defines nuclear energy as an “important base load power source,” it does not refer to the government’s position with regard to the construction of new reactors.
The nuclear power industry, along with related business circles, have been pushing for the construction of new reactors.
But the Ministry of Economy, Trade and Industry, which oversees the electricity industry, is hesistant to commit to new construction projects in the new energy plan, given the general outcry over nuclear energy following the 2011 Fukushima nuclear disaster.
Seko said the government’s decision in 2015 to ensure measures are taken so that nuclear energy accounts for 20 to 22 percent of the nation’s overall power output by fiscal 2030 will be achievable without adding new reactors.
“We can attain the objective without building new reactors if existing ones are brought back online,” he said.
Seko added that an advisory panel will meet Aug. 9 to discuss the review of the basic energy plan.
The ministry also plans to hold an inaugural meeting of experts late this month to discuss energy policy through 2050 and whether Japan will need nuclear power plants in the long term.
Five reactors are now operating in Japan after they were certified as meeting more stringent new regulations put in place after the Fukushima disaster.
According to a ministry estimate, the goal of nuclear power accounting for 20 to 22 percent of the nation's energy needs in fiscal 2030 would be achieved if 30 or so existing reactors were in service.
Asahi Shimbun opinion polls since the Fukushima disaster have consistently shown that opposition to nuclear power is almost double that of those who are in favor.
(This article was written by Tokuhiko Saito and Tsuneo Sasai.)

Japan reviews energy plan

August 9, 2017

Energy plan review begins
https://www3.nhk.or.jp/nhkworld/en/news/20170809_40/
A Japanese government panel has begun reviewing the country's medium-to long-term energy policy. The group of experts is focusing on what to do about nuclear power generation and on ways to promote renewables.

The energy policy is reviewed every 3 years or so.

Officials from the industry ministry told the panel that, last fiscal year, nuclear power accounted for about 2-percent of the country's power supply.
Renewables stood at about 15-percent.

The current energy plan calls for nuclear power to account for 20 to 22-percent, and renewables 22 to 24-percent, in fiscal 2030.

Some panel members have requested that the plan be reviewed. Others say more discussions are necessary on whether nuclear power plants should be rebuilt or their numbers increased.

The ministry aims to complete the review by next March.

New reactors?

August 10, 2017

Panel members favor new reactors; others ask, 'Why now?'
http://www.asahi.com/ajw/articles/AJ201708100042.html
THE ASAHI SHIMBUN
Nuclear energy proponents suggested building additional reactors during an industry ministry committee meeting on Japan's energy policy, but others said now is not the time to discuss such a proposal.
Leaders of energy institutions, consulting agencies and others in the field attended the Aug. 9 meeting of the Strategic Policy Committee of the Advisory Committee for Natural Resources and Energy.
The Ministry of Economy, Trade and Industry convened the meeting to obtain opinions concerning the first update of the basic energy plan in three years.
Takeo Kitsukawa, professor of energy and environment policies at the Tokyo University of Science, Professional Graduate School, suggested debate on whether the country should decommission old nuclear reactors and build new ones in their place.
Nobuko Mizumoto, managing executive officer of IHI Corp., a leading heavy industries company, added: "We would like (the ministry) to consider keeping the option of replacing existing nuclear reactors and establishing new reactors."
Although many at the meeting backed the idea of building new reactors, industry minister Hiroshige Seko showed a cautious stance.
"We do not need to change the basic framework," he said.
A number of committee members favor nuclear power generation, including executives of companies that develop nuclear power facilities and a governor of a prefectural government that has accepted hosting such plants.
But given the ongoing battle at the crippled Fukushima No. 1 nuclear power plant, the dominant view in the industry ministry is that it would be too early to include establishment of new nuclear reactors in the basic energy plan. Instead, voices are calling for the government to focus on resuming operations of idle nuclear reactors for the time being.
Kikuko Tatsumi, executive adviser of the Nippon Association of Consumer Specialists, was one of the few participants to clearly propose abandoning nuclear power generation.
"(We should) directly look at the Fukushima accident," Tatsumi said. "(Please shape) policies that are based on sustainable energies."
Hiroya Masuda, adviser of Nomura Research Institute Ltd., said: "Debate on whether we should newly establish reactors means very little now."

Masahiro Sakane, councilor of Komatsu Ltd. and head of the strategic policy committee, echoed that view, saying discussions on building new reactors should come only after resuming operations of existing reactors.
“I totally cannot understand why we are debating whether we should establish new nuclear reactors even though some reactors could be in operation from tomorrow,” he said. “We should look at the realities before discussing the issue.”
(This article was written by Tsuneo Sasai and Yoichi Yonetani.)

South Korea & nukes

August 12, 2017
Lights Out for South Korea's Nuclear Export Ambitions
http://thediplomat.com/2017/08/lights-out-for-south-koreas-nuclear-export-ambitions/
President Moon’s decision to phase out nuclear energy will undercut South Korea’s role in the global industry.
By Viet Phuong Nguyen
Until recently, the success story of nuclear energy was considered a national pride of South Korea, as the country was not only able to establish a strong domestic nuclear market but also compete with other countries on the export front. However, the decision by the newly-elected president of South Korea, Moon Jae-in, to gradually phase out nuclear energy in South Korea has affected both the domestic and export prospects of the Korean nuclear industry. Such a policy, once implemented, will decimate South Korea’s hope for exporting nuclear technology by undermining credibility, capability, and opportunity.
For the past two decades, the nuclear power program of South Korea has become a rare bright spot in the global nuclear industry. The country’s fleet of nuclear power plants has expanded threefold, from eight units in 1989 to 24 units by 2017 with on-time, within-budget constructions of advanced technologies like the APR1400 (Advanced Power Reactor with 1400 MW electricity capacity).
South Korean companies have also searched for opportunities abroad. In 2009, South Korea won its first nuclear contract abroad when the United Arab Emirates selected the consortium led by the Korea Electric Power Corporation (KEPCO) over more experienced bidders from France, the United States, and Japan to build four APR1400 units at Barakah. In the same year, the Korean Atomic Energy Research Institute (KAERI) and Daewoo scored another win for South Korea in the nuclear export market when they secured a contract to supply the first research reactor for Jordan.
Then came the Fukushima nuclear accident in Japan in March 2011, and **the revelation in 2012 of several safety-related scandals of the Korean nuclear industry, like the** cover-up of a station black-out incident **at the Kori nuclear power plant, or the** falsification of safety documents of plant components. In the aftermath, the Lee Myung-bak (2008-2013) and Park Geun-hye (2013-2017) administrations reaffirmed the importance of nuclear energy by continuing the construction of three new APR1400 nuclear units, while reaching out to potential customers of South Korean nuclear technology by signing multiple nuclear cooperation agreements with countries like Vietnam, Saudi Arabia, or Czech Republic. The nuclear export ambitions of South Korea during this booming period were reflected through the the Ministry of Knowledge Economy’s optimistic 2010 plan to export 80 reactors by 2030. More modestly, in 2015, KEPCO projected six new contracts through 2020.
The good fortune of the South Korean nuclear industry has seemingly come to an end, however, under the new government of Moon Jae-in. In a move that stunned many domestic and foreign observers, Moon,

citing safety reasons, announced his decision to phase out nuclear energy by suspending the ongoing construction of two APR1400 units, cancelling any domestic plans for new reactors, and gradually replacing all existing nuclear capacity with natural gas and renewable energy.

On the other hand, it appears that the Moon administration will continue its predecessors' policy of promoting Korean nuclear technology abroad given the recent statement of South Korea's new energy minister: "The problem we're facing is having multiple units in a small country, and if other countries do not have such problems, I have no intention to stop exports at all and am planning to support such moves." Despite such reassuring messages and other good news on the export front, like the smooth implementation of the Barakah project, Moon's nuclear reversal will negatively affect South Korea's nuclear export ambition in three aspects: credibility, capability, and opportunity.

In term of credibility, it is reasonable to argue that when the Korean president has openly stated that nuclear energy needs to be phased out for the sake of public safety, it will be very difficult to convince other countries to import the exact same kind of technology from South Korea. For comparison, when faced with public and foreign partner concerns about the safety of Korean nuclear technology following the Fukushima accident and domestic safety scandals, the Lee Myung-bak government implemented both internal reforms of safety regulation and external communications with the UAE on the nature of the scandals and the safety advantages of the APR1400 technology. These effective measures did help reassure the UAE, as the construction schedule of the four nuclear units at the Barakah site has been maintained without any major dispute.

In another example, the Japanese government, while admitting a faulty regulatory system for nuclear safety was one of the reasons that led to the disastrous events at Fukushima, still insists that the reactors that they offer to other countries are much more advanced, safety-wise, in comparison with the outdated ones installed at the Fukushima Dai-ichi plant. In both cases, nuclear export opportunities were created and maintained, by emphasizing the safety features of the technology through continuous communication with foreign partners, and not by denouncing the same technology in front of the public.

In term of capability, experiences from the United States show that the lack of a robust domestic market will negatively affect the competitiveness of the country on the export front. Two decades without domestic orders for new reactors following the nuclear accident at Three Mile Island in 1979 had a serious impact on the manufacturing and financial capabilities of American suppliers in their competition with vendors from other countries in new projects abroad. The latest sign of such struggles is the bankruptcy of Westinghouse, which was one of the two remaining reactor suppliers from the United States, in early 2017, and the decision by American utilities to stop the construction of two new reactors that were supposed to be the springboard for the revival of the American nuclear industry –both of which Westinghouse was primary contractor for.

In contrast, starting from an importer of nuclear technology, South Korea has recently been praised for a strong domestic industry that can independently design, manufacture, and build nuclear reactors with its own advanced technology. Currently, South Korea is also one of the few countries that can avoid significant delays in new reactor construction, largely thanks to accumulated experiences from continuously building new plants since the late 1980s. Korean companies will hardly be able to keep such a track record and reputation once Moon's domestic phase-out policy is carried out, especially when new demands from other countries are few and far between and thus cannot help sustain the existing domestic manufacturing capacities of Korean suppliers like KEPCO and Doosan Heavy Industries.

Finally, the conflicting messages about phasing out the domestic nuclear fleet while promoting the same technology abroad will lower the chances for South Korea to win new contracts in nuclear newcomers like Egypt or Saudi Arabia. As previously mentioned, it was a big surprise in the international nuclear market

when novice exporter KEPCO won the UAE project over experienced suppliers like Areva and EDF of France. One of the main reasons for such success is the strong coordination between the Korean government, KEPCO, and their partners in preparing for the UAE bid, whereas the French team consisting of Areva and EDF was actually stuck in an internal dispute during the same bidding period.
Lessons learned from this episode, and the strong performance of ROSATOM as the sole representative of Russian efforts in promoting nuclear technology abroad, have led to the creation of other national consortia in Japan (the International Nuclear Energy Development of Japan) and China (Hualong Company) to improve the chance of these countries in the international market. The nuclear reversal policy will likely create confusion between the South Korean government and nuclear companies; an early controversy has already been observed regarding the suspension of construction of two domestic reactors at the Shin Kori site. Under these circumstances, it's an open question whether "team Korea" can keep its previously exemplary coordination in the race to win new exports faced with other strong contenders like Russia and China.
From the above discussion, a conclusion can be made that the nuclear export ambitions of South Korea will be severely affected once the nuclear phase out is official implemented by the Moon administration. Even if this policy is reversed by Moon's successor, as the president of South Korea is limited to one five-year term, the damages in terms of credibility, capability, and opportunity to South Korea's nuclear exports will be significant, especially when taking into account the declining interest in nuclear energy in once-potential customers in Southeast Asia. A policy that may have long-lasting repercussions domestically and abroad, like Moon's nuclear reversal initiative, should be discussed thoroughly and democratically between all national stakeholders that may be affected in order to reflect a balance of interest for the common benefit of South Korea.
From a global perspective, the future of South Korea's nuclear export capability is also of great interest. After the disintegration of the French nuclear giant Areva and the aforementioned downfall of Westinghouse, prospective customers will likely prefer a more competitive export market, with the strong presence of South Korea, to a rising duopoly between Russia and China.
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New energy plan : Phase-out nukes and fight global warming

August 14, 2017

EDITORIAL: Phasing out nuclear power a must for Japan's new energy plan
http://www.asahi.com/ajw/articles/AJ201708140020.html
The industry ministry has opened discussions for reviewing Japan's Strategic Energy Plan, which defines a grand framework for how the country will consume, and cover the demand for, electric power, heat and other forms of energy.
Industry minister Hiroshige Seko has said the core part of the plan will remain basically unchanged. Minor adjustments alone, however, would simply not suffice under current circumstances.

The ongoing edition of the plan is questionable in many respects, including in the way it defines nuclear energy as a mainstay power source despite broad public opposition to restarts of nuclear reactors.

A big wave of change is occurring on a global scale. For example, there are moves, mostly in advanced industrialized nations, for pulling the plug on nuclear power. There is also a trend for moving from coal-fired thermal power generation, given that the Paris Agreement has now taken effect for fighting global warming. Renewable energy options, such as wind and solar power, are spreading rapidly.

Japan should also redraw the image of its future self. First and foremost, a phase-out of nuclear power should define the foundation of the country's new future perspective.

While combining a nuclear phase-out with a fight against global warming won't be an easy task, advances in energy-saving technologies and in renewable energy options have lowered the hurdles for pursuing both. There is a need to seek pathways for doing so, with due consideration given to cost performance and the stability of the energy supply.

FALSE PLEDGE TO LOWER DEPENDENCY ON NUCLEAR POWER

The current Strategic Energy Plan, which was approved by the Cabinet in 2014, contains one deceptive aspect.

In response to the Fukushima nuclear disaster of 2011, the plan included a passage saying that, "Japan will minimize its dependency on nuclear power," but it also defined atomic energy as an "important base-load power source."

The plan also explicitly stated that the government would "proceed with the restart of the nuclear power plants" in accordance with the country's revised regulatory standards. And nuclear reactors across Japan are actually being brought back online.

The Long-Term Energy Supply and Demand Outlook, a document worked out by the industry ministry in 2015 on the basis of the energy plan, favors a return to nuclear power more openly. The document assumes that atomic energy will account for about 20 percent of Japan's total power supply in fiscal 2030. That figure translates to 30 or so active nuclear reactors. Restarting reactors that are currently available for restarts would not be enough to achieve that number, so there would also be a need to either extend the service lives of, or replace, many of the aging nuclear reactors.

But even experts with a neutral stance on nuclear power policy have criticized that assumption for being too unrealistic, because nuclear energy is falling out of favor with the times both in Japan and abroad following the Fukushima disaster. For example, the public has grown more skeptical about the use of nuclear power, and the costs of implementing required safety measures have soared.

The question of how to dispose of radioactive waste from nuclear power reactors remains unlikely to be solved any time soon in most of the countries that have such reactors, including Japan. Efforts are spreading, mostly in advanced nations, for seeking to scrap all, or a considerable part, of a national fleet of nuclear reactors.

The forthcoming edition of Japan's Strategic Energy Plan should no longer define atomic energy as a mainstay source of power. Minimizing dependency on nuclear power should be designated a priority issue instead of being left as a hollow promise. Discussions should be made on what efforts are necessary for achieving that goal, and a road map should be presented in a concrete manner.

PHASE OUT NUCLEAR, FIGHT GLOBAL WARMING

Intensive power-saving efforts, combined with a substantial growth in renewable energy options, will represent a solution to the question of how to phase out nuclear power and fight global warming at the same time. It has been pointed out that such measures are costly and have other disadvantages, but possibilities have been opening up for them in recent years.

On the power-saving front, the mainstream approach in advanced nations lies in suppressing energy consumption while pursing economic growth at the same time. Technological innovation is taking place, including in the use of information technology for efficient control of devices and for adjustment of the power demand.

The government should use policy incentives and regulations to apply strong pressure on the private sector to take action, just like it did when Japan was getting over the oil crisis in the past.

On the front of renewable energy options, the current Strategic Energy Plan says that the government "has accelerated the introduction of renewable energy as far as possible."

Solar power has indeed risen sharply in output over the past several years, but the growth of wind power has remained stalled. Renewable energy sources account for around 15 percent of Japan's total power supply, far behind the corresponding figures for European nations.

There is an urgent need to remove obstacles to realize a more substantial spread of the use of renewable energy sources. For example, operation of facilities should be improved so that more electricity generated from renewable energy sources can be supplied to areas where power transmission lines are currently near capacity. Rules should also be set on how to divide burdens of payable expenses so it will become easier for concerned parties to make additional investments that are deemed necessary.

Wind and solar power have become drastically cheaper to generate in the rest of the world. They can now compete on an equal footing with thermal power and nuclear power in more and more corners of the globe.

Those forms of energy remain relatively expensive in Japan, so we should rack our brains to improve the efficiency of wind and solar power plants, across all stages from their installation to their operation.

The spread of renewable energy options has been helped by a system that allows the cost of power generation to be added on top of electricity charges. In future years, however, it will also become essential to design an institutional setup that helps suppress the burdens passed on to the public.

In the meantime, thermal power has risen sharply in supply to fill a hole left by nuclear power reactors, which went offline and have remained idle in the wake of the Fukushima disaster.

The output of thermal power should be reduced steadily in step with the expanding use of renewable energy.

The current Strategic Energy Plan defines coal-fired thermal power, which is cheap to generate, as another mainstay power source on par with nuclear energy. The private sector has an army of plans for building new coal-fired thermal plants.

But moves are taking place quickly overseas for lowering dependency on coal-fired thermal power, which is generated at the cost of particularly large carbon dioxide emissions. Natural gas, which is friendlier to the environment, should be given priority when it comes to thermal power generation.

EYES SHOULD BE SET ON GLOBAL TREND

The proceeding of discussions for the ongoing review of the energy plan is also problematic.

Apart from having the matter discussed by an existing council, the industry ministry is also setting up a separate panel of experts for discussing long-term strategies. Scholars and senior corporate executives sit on the two bodies who are supportive of the current energy policy, whereas advocates of a departure from nuclear power and of intensive development of renewable energy options account for a mere handful of their members.

One could only doubt that such a lineup of members will enable substantial discussions. It would be indispensable to also include experts who are well-versed in overseas trends, matters of technology and issues of cost performance and approach the question from a broad array of angles.

Japan, a country with scanty natural resources, has placed emphasis on the stability of the energy supply. That was indeed a necessary viewpoint, but it also led Japan, in a sense, to fall into a state of sclerosis whereby the use of nuclear power became the central axis of the nation's energy policy.
Renewable energy sources have already replaced thermal energy and nuclear energy as the leading destinations of global investments into the electric power sector.
Japan should quickly switch its energy policy instead of turning its back on the international trend.
--The Asahi Shimbun, Aug. 13

Will East Asia go greener?

August 18, 2017

Greener grid for East Asia
https://www.japantimes.co.jp/opinion/2017/08/18/commentary/world-commentary/greener-grid-east-asia/#.WZb7TcZpyos
South Korea and Taiwan have announced plans to phase out or reduce their use of nuclear power and fossil fuels
by Sung-Young Kim **and** John A. Mathews
SYDNEY – Not long ago, the future of nuclear power was in Asia. In 2015, nine of the 10 reactors that opened globally were on the continent. But recent declarations by South Korea and Taiwan that they will "go green" have called into question nuclear power's long-term viability, at least in East Asia. Indeed, 2017 may mark the end of the region's nuclear love affair — and the start of a new one with renewables.
South Korean President Moon Jae-in and Taiwan's President Tsai Ing-wen have both set ambitious national agendas to boost renewable energy generation while calling for a phase-out of nuclear. For years, overreliance on traditional fuels discouraged investment in clean technologies for power generation, despite the fact that both countries are innovators in green industries, like energy storage and smart grids. Whereas 22 percent of South Korea's energy needs, and 14 percent of Taiwan's, are met by nuclear, those ratios are now set to drop dramatically.
Blueprints are still being formulated, but taken together the two countries' commitments mark a major shift in regional energy planning toward greener, cleaner technologies. Moreover, they will pave the way for increased investment in renewable power installations, placing their countries on a new competitive footing in the regional market.
South Korea's strategy calls for a phased withdrawal from the nuclear industry, through non-renewal of existing licenses and bans on future plants. Last month, Moon, who was elected in May and campaigned on a nuclear-free agenda, called for an increase in the use of renewables, to 20 percent of the country's total power generation, by 2030, up from the current 5 percent. He has also pledged to close 10 coal-fired power plants by the end of his term in 2022. Currently, coal accounts for about a quarter of the country's energy consumption. Natural gas would be used as a "bridging fuel" during the transition to greener power.
Given that South Korea currently operates 25 nuclear reactors and had plans to build six more, the shelving of nuclear power is a significant shift in the country's energy strategy. Indeed, some have expressed doubts about the feasibility of Moon's plans. There are also questions about how the energy-

policy overhaul will affect the country's lucrative export market for nuclear technology. But Moon remains resolute.

In Taiwan, Tsai is equally committed. Last year, responding to public opposition to nuclear energy in the wake of Japan's 2011 Fukushima meltdown, Tsai vowed to make Taiwan nuclear-free by 2025. Today, coal and natural gas provide more than two thirds of the country's electricity needs, with renewables accounting for 5 percent. Tsai has called for the share of renewables to increase to 20 percent over the next eight years, with the capacity coming primarily from solar and offshore wind. This new load would easily replace the electricity generated by the country's six nuclear reactors.

Critics contend that green technologies are not mature enough to replace traditional fuels for industrial-scale energy use. But these claims are a few years too late. Significant declines in startup costs and energy-storage prices, as well as improved battery performance, have made renewables more competitive than ever. As Francesco Starace, chief executive of Enel, Europe's largest energy company by market capitalization, told the Financial Times in June, renewables are becoming the "cheapest and most convenient way of producing electricity."

South Korea and Taiwan are not the first East Asian powers to go greener. China has been moving in that direction for years, and now leads the world in installed renewable-energy capacity. But by joining the renewables revolution, Taiwan and South Korea will make it easier for other regional players to enter the market, because expanded investment opportunities will increase competitiveness and further drive down already declining costs.

In fact, if there is one valid criticism of Moon's and Tsai's visionary goals, it is that they could be realized even faster. For example, if both leaders were to allow the purchase of renewable power from the planned Global Energy Interconnection or the Asian Super Grid, they could increase the share of green energy more rapidly. South Korea and Taiwan have few natural resources of their own, and are heavily reliant on imported fuel to generate electricity. The introduction of competition to the national monopolies in both countries would also speed the shift to renewables.

But for now, what is most important is the precedent that South Korea and Taiwan are setting. The renewables market in East Asia is about to blossom. When it does, the region's decades-old dependence on nuclear power will finally be broken.

Sung-Young Kim is a lecturer in international relations at Macquarie University in Sydney. John A. Mathews is a professor of management at the Macquarie Graduate School of Management in Sydney. © Project Syndicate, 2017

What energy plan for the future?

August 27, 2017

National energy plan needs a major review
https://www.japantimes.co.jp/opinion/2017/08/27/editorials/national-energy-plan-needs-major-review/#.WaLgqMZpxLP

The Ministry of Economy, Trade and Industry has begun a review of the government's Basic Energy Plan — three years after its last update in 2014 by the administration of Prime Minister Shinzo Abe. The current plan, the first adopted in the wake of the March 2011 catastrophe at the Fukushima No. 1 nuclear plant, lacks clear direction and features apparent inconsistencies, such as its call for reducing "as much as

possible" the nation's dependence on nuclear power as a source of electricity while at the same time characterizing nuclear energy as an "important baseload power source" that contributes to a stable energy supply. Under this policy, the Abe administration and the power companies have pushed for restarting nuclear reactors taken offline after the 2011 crisis once they have cleared screening by the Nuclear Regulation Authority (NRA).

In the review to be completed by the end of the current fiscal year, METI reportedly intends to keep the basic outline of the current plan intact — because of the political sensitivities surrounding nuclear power six years after the 2011 disaster. However, the government should overhaul the plan with a more pragmatic assessment of the prospect of nuclear power in this country, which could also affect Japan's commitment to reducing its greenhouse gas emissions, and a greater emphasis on renewable energy.

Based on the 2014 plan, the government envisages an energy mix in 2030 where nuclear power will account for 20 to 22 percent of the nation's electricity output — compared with nearly 29 percent in 2010, the last year before the Fukushima crisis. Since power companies have decommissioned several aging reactors under the tightened safety regulations, that target would likely not be achieved unless almost all of the remaining reactors — including the four at Tokyo Electric Power Company Holdings Inc.'s Fukushima No. 2 plant — are restarted and the operations of many of them are extended beyond the 40-year rule to the maximum 60 years allowed as "exceptions.

That hardly sounds like shedding the reliance on nuclear power. But the feasibility of that target is another question. Restarting the idled reactors has so far not progressed as much as hoped by the power industry, which faces a heavy financial burden from having to import fuel to run thermal power plants instead. Of the 26 reactors whose restart have been sought by 11 power firms, only five have been brought back online after clearing the NRA's screening under the post-Fukushima disaster safety regulations and getting the nod of host local governments. In fiscal 2016, the share of nuclear power in the electricity supply stood at a mere 2 percent.

Popular concern over the safety of nuclear power remains strong. as shown in media surveys that point to steep opposition to restarting of the idled reactors. Lawsuits have been filed to prevent power companies from reactivating their reactors — with some court orders issued, though later reversed, to halt their operations. Behind METI's intention to avoid a major overhaul of the Basic Energy Plan, including discussion on the question over construction of new reactors, is said to be the political sensitivities to the public opinion still wary of nuclear power, particularly as popular approval ratings of the Abe administration have come down sharply in recent months.

A recent estimate by Bloomberg New Energy Finance, a private research institute, forecast that nuclear power will account for about 10 percent of Japan's electricity output in 2030 — less than half the government's energy mix target — and that power companies will instead turn more to coal-fired thermal power plants, pushing up the share of coal to as much as 38 percent of the total supply in 2030, far above the government's target of 26 percent and even higher than the 30 percent last year.

The government has long relied on nuclear energy as a key pillar of the nation's measures against climate change, given that nuclear reactors do not generate carbon dioxide in power generation. However, the cloudy prospects of nuclear power cast doubt on reaching the government's targets for reducing the nation's emissions of global warming gases, including the goal of cutting emissions in 2030 by 26 percent from 2013 levels. Furthermore, Japan's continued emphasis on coal-fired plants — which are popular in the power industry because of their low fuel cost but which emit far more carbon dioxide than other forms of power generation — goes against the global trend of other countries shedding coal to combat

climate change. Power companies in Japan have plans to build roughly 40 new coal-fired thermal power plants.

As it is, the Basic Energy Plan does not appear to reflect the broad changes that have taken place in the energy landscape both in Japan and overseas. The once-touted cost advantages of nuclear power now appears to be in doubt with the added safety requirements following the 2011 disaster, with a number of counties rethinking their nuclear power plans. Introduction of renewable energy such as solar and wind power had expanded in recent years, significantly pushing down their costs. While the plan calls for expanding “as much as possible” the share of renewable energy in Japan, their target in the 2030 energy mix is set at a modest 22 to 24 percent — just slightly above the target for nuclear power, and even lower than the one for coal-fired plants. The plan merits a major review in view of these developments.

Japan should stick to its 3 non-nuclear principles

September 9, 2017
Editorial: Japan must stick to non-nuclear principles
https://mainichi.jp/english/articles/20170909/p2a/00m/0na/009000c
Shigeru Ishiba, former secretary-general of the ruling Liberal Democratic Party (LDP), called for discussions on a review of Japan's three non-nuclear principles of not possessing, not producing and not bringing in nuclear weapons.

- 【Related】Japan should discuss deployment of US nukes inside country: Ishiba
- 【Related】Komeito chief insists Japan stick to 3 non-nuclear principles, rejects nuke deployment

Specifically, Ishiba suggested that the third principle of not bringing in such weapons be re-evaluated to open the way for the deployment of U.S. nuclear weapons in Japan.
Debate on the deployment of U.S. nuclear arms could send the wrong message to China and other countries and adversely affect international cooperation in pressuring North Korea to abandon its nuclear weapons program.
Ishiba said, "Is it right to refuse the deployment of nuclear weapons inside the country while relying on U.S. nuclear arms for protection?"
Behind his remark is the idea that the deployment of nuclear arms in Japan, which would be exposed to a direct threat if North Korea possesses nuclear missiles, would enhance deterrence.
Ishiba pointed out that NATO has countered threats from the former Soviet Union and Russia by deploying U.S. nuclear weapons in its member countries, and said, "Such discussions are necessary to increase the usefulness of the nuclear umbrella." However, the security environment in East Asia is significantly different from that in Europe.
After China successfully conducted a nuclear test in 1964, there were discussions on the pros and cons of Japan arming itself with nuclear weapons. Nevertheless, then Prime Minister Eisaku Sato announced Japan's three non-nuclear principles in 1967, and the principles took root in Japan as an important part of its national policy in the process of the Ogasawara Islands south of Tokyo and Okinawa being returned to Japan's sovereignty from U.S. occupation in 1968 and 1972, respectively.
In adopting the principles, the government didn't just consider the Japanese public's sentiments as the only atomic-bombed country. Japan's calls for nuclear arms reduction and nuclear disarmament have

been a pillar of Japan's diplomatic policy, and the denuclearization of East Asia, including the Korean Peninsula, is an important goal for Japan.
While falling under the protection of the U.S. nuclear umbrella, Japan has managed to maintain its goal of nuclear disarmament by adhering to its three non-nuclear principles.
It is necessary to re-examine Japan's diplomatic and security policies in the face of the growing threat posed by North Korea. That does not mean, however, that Japan can disregard the accumulation of historical and multifaceted discussions that led to the adoption of the non-nuclear principles as its national policy.
Fears persist in the international community that if North Korea were to possess nuclear missiles, Japan and South Korea would also arm themselves with nuclear weapons to deter the threat from Pyongyang.
It was appropriate that Chief Cabinet Secretary Yoshihide Suga promptly ruled out the possibility of Japan debating a review of the three non-nuclear principles, saying, "The government isn't considering deliberating the matter."
We fear Ishiba's remarks could undermine Japan's ultimate goal of realizing a world without nuclear arms.
September 8, 2017

EDITORIAL: Even in face of N. Korean threat, anti-nuke policy should remain
http://www.asahi.com/ajw/articles/AJ201709080020.html
With Japan facing the challenge of responding to North Korea's continuing nuclear arms program, former Defense Minister Shigeru Ishiba of the ruling Liberal Democratic Party has suggested a review of the nation's long-standing three non-nuclear principles.
Appearing in a TV Asahi program, Ishiba asked, "Is it a viable argument that we will not accept (nuclear weapons) in Japan while saying that the nation will be protected under the U.S. nuclear umbrella?"
The simple answer to his question is, "Yes, it is a viable argument."
The three principles of not producing or possessing nuclear weapons and not allowing their entry into Japan were first announced in 1967, during the Cold War, by then Prime Minister Eisaku Sato. Since then, the principles have been followed by Japan's successive Cabinets.
This is a key national creed of postwar Japan and a product of its desperate attempt to come to terms with the reality that it relies on the U.S. nuclear deterrence for its security despite its strong desire to help eliminate nuclear arms from the world, driven by its experiences as the only country that has ever suffered nuclear attacks.
The United States doesn't disclose, in principle, where it deploys its nuclear weapons. It is therefore difficult to confirm that the U.S. forces have not brought nuclear arms into Japan.
Even so, Japan's commitment to the three non-nuclear principles has been a pillar of the nation's foreign policy even after the end of the Cold War.
Japan's move to reconsider the principles could prompt South Korea and Taiwan to seek their own nuclear arsenals, triggering a nuclear domino effect.
In South Korea, there are already calls for the redeployment of U.S. tactical nuclear weapons to the country and even for its own nuclear armament.
The moves of South Korea and Taiwan to arm themselves with nuclear arsenals would seriously undermine the Nuclear Nonproliferation Treaty regime, giving North Korea a rationale for developing nuclear arms.

What is more important than anything else for the efforts to deal with North Korea's nuclear program is solidarity among Japan, the United States and South Korea. The three countries should act on their united front to seek cooperation from China and Russia, which have significant influence over Pyongyang.
Japan should contribute to this strategy by sending out a strong message about its resolve to seek the denuclearization of Northeast Asia including the Korean Peninsula.
Japan's solid commitment to the three non-nuclear principles will underpin its diplomatic efforts for this goal.
Made under these circumstances, Ishiba's remarks could cause diplomatic repercussions that can chip away at the foundation of Japan's diplomacy based on its non-nuclear principles. We cannot help but question his view on the issue.
As possible examples of allowing U.S. nuclear arms into Japan, Ishiba cited port calls made by U.S. strategic missile submarines carrying nuclear warheads at the U.S. Navy's Yokosuka base in Kanagawa Prefecture or the Sasebo base in Nagasaki Prefecture.
The port calls at bases in Japan, which are close to North Korea, however, would not make much strategic sense.
In addition, such actions by the U.S. forces could provoke backlashes from some neighboring countries and make Japan a target should war break out.
Ishiba's remarks came as part of a recent series of arguments made by LDP lawmakers for enhancing Japan's military power in response to North Korea's nuclear and missile provocations.
Katsuyuki Kawai, an LDP Lower House lawmaker who now serves as a special adviser to the LDP president, Prime Minister Shinzo Abe, on foreign affairs, recently said, "I personally believe that the time has already arrived to seriously consider the possibility of the Self-Defense Forces possessing intermediate-range ballistic missiles and cruise missiles."
This kind of proposal, apparently designed to promote a hard-line security policy agenda by taking advantage of the current crisis, can never contribute to regional stability.
What is really needed is cool-headed debate that is firmly in line with Japan's basic foreign policy tenets, including the three non-nuclear principles and the strictly defensive security policy.

Human Rights, Future Generations and Crimes in the Nuclear Age (Basel, Sept. 2017)

Basel Declaration on human rights and trans-generational crimes resulting from nuclear weapons and nuclear energy

The participants in the international conference *Human Rights, Future Generations and Crimes in the Nuclear Age*, held in Basel from September 14-17, 2017, affirm that the risks and impacts of nuclear weapons, depleted uranium weapons and nuclear energy, which are both transnational and trans-generational, constitute a violation of human rights, a transgression of international humanitarian and environmental law, and a crime against future generations.

We are convinced that the energy needs of all countries can be met by safe, sustainable, renewable energies, and that the security of all countries can be met without reliance on nuclear weapons. Our conclusions are based on the following;

On Uranium mining

- Uranium mining and enrichment, which provide the fuel for nuclear energy, release long-lasting and highly toxic radionuclides into the environment causing severe impact on the health of current and future generations exposed to the radiation;
- The nuclear fuel chain, especially uranium enrichment and plutonium reprocessing, provide possibilities for countries with these technologies to also produce nuclear weapons, creating additional threats to current and future generations.
- Finally, the financial prospects of uranium mining in the intermediate and long term future seem questionable at best, considering the existing downtrend in utilization of nuclear energy. Subsequently Governments may seriously consider ceasing the exploration of uranium.

On nuclear energy

- Along the chain of production, regular use and waste management of nuclear fuel for energy generation as well as after nuclear power plant accidents huge amounts of radioactive isotopes are released into the biosphere. Severe health effects as cancer and non-cancer diseases have been demonstrated in populations exposed. In particular resulting genetic changes impact on the health of current and future generations. Modern studies on low dose ionizing radiation (LDIR) corroborate the Linear No Threshold [LNT] concept. Scientifically based understanding calls for acceptance of risk estimations at doses as low as 1 mSv. ICRP-recommendations must be revised as they are outdated one decade after their effective date.
- Many nuclear power plants, particularly in Europe, are located in regions of high population density;
- Any nuclear disaster has cross border effects affecting population of several countries, and would be an infringement of international law requiring states to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states.
- The 2015 Sendai United Nations declaration recognized that accountability for disaster risk creation is needed at all levels. Furthermore, all human rights need to be promoted and protected in any disaster situation, including man made hazards and technological risks;
- The exorbitantly high costs of nuclear energy production and management (including waste storage) make it an inappropriate investment as compared to renewable energies;
- Nuclear disasters like those at Mayak, Three Mile Island, Sellafield, Chernobyl and Fukushima, release massive quantities of radionuclides into the environment impacting on the health of current and future generations;
- Nuclear power plants, in operation and after their dismantlement, generate huge amounts of radioactive waste, which is dangerous for thousands of years, even longer than any known civilization has lasted. The question of safe long-term storage of radioactive waste over centuries has not been answered so far.

On nuclear weapons

- The use and testing of nuclear weapons has generated severe, trans-generational damage to health and the environment of those in the vicinity of the detonations and also to humanity as a whole;
- Recent research, highlighted by the series of international conferences on the humanitarian impact of nuclear weapons, indicates that any use of nuclear weapons on a populated area would cause disastrous humanitarian and environmental consequences, and any multiple use of nuclear weapons would cause catastrophic and irreversible damage to the climate in addition to the radiation and blast impacts;
- We affirm that nuclear deterrence is immoral, illegal and of doubtful value for security. The high risks of nuclear weapons being used in current confliicts such as in North East Asia, in other times of tension, and until nuclear weapons are eliminated provides an imperative for nuclear abolition.
- The financial and human investments in the nuclear arms race are deviating required resources from human, social and environmental needs. This includes promoting education, providing basic universal health care, protecting the climate and implementing the sustainable development goals.

On depleted uranium (DU) weapons

- Epidemiological reports indicate that exposure to depleted uranium has health impacts on those exposed and their offspring;
- Use of uranium for armor plating and piercing projectiles release depleted uranium into the environment, where it will be deposited for thousands of years, causing risks to combatants and non-combatants alike.

On international law applicable to nuclear weapons and energy

In addition to general international law, the following branches, *inter alia*, are applicable to nuclear weapons and nuclear energy:

- *International human rights law* protects, in particular, the right to life, the right not to be subject to inhuman or degrading treatment, the right to the highest standard of health and to a healthy environment, the right to an adequate standard of living, including the right to food and water, as well as the freedom of expression and the right to seek and receive information. Moreover, special instruments for particularly vulnerable groups, such as women, children, indigenous peoples or persons with disabilities, have been adopted and concluded.
- *International humanitarian law:* This body of law prohibits the use of weapons or methods of warfare that would indiscriminately impact on civilians, cause unnecessary suffering to combatants, violate neutral territories, be dis-proportionate to the provocation or cause severe, long-term or irreversible damage to the environment.
- *The law of peace and security*: This body of law, expressed primarily through the UN Charter, prohibits the threat or use of force except in legitimate self defence.
- *Law protecting the environment and future generations*: This body of law, expressed in a number of international treaties, provides a responsibility to ensure a sustainable environment for current and future generations, and to prohibit activities which are known to seriously threaten this. There is also a legal responsibility to prevent and protect the public from exposure to harm, when scientific investigation has found a plausible risk.

The production of nuclear energy violates human rights law and international law protecting the environment and future generations due to the impacts of nuclear energy on human health and the environment as outlined above.

The production, threat and use of nuclear weapons violate all four bodies of law outlined above. As such, we agree with the conclusion of the International Court of Justice that '*the destructive impact of nuclear weapons cannot be contained in time or space'* and with the affirmation of the Treaty on the Prohibition of Nuclear Weapons that '*any use of nuclear weapons would be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of international humanitarian law*.' More-over, it would constitute an ecocide.

On rights and responsibilities under the law

- We call for full redress for all people whose health, well-being or livelihoods have been negatively impacted by uranium mining, nuclear energy and nuclear weapons;
- We welcome the provision in the *Treaty on the Prohibition of Nuclear Weapons* on victim assistance and environmental remediation and call for its full implementation;
- We appeal to all those in the nuclear weapons and energy industries and administrating government departments to recognize the illegality of the production of nuclear weapons and energy, and to cease such activities;
- We welcome the conclusions of the *International Peoples' Tribunal on Nuclear Weapons and the Destruction of Human Civilisation.* held on July 7-9, 2016, that convicted (in absentia) the leaders of the nuclear-armed States (and one of the allied States as a test case) for war crimes, crimes against humanity, crimes against peace, crimes against future generations and crimes of threatening, planning and preparing acts which would constitute ecocide, which is understood as causing serious damage to, or destruction, of an ecosystem or ecosystems, or of causing serious, long-term or irreversible damage to the global commons.
- We welcome the fact that the majority of countries neither produce nuclear energy nor possess nuclear weapons, and we call on all other countries to join them.
- We welcome the establishment of the International Renewable Energy Agency, which provides assistance to countries to develop renewable energies, and we highlight it's 2016 Report *REthinking Energy: Renewable Energy and Climate Change which demonstrates the possibilities to completely replace fossil fuels by safe renewable energies, without relying on nuclear energy, by 2030.*
- We commend the 184 countries who have joined the *Non-Proliferation Treaty* as non-nuclear States and the 122 countries who voted in favour of the *Treaty on the Prohibition of Nuclear Weapons* which also prohibits the threat or use of nuclear weapons. We call on all countries to agree to the prohibition and elimination of nuclear weapons and to adopt, at the 2018 UN High Level Conference on Disarmament, a framework to implement this.
- We call on all countries utilizing nuclear energy to announce a program for phasing out their use of nuclear energy and replacing it with renewable energy sources.
- Finally, as doctors, lawyers, scientists and nuclear experts from 27 countries we consider it as our moral duty to highlight the facts regarding nuclear energy and weapons, and promote a safe, sustainable and peaceful future for humanity and our planet consistent with human rights and the rights of future generations.

As such we make the following proposals:

We support the initiatives that Switzerland has taken to phase out nuclear energy domestically and to prohibit nuclear weapons globally, and we encourage Switzerland to take further efforts at the United Nations to prohibit all aspects of the nuclear energy and weapons industries.

2. The Linear No Threshold [LNT] concept and collective dose-calculations allow extrapolations of health risks in large populations exposed to low doses of ionizing radiation. Current scientifically based understanding calls for acceptance of risk estimations at doses as low as 1 mSv and therefore asks for a revision of the ICRP-recommendations, which are outdated one decade after their effective date.

3. Violations of human rights by ionizing radiation sources must be documented epidemiologically. In this regard medical standards for compensation of victims have to be established. Companies / people found to violate the rights of the concerned workers must be held responsible by national and international courts. Everyone has the right to seek and receive information. Victims must be compensated.

4. The employment of nuclear weapons, as well as indiscriminate damage to health and to the environment resulting from other nuclear activities, should be included as a crime against humanity under the Rome Statute of the International Criminal Court. We also call for amendment of the Rome Statute to include the crime of ecocide.

5. Young people and students need to be alerted to the relation between « Nuclear energy / nuclear weapons – Violations of human rights – Rights of future generations. Their human rights are endangered and therefore they need to become active and encouraged to have their current and future interests respected. Law and medical faculties are encouraged to consider teaching on human rights in their corresponding curricula, in general but also in the mentioned context of the 'Nuclear fuel chain', and this also in view of the rights of future generations.

6. The 28 May 1959 agreement between the World Health organization and the IAEA, which leads to conflict of interest and limits the free information on health consequences of nuclear civil use, must be abolished

7. The participants of the Symposium 'Human Rights, Future Generations and Crimes in the Nuclear Age' are ready to share these demands and communicate them to decision makers in other countries.

Contacts:
Conference website: www.events-swiss-ippnw.org
Association of Swiss Lawyers for Nuclear Disarmament: https://safna.org
Basel Peace Office: www.baselpeaceoffice.org
International Center for Comparative Environmental Law: www.cidce.org
PSR/IPPNW Schweiz: www.ippnw.ch
Uranium Network: www.uranium-network.org

Govt sees nukes as key power source

October 4, 2017

Seko: Zero nuclear plants unrealistic
https://www3.nhk.or.jp/nhkworld/en/news/20171003_25/
Japan's minister of economy, trade and industry says a proposal by Tokyo Governor Yuriko Koike's new party that the country have no nuclear plants is unrealistic.

At a news conference on Tuesday, Hiroshige Seko said the world faces the challenge of cutting carbon dioxide emissions, and electricity bills are rising.

But he said the government is trying to reduce the number of nuclear plants in Japan as much as possible.

The government sees nuclear plants as a key power source.

It says it will restart only reactors certified by the country's regulating body as meeting requirements introduced after the 2011 Fukushima disaster.
Seko stressed the government's stance of implementing balanced, realistic and responsible energy policies with safety as the top priority.

What will happen to Japan's nuclear industry?

October 5, 2017
Nuclear power clash shaping up between ruling, opposition parties
https://mainichi.jp/english/articles/20171005/p2a/00m/0na/018000c#cxrecs_s
A three-way battle appears set to unfold during the general election campaign over the fate of Japan's nuclear power industry, with the ruling parties pushing reactor restarts, conservative opposition forces favoring a planned phase-out, and centrist and left-wing parties pulling for elimination as soon as possible.

- 【Related】TEPCO reactors clear safety review for 1st time after Fukushima
- 【Related】After much shuffling, election now a race between 3 political forces
- 【Japan Election 2017】

While most opposition parties -- the conservative Party of Hope, and the Constitutional Democratic Party of Japan (CDP), the Social Democratic Party (SDP) and the Japanese Communist Party (JCP) in the center and on the left -- want an end to nuclear power, none have so far presented a concrete plan to eliminate it. This lack of specificity makes it hard to foresee debate on the issue reaching any depth during the campaign.
The new Party of Hope, led by Tokyo Gov. Yuriko Koike, has vowed to shut down all Japan's reactors by 2030, putting it one step ahead of the disintegrating Democratic Party (DP)'s promise to do so "in the

2030s." Speaking on Oct. 4, Koike revealed her intention to make the zero nuclear power pledge a major pillar of her party's platform, stating, "If we don't do what the (ruling) Liberal Democratic Party (LDP) has failed to do, then we cannot return Japan to its previous vigor."

Koike was obviously attempting to play up a clear difference between the Party of Hope and the LDP to woo voters. However, Koike's nuclear power promise is essentially the same as the DP's, in that it has not come with a clear schedule to make it a reality. Meanwhile, the party's election ally Nippon Ishin has not taken a clear anti-nuclear power position.

The newly minted CDP is also following in the nuclear power policy footsteps of the DP, and has promised to rid Japan of reactors as soon as possible. In an emailed newsletter sent on Oct. 4, CDP leader Yukio Edano stated, "We will put our greatest efforts into eliminating nuclear power even a day earlier," and also pledged to "release concrete details of the process and a work schedule" towards that end.

When the LDP released its election manifesto on Oct. 2, party policy chief Fumio Kishida stated, "If the debate on nuclear power is boiled down to a choice between saying 'yes' or 'no' to eliminating it, then no proper explanation is possible. As the political party responsible, we will present our thinking based on the full context of the issue including background aspects." However, despite Kishida's comments, nuclear power is not among the LDP's six main platform points.

The party's more detailed "policy bank" campaign pledge document declares that nuclear power "will be used to provide for (Japan's) base load power needs, on the precondition that safety is guaranteed." Junior coalition partner Komeito's platform, meanwhile, says the party will "aim for zero nuclear power." The administration of Prime Minister Shinzo Abe has long lived with this conflicting policy position within the ruling coalition, while at the same time pushing for the restart of reactors that meet post-Fukushima meltdown safety standards.

Furthermore, only the JCP and SDP have declared their clear opposition to these restarts, with the NRA giving the Kashiwazaki-Kariwa Nuclear Power Plant in Niigata Prefecture a passing safety grade on Oct. 4. All the other parties would allow reactor restarts under certain conditions, and are competing with each other over how strongly they can impress the public with their goal of eliminating nuclear power.

How is Govt going to revise its energy plan?

Status of nuclear power plants built before 1985

	Power company	Nuclear power plant	Output (10,000 kW)	Start date
Decommissioning decided	Japan Atomic Power Co.	Tsuruga No. 1 reactor	35.7	Mar. 1970
	Kansai Electric Power Co.	Mihama No. 1 reactor	34	Nov. 1970
		Mihama No. 2 reactor	50	July 1972
	Chugoku Electric Power Co.	Shimane No. 1 reactor	46	Mar. 1974
	Kyushu Electric Power Co.	Genkai No. 1 reactor	55.9	Oct. 1975
	Shikoku Electric Power Co.	Ikata No. 1 reactor	56.6	Sept. 1977
Being coordinated	Kansai Electric Power Co.	Oi No. 1 reactor	117.5	Mar. 1979
		Oi No. 2 reactor	117.5	Dec. 1979
Long-term operating plants	Japan Atomic Power Co.	Tokai No. 2 plant	110	Nov. 1978
	Kyushu Electric Power Co.	Genkai No. 2 reactor	55.9	Mar. 1981
	Shikoku Electric Power Co.	Ikata No. 2 reactor	56.6	Mar. 1982
	Tohoku Electric Power Co.	Onagawa No. 1 reactor	52.4	June 1984
	Kyushu Electric Power Co.	Sendai No. 1 reactor	89	July 1984

October 18, 2017

Planned decommissioning of KEPCO reactors puts pressure on gov't energy goals
https://mainichi.jp/english/articles/20171018/p2a/00m/0na/006000c
Following Kansai Electric Power Co. (KEPCO)'s decision to work toward decommissioning the No. 1 and No. 2 reactors at its Oi Nuclear Power Plant in Fukui Prefecture, it is now more likely that other aging nuclear plants across Japan will also be decommissioned, regardless of size.

- 【Related】Gov't reluctant to review energy plan as nuclear power policy could further hurt Cabinet

As a result, the government will now be watched closely regarding its next move. Specifically, the key issue will be whether it will approve the construction of new or replacement nuclear power plants so as to achieve its goal of supplying 20 to 22 percent of the nation's electric power from nuclear power plants by fiscal 2030.
The aim of providing 20 to 22 percent of electric power in this way falls under the government's "Basic Energy Plan." In order to provide 20 percent of power from nuclear energy sources, it would be necessary to restart about 30 nuclear reactors. However, of the existing 45 reactors across the country, only 14 reactors at seven plants have met the safety standards set down by the Nuclear Regulation Authority (NRA), and only five of these reactors have been restarted.
With regard to 19 nuclear reactors including those at Tokyo Electric Power Co. Holdings, Inc.'s Fukushima No. 2 Power Plant, no applications to restart operations have been made.
As a result of the Fukushima nuclear disaster in 2011, regulatory standards regarding nuclear power plants have been made stricter, and therefore safety measure costs have increased considerably. Consequently, electric power companies are hesitant about applying to restart reactors as they are trying to determine the costs involved in restarting aging power plants.

Commenting on the plan to decommission the No. 1 and No. 2 reactors at the Oi Nuclear Power Plant, a senior official at the Ministry of Economy, Trade and Industry said, "The decommissioning of aging nuclear plants is within our range of expectation."
However, if there are additional cases of plants that have exceeded the 40-year operation limit being decommissioned instead of extended, it will be difficult for the government to achieve its power supply framework target set out for fiscal 2030.
Currently, the economy ministry is working on amendments to its basic energy plan.
However, if we assume that the decommissioning of dilapidated plants will be accelerated, then the government's response will be undoubtedly watched carefully.
Will the government lower its nuclear power targets for fiscal 2030, or will it approve the construction of new and replacement power plants instead?

South Korea: Reactor construction to be resumed

20.10.2017_No210 / News in Brief
Construction Set To Resume As South Korea Commission Votes In Favour Of Nuclear
http://www.nucnet.org/all-the-news/2017/10/20/construction-set-to-resume-as-south-korea-commission-votes-in-favour-of-nuclear
Plans & Construction
20 Oct (NucNet): South Korea is expected to resume the stalled construction of two nuclear reactors after a state commission recommended doing so despite president Moon Jae-in's campaign promise to scrap the projects. The commission, composed of 471 citizens, said 59.5% of its members supported resuming building the Shin Kori-5 and Shin Kori-6 reactors, near the southeastern city of Ulsan and under construction since last year. **However, 53.2% of the members were in favour of the government policy to reduce nuclear power generation.**
The commission was established to look into plans announced by president Moon to suspend construction of the two reactors for three months as part of a government policy to phase out nuclear power in South Korea, whose 24 commercial reactor units are responsible for about 30% of electricity supply. Following Mr Moon's phaseout announcement, a board meeting of Korea Hydro and Nuclear Power Corporation (KHNP), which operates the country's nuclear plants, endorsed the government's plan to suspend construction of Shin-Kori-5 and -6, although in comments reported in the media company officials said they would fight the shutdown plans. Reports said KHNP has already spent about $1.4bn (€1.2bn) on construction of the two pressurised water reactors and there might be legal and compensation issues if construction was completely halted. Other media reports said "nearly 30% of construction of the two reactors that was estimated to cost $7.5bn has been completed so far". South Korean media reported on 20 October 2017 that construction is expected to resume next week because the government is likely to endorse the recommendation in a cabinet meeting on Tuesday.

What energy plan for Japan?

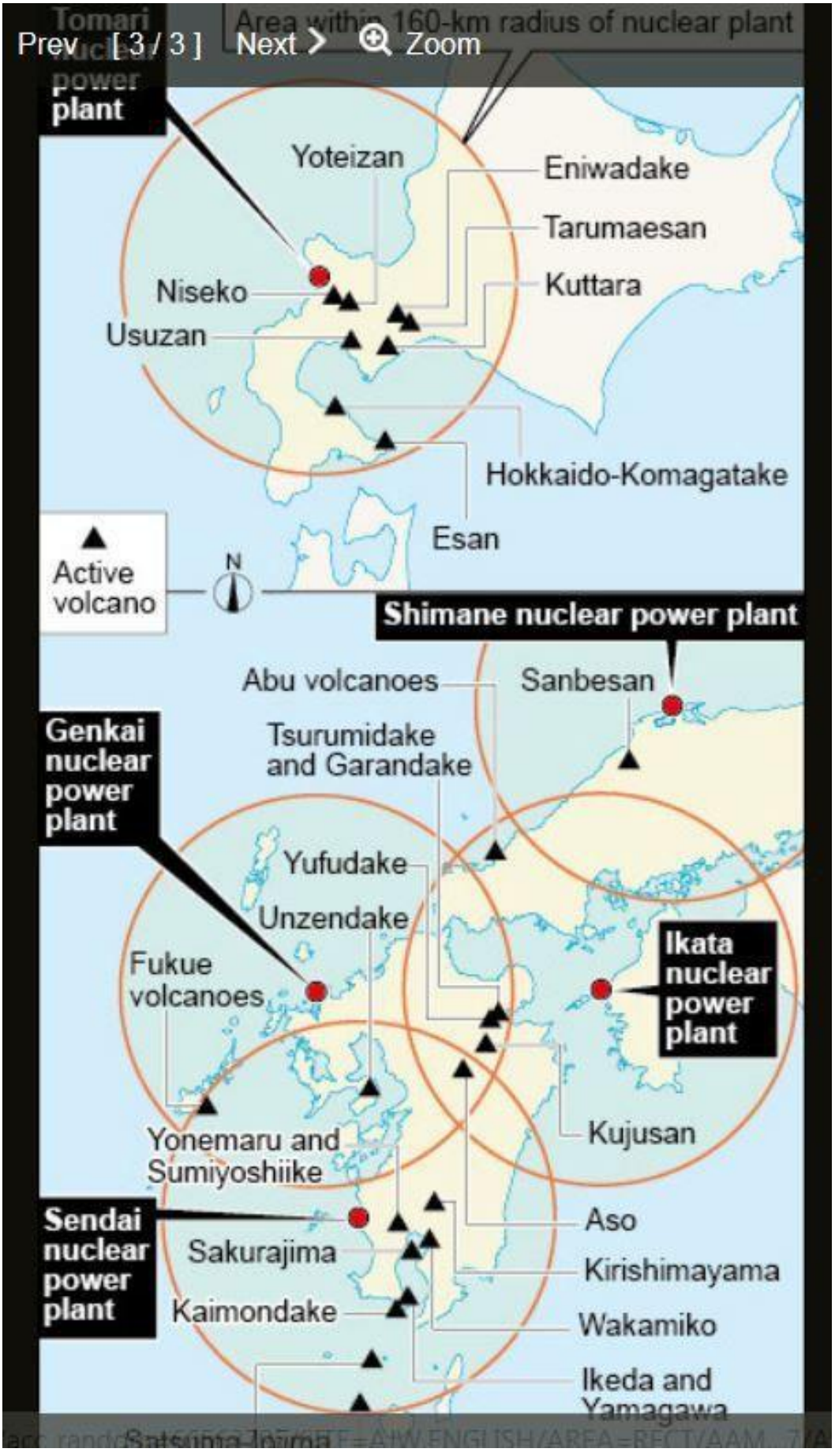
November 29, 2017

Energy policy body to think long term on global warming as nuke power casts long shadow
https://mainichi.jp/english/articles/20171129/p2a/00m/0na/010000c
A Ministry of Economy, Trade and Industry expert body convened on Nov. 28 to discuss Japan's next basic energy plan will look ahead all the way to 2050, focusing on long-term energy policies and anti-global warming measures, it has been confirmed.

- 【Related】Gov't reluctant to review energy plan as nuclear power policy could further hurt Cabinet
- 【Related】Spotlight on party pledges in upper house election: Energy policy
- 【Related】Researchers in Japan look to ocean for new, stable energy supply

The committee also looks likely to delve into whether Japan should build new nuclear reactors, as the present units inevitably reach the end of their service lives and are decommissioned.
The expert body is a subcommittee of the Advisory Committee for Natural Resources and Energy, an advisory panel to industry minister Hiroshige Seko. Meanwhile, Seko has also made his own private "Energy josei kondankai" advisory group on energy issues an official player in the formulation of Japan's next basic energy policy, and the group has already been discussing plans looking forward to 2050.
The expert subcommittee confirmed on Nov. 28 that, beginning in spring 2018, it would begin discussions on policy goals up to 2050 based on a report set to be put together by Seko's private advisory group by the end of the current fiscal year.
The current basic energy plan includes an energy mix goal for 2030, of which 20 to 22 percent is projected to be nuclear power. If the government and power companies uphold the principle of decommissioning reactors after 40 years in service, then atomic power will only be able to cover 15 percent of Japan's energy needs by that year. However, the 20 to 22 percent goal is considered attainable if older units pass Nuclear Regulation Authority inspections for extending the life span of reactors by up to 20 years.
By 2050, however, even reactors granted two extra decades online will have hit the absolute limit of their operational lives, and decommissionings will be well under way. That being the case, if nuclear power is to retain its one-fifth share of Japan's energy mix, then new reactors will have to be built. While there is currently strong local resistance to restarting existing reactors, the industry ministry maintains that keeping nuclear power in the country's energy mix as a "stable energy source" is indispensable.
Expert subcommittee Chairman Masahiro Sakane stated at the Nov. 28 meeting, "As we will be debating (policy for) 2050, we need to seriously discuss the global warming problem." Government plans call for an 80 percent reduction in greenhouse gas emissions by that year, and as nuclear power is a carbon-free energy source, it is thought the subcommittee will discuss building new reactors.
However, public distrust of nuclear power remains strong in the wake of the March 2011 Fukushima triple meltdown, and the subcommittee is likely to be called on to tread carefully when discussing possible new reactors.

Japan's nuclear policy: What now?


Prev [3 / 3] Next > Zoom
Area within 160-km radius of nuclear plant
Tomari nuclear power plant
Yoteizan
Eniwadake
Tarumaesan
Kuttara
Niseko
Usuzan
Hokkaido-Komagatake
Esan
Active volcano
N
Shimane nuclear power plant
Abu volcanoes
Sanbesan
Tsurumidake and Garandake
Genkai nuclear power plant
Yufudake
Unzendake
Fukue volcanoes
Ikata nuclear power plant
Kujusan
Yonemaru and Sumiyoshiike
Sendai nuclear power plant
Aso
Sakurajima
Kirishimayama
Kaimondake
Wakamiko
Ikeda and Yamagawa

December 15, 2017

Uncertain future for nuclear policy after high court ruling
http://www.asahi.com/ajw/articles/AJ201712140031.html

The landmark Hiroshima High Court ruling ordering a suspension of operations at the Ikata nuclear power plant will likely have far-reaching ramifications for Japan's nuclear energy policy.
It zeroed in on an aspect that has long been an issue with the anti-nuclear lobby, the Ehime Prefecture plant's proximity to an active volcano and the prospect of the facility being inundated in a pyroclastic flow if Kyushu's Mount Aso, 130 or so kilometers away, blows its top.
Instead of considering the frequency of major eruptions in the area, the Dec. 13 ruling focused on a massive one 90,000 years ago and the possibility of a nuclear calamity occurring if a similar event occurred today.
The ruling, the first by a high court ordering a suspension of nuclear plant operations, is especially relevant because Japan has 111 active volcanoes that have erupted in the past 10,000 years.
While massive eruptions are rare, occurring in general once every 10,000 years, all it takes is one to trigger destruction on an unimaginable scale.
Aso has had four massive eruptions in the last 300,000 years, the most recent occurring 90,000 years ago that triggered a pyroclastic flow that tossed magma and volcanic rocks over the Kanmon Straits separating Kyushu and Honshu into Yamaguchi Prefecture.
The last major volcanic eruption in Japan occurred roughly 7,300 years ago on the seabed south of Kyushu, devastating the southernmost main island where Jomon Pottery Culture (c. 8,000 B.C.-300 B.C.) was thriving.
The government, which was caught off-guard by the Hiroshima ruling, no doubt will pay close attention to future court rulings at that level because other nuclear power plants are situated at distances similar to that between the Ikata plant and Aso.
For example, the No. 1 and No. 2 reactors of the Sendai nuclear plant in Kagoshima Prefecture that are currently operating are located within a 160-kilometer radius of the Aso caldera, as are the No. 3 and No. 4 reactors of the Genkai nuclear plant in Saga Prefecture that Kyushu Electric Power Co. hopes to bring back online next spring.
Kyushu Electric said it maintains close monitoring of seismic movements in the area caused by the rumblings of five volcanoes and is confident it will detect any signs of a possible huge eruption.
However, experts scoff at the notion on grounds that it is almost impossible to accurately predict the timing and scale of such an event. They also note that Japan has no practical experience in dealing with a massive eruption.
That said, the Japan Meteorological Agency monitors 50 active volcanoes around the clock.
Yoshiyuki Tatsumi, a professor of planetology at Kobe University, said, "Under the current setup of observing (volcanic) quakes and crustal movement, it is impossible to predict the scale of any eruption."
The groundbreaking Hiroshima court ruling took the government by surprise.
Hiroshige Seko, the economy minister and a champion of nuclear power generation, asserts that the safety standards implemented by the Nuclear Regulation Agency in the aftermath of the 2011 nuclear disaster are "the highest in the world."
Five reactors that passed the NRA's more stringent screening have resumed operations since the Fukushima accident.

But the Hiroshima High Court said the NRA's decision to allow the Ikata plant to resume operations was "not rational" in light of the facility's location and the danger of a catastrophe occurring if Mount Aso erupts like it did 90,000 years ago.
Although Chief Cabinet Secretary Yoshihide Suga made clear at a Dec. 13 news conference that the government would closely abide by future decisions by the NRA, he was painfully rattled by the thought that the court ruling could sow further doubts among the public about the safety of nuclear plants, especially those located near volcanoes.
The government has set a goal of raising the ratio of electricity generated by nuclear power to between 20 and 22 percent of the nation's overall needs by fiscal 2030. That would mean resuming operations at about 30 nuclear power plants.
However, utilities are already facing mind-boggling expenses just to meet the tougher safety standards. If they now have to brace for the possibility of being ordered by courts to halt their nuclear plant operations, the burden on private companies could become too much.
"Nuclear power generation is now impossible for a private-sector company because the risks are just too great," said an executive of an electric power company.
(This article was compiled from reports by Shigeko Segawa, a senior staff writer, Chikako Kawahara and Tsuneo Sasai.)

What place for nuclear power?

December 19, 2017

Nuclear power should be 'baseload power source': Hitachi president
https://mainichi.jp/english/articles/20171219/p2a/00m/0na/010000c#cxrecs_s
Hitachi Ltd. President Toshiaki Higashihara underscored the significance of nuclear power as Japan's baseload power source despite the sector's sluggish business performance in the wake of the Fukushima No. 1 Nuclear Power Plant disaster.
During an interview with the Mainichi Shimbun and other media outlets on Dec. 18, Higashihara said, "We need to consider issues such as the environment, stable energy supply and securing manpower for reactor decommissioning all in a comprehensive manner. Nuclear power should be the country's baseload power source."
Hitachi acquired Britain's Horizon Nuclear Power in 2012 and is promoting a plan to build two nuclear reactors in the country for possible operation in the early 2020s. The Japanese electronics giant is set to make a final decision on the plan in fiscal 2019, though the manner of raising necessary funds for the project has yet to be decided.
"We will create an environment to make the project profitable while receiving support from the governments (of Japan and Britain)," Higashihara said.
At a press conference in October 2016, Higashihara had suggested potential realignment in the nuclear power business in the future alongside Toshiba Corp. and Mitsubishi Heavy Industries Ltd. However, he expressed reservations about the move during the Dec. 18 interview, saying, "It's not something that one single manufacturer should think about. It requires discussion as the issue concerns global energy policy."
With regard to the move to integrate domestic nuclear fuel businesses among the three companies, the Hitachi president said the talks "have not progressed well."

Higashihara unveiled his company's goal of raising the ratio of operating profit to sales to 10 percent or more under the next medium-term management plan for the three-year period up to fiscal 2021.
The company had earlier set out a goal of raising its operating profit ratio to 8 percent by fiscal 2018 from the 6.9 percent posted in the midterm consolidated settlement for the business term ended September 2017.
"(Achieving that goal) is a pass point. We should further compare ourselves with global companies," he said. As part of efforts to bolster its marketing efforts overseas, Hitachi is aiming for mergers and acquisitions and business alignment with other companies, according to Higashihara. "There are a great deal of negotiations that are under way behind the scenes," the president said about his firm's acquisition strategy.
In reference to the recent data falsification scandals involving Kobe Steel Ltd. and Mitsubishi Materials Corp., Higashihara pointed out, "Various problems arise when companies attach weight to cost-cutting measures. The heads of companies must keep telling their staff that it is more important to discern right and wrong than pursuing profits."
He testified that Hitachi is free of any quality data falsifications, revealing that an in-house survey found no violation of ethics.

Koizumi to announce zero nuclear power policy (Genjiren)

December 22, 2017

Koizumi to introduce 'bill' to abandon nuclear energy
http://www.asahi.com/ajw/articles/AJ201712220043.html
Former prime minister and anti-nuclear exponent Junichiro Koizumi is expected to announce a "bill" abandoning nuclear power plants and promoting natural energy next month.
Genjiren (an acronym for the confederation of zero nuclear power plants and the promotion of natural energy), a private organization headed by Tsuyoshi Yoshiwara, former president of Johnan Shinkin Bank, drafted the proposal for the zero nuclear power policy.
Koizumi, an adviser to Genjiren, will request both ruling and opposition parties to provide assistance.
The policy states that nuclear power plants should not be restarted and renewable energy resources should be increased.
Koizumi, who has been calling for abandoning nuclear power at public lectures across the country, is scheduled to make an announcement together with Morihiro Hosokawa, also a former prime minister, on Jan. 10.
“It might be difficult (to reach the goal) under the Abe administration, but we are determined to fulfill the project of zero nuclear power plants in the near future. Public sentiment that opposes the restart of nuclear power plants is much larger (than that of pro-nuclear power),” Koizumi has reportedly told his confidantes.
He also often says, "Japan can get along with zero nuclear power plants."
The main opposition in the Lower House Constitutional Democratic Party of Japan (CDP) aims to submit a bill calling for no nuclear power plants to the Diet.
“We are in the phase where specific processes (toward zero nuclear power) are questioned," said CDP leader Yukio Edano.

The CDP is expected to compile measures that can be taken for local governments hosting nuclear facilities to prepare them for transition to a phaseout of nuclear energy and the schedule of disposal of spent nuclear fuel.

CDP clarifies position on nukes

December 25, 2017

CDP clarifies goal of eliminating nuclear power in policy draft
https://mainichi.jp/english/articles/20171225/p2a/00m/0na/019000c
The Constitutional Democratic Party of Japan (CDP), the largest opposition party in the powerful House of Representatives, specified its goal of eliminating nuclear power by 2040 in a draft of its basic policy that was revealed on Dec. 24.

- 【Related】CDP, JCP leaders join rally against revising Constitution's war-renouncing Article 9
- 【Related】Editorial: Weakened, fractured opposition needs to band together at faction level
- 【Related】Election Review: United opposition could have won 84 single-seat constituencies

The draft states that the CDP seeks to stop the installation of new nuclear reactors as the necessity for such facilities "cannot be recognized," and will not agree on reactivation of idled nuclear reactors unless the national government works out effective evacuation plans, for which the state can be responsible.
It then pledges to stick to its goal of decommissioning all nuclear reactors by 2040 in principle, reinforcing its goal of achieving a society without atomic power as early as possible, which the party declared in its campaign pledge for the lower house election in October.
With regard to constitutional amendment, the draft says the party will consider clauses that actually require revisions from the standpoint of putting the brakes on the authorities and protecting the rights of the people.
Under the policy draft, the party regards the Japan-U.S. alliance as the linchpin of Japan's diplomatic and security policy and pursues the sound development of the pact, while proposing revisions to the Status of Forces Agreement between the two countries to reduce the burden of hosting U.S. military bases.
On the economic front, the draft states that the party will seek to set mid- and long-term targets of achieving fiscal health and strengthen the system of redistribution of wealth through a review of the entire tax system, including the consumption tax. The policy draft also includes the goal of raising the minimum wage to at least 1,000 yen an hour, enacting legislation to ban corporate political donations while promoting individual political donations. The party also aims to lower the minimum age at which people can run for public office by 5 years.
The CDP is also poised to incorporate its goal of phasing out nuclear power in a draft of its platform to be compiled by the end of this year. The party aims to demonstrate originality in its draft platform using phrases such as "bottom-up politics" and "grass-root democracy," which CDP leader Yukio Edano pledged to carry out when the party was launched.

Private equity group buys Westinghouse

January 5, 2018

Brookfield Private Equity Group To Buy Westinghouse For $4.6 Billion
https://www.nucnet.org/all-the-news/2018/01/05/brookfield-private-equity-group-to-buy-westinghouse-for-4-6-billion
5 Jan (NucNet): Westinghouse Electric Company, the US nuclear engineering group that went into chapter 11 bankruptcy last year, has been sold by its owner Toshiba to Brookfield Business Partners, the private equity group, for $4.6bn (€3.8bn).
According to Brookfield, the deal is conditional on approval from the bankruptcy court and regulators around the world.

Brookfield is funding the acquisition with about $1bn in equity and $3bn in long-term debt, with the remainder coming from pension and environmental liabilities that it is taking on.

Cyrus Madon, Brookfield's chief executive, said the group looked forward to "bringing our significant expertise and reputation as a long-term owner and operator of critical infrastructure in the US and globally, as well as our deep facilities management capabilities, to enhance the company's position as a leading global infrastructure services provider to the power generation industry".

Westinghouse was forced into bankruptcy after long delays and rising costs at the Vogtle and Summer AP1000 nuclear projects in the US, for which it was supplying the AP1000 reactor technology.

The company leading the Summer project, Scana of South Carolina, abandoned the development last year and on Wednesday announced that it had accepted a $14.6bn takeover bid from Dominion Energy.

The other project, Vogtle in Georgia, is still going ahead after state regulators gave their approval last month.

Brookfield said in a statement that Westinghouse had a strong market position as the largest service provider to nuclear power plants worldwide, earning the majority of its profits from long-term contracts.

It added: "An iconic American company, Westinghouse offers a full suite of specialised parts and components, many of which are licensed or patented, as well as industry-leading engineering and other services that enhance the safety, efficiency and reliability of its customers' facilities."

Human Rights, Future Generations and Crimes in the Nuclear Age

January 5, 2018
Paracelsus, the Nuclear Age, and Future Generations
http://akiomatsumura.com/2018/01/paracelsus-the-nuclear-age-and-future-generations.html
Emilie Gaillard and Andreas Nidecker

The famous physician Andreas Paracelsus, who taught at the University of Basel in the early 16th century, wrote: “What sense would it make or what would it benefit a physician, if he discovered the origin of the diseases but could not cure or alleviate them?”

We are a lawyer and a radiologist, reporting from a recent three-day interdisciplinary symposium at the U of Basel. It was attended by physicians, lawyers, nuclear experts and scientists, entitled “**Human Rights, Future Generations and Crimes in the Nuclear Age**” and was sponsored by the Swiss branch of the International Physicians for the Prevention of Nuclear War (IPPNW) and the International Association of Lawyers Against Nuclear Arms (IALANA).

At our symposium we examined what effects policies relating to nuclear weapons have on the health and the environment. In that regard we considered the human rights situation of victims of nuclear tests and nuclear disasters. The recent success of 122 nations, which on July 7th accepted the UN “treaty on the prohibition of nuclear weapons” obliges in Article 6 nations to environmental remediation and to assistance for the victims, at least those of the use and testing of nuclear weapons.

Most of the discussions, however, focused on the implications of the nuclear weapons and civil use of nuclear energy for the future generations. It is they – our children, grandchildren and their descendants – who will continue to bear the risks of nuclear war and the potential health effects of the ongoing, progressive global nuclear contamination. This started with the first atmospheric nuclear weapons test “Trinity” in July 1945, followed by some 2000 test explosions by nine nuclear states, hundreds of which were above ground thereby contaminating the biosphere. The Chernobyl nuclear reactor explosion lead to a regional but also widespread contamination of Europe and today there is the ongoing leakage into the pacific of high volumes of radioactively contaminated water from the damaged reactors in Fukushima. Financing the legacy of civil use of nuclear power, including the construction of safe waste storage repositories will be a further challenge we mainly leave to our children and grand-children.

Discussions finally questioned possible liabilities of Governments i.e. decision makers in nuclear weapon states, when intended or accidental launch of nuclear arms might eventually have global repercussions and could lead to the extinction of mankind. The very idea of recognizing crimes against future generations becomes now a new reality: any nuclear war should lead to a major response of international law as it closes the horizon of the future for ever.

Indeed, the entry into the nuclear age marks the unprecedented acquisition of power of humankind over the earth and all forms of life; geologists name this new era the Anthropocene. Many believe that in this era a new code of medical and legal ethics is necessary, as the specific challenges of facing nuclear risks and disasters require a paradigm shift in both disciplines. We must now seriously consider the trans-generational impacts of ionizing radiation on all forms of life and take effective measures to prevent serious health effects in today’s populations, in particular young women and children. Yet we also must protect our descendants, as ionizing radiation may cause not only cancer and non-cancerous diseases but also may have genetic impacts in humans exposed today. These effects may even occur with long-term chronic exposure to very low doses of ionizing radiation. They will not become manifest in today’s victims, but might present as disease in their offspring only decades later.

Thus we must also adapt the current legal framework of basic principles to this new reality and create new laws, designed specifically to protect and take into consideration the human rights of future generations. The Universal Declaration of Human Rights, although not legally binding, comprises some thirty individual rights. Some of them are pertinent to victims of nuclear accidents. Displaced people in the Fukushima prefecture e.g. should have the right to adequate living standards as well as the rights to express their opinion and the right to receive information. In fact, the Japanese constitution does recognize these rights and defends the trans-generational principle of human rights of future generations

in Articles 11 and 97. Yet these rights presently are not respected, for in Japan the press is forbidden to report on current events in Fukushima and medical research on the effects of the reactor meltdown is restricted. Most radiation scientists in Japan, with some exceptions, minimize the risks of radiation and the official widely-observed policy is that small amounts of radiation are harmless: scientifically speaking this is untenable. Furthermore, the Japanese Government is trying to increase the public limit for radiation from 1 mSv to 20 mSv per year, a value generally allowed for radiation workers only. Its scientists are trying to force the International Commission of Radiation Protection ICRP to accept this large increase, yet many consider this not only unscientific but also unconscionable. This handling of the aftermath of the nuclear catastrophe of Fukushima therefore could be considered a violation of human rights and even a crime against future generations.

To voice concerns for the human rights of future generations today is not enough. New legal provisions to insure these rights must be created. Additionally concrete steps towards abolishing nuclear weapons in the coming years are urgently needed. Furthermore, due to the high costs for dismantlement of nuclear reactors and the enormous investments for safe nuclear waste storage, our generation should take responsibility and at least shoulder some of these costs and not burden them on our offspring only.

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Andreas Nidecker, *M.D. (Switzerland), is a Professor Emeritus of Radiology at the University of Basel, Switzerland. Past president and board member of PSR / IPPNW Switzerland and member of the organizing Committees of the symposium "Human Rights, Future Generations & Crimes in the Nuclear Age"*

International Physicians for the Prevention of Nuclear War (IPPNW) received the Nobel Peace Prize in 1985. *IPPNW has remained a leader in the global movement for a world without nuclear weapons, launching the* International Campaign to Abolish Nuclear Weapons (ICAN) *in 2007, and campaigning for a treaty to ban these instruments of mass extermination as a basis for their elimination. ICAN received the 2017 Nobel Peace Prize in recognition of its efforts to achieve the Treaty on the Prohibition of Nuclear Weapons, which was adopted at the UN in July 2017.*

2018 World Nuclear Industry Status

https://www.worldnuclearreport.org/World-Nuclear-Industry-Status-as-of-1-January-2018.html

World Nuclear Industry Status as of 1 January 2018

Tuesday 9 January 2018, by Mycle Schneider

The Year 2017 for Global Nuclear Power in a nutshell: 4 reactor startups (12 less than scheduled), 3 shutdowns, 4 construction starts, 2 abandoned constructions, bankruptcy of Westinghouse, bailout and breakup of AREVA, significant financial and economic pressure on nuclear operators. Five new reactors entered long-term outage, and 3 were restarted.

Globally, 405 reactors operating (1 less than a year ago), 52 under construction (3 less).

After ten reactor startups in both 2016 and 2015, only four new units—three in China, one in Pakistan (built by Chinese companies)—were connected to electricity grids in 2017.

Tianwan-3, designed and built by Russian Rosatom, was connected to the Chinese grid on 30 December 2017. Since construction of this unit started only in December 2012, that is a remarkably low construction

time. *The World Nuclear Industry Status Report 2017 (*WNISR2017*)* had listed Tianwan-3 as delayed with a planned startup in February 2018.

As of the beginning of 2017, 16 reactors were scheduled to be connected to the grid during the year (not including Tianwan-3). One year ago, WNISR wrote: "Of these 16 reactors, 11 are already behind schedule. The year 2017 will therefore be an interesting test case for the industry." The test did not go well. Only three of these units plus Tianwan-3 with a combined capacity of 3.3 GW generated their first power, all 13 others, including eight units in China, were delayed or further delayed. This compares with China's "eye watering installation rates" (PV Magazine) of solar capacity, as it added over 50 GW to its grid. Even taking into account lower productivity per installed GW, [1] this means that new solar plants in China alone in 2017 will generate significantly more power than all nuclear reactors started up in the same year in the entire world.

Globally, three reactors were permanently closed in 2017. In Germany, Gundremmingen-B was shut down as scheduled on 31 December 2017, as part of the country's nuclear phase-out policy. South Korea and Sweden both shut down their respectively oldest units, Kori-1 and Oskashamn-1. In addition, two more Japanese reactors, Ohi-1 and -2 were officially closed, after the operator abandoned plans for restart and lifetime extension. However, as the two units have not generated any power since 2011, the WNISR had listed them as in Long-Term Outage (LTO) [2], and now moved them to the shutdown category accounting for their closure in the respective years of last electricity generation. This increases the number of units shut down worldwide in Fukushima-year 2011 to 25. Some of the 31 units, currently still in LTO in Japan, are likely to follow over the coming years. In addition to the Japanese stranded reactors, there are five units in LTO around the world, one each in Argentina, France, India, Switzerland and Taiwan. The Japanese government decided already in December 2016 to officially close the Monju fast breeder reactor, which did not generate any power since 1995. The International Atomic Energy Agency (IAEA) noted that decision in its online Power Reactor Information System (PRIS) only after a full year's delay. The IAEA also lists Santa Maria de Garona as closed in 2017. However, the Spanish reactor did not generate any power since 2012, and WNISR has considered it permanently shut down ever since.

As of 1 January 2018, there are 52 reactors under construction, three less than a year ago. Construction started on four reactors in 2017, one each in Bangladesh, China, India and South Korea. The Chinese project is a pilot fast reactor, launched on 25 December at the Xiapu site in Fujian province, and not a single new construction start for a commercial nuclear power plant was announced in the country. This raises the question, is this the sign of a major shift or slowdown in Chinese nuclear policy, which dominated world nuclear construction for the past 10 years, contributing over 60 percent of all new building sites since 2008?

The construction of Shin-Kori-5 in South Korea, launched in April 2017 (but only officialized months later), had been suspended in June following President Moon Jae-in's election in May, but resumed after a citizens' committee voted in favor of its completion. The South Korean nuclear ambitions remain in question after the Moon administration confirmed its long-term nuclear phase-out goal.

In March 2017, Toshiba-Westinghouse, historically the largest nuclear builder in the world, filed for bankruptcy protection in the U.S., and was bought for US$4.6 billion (subject to regulatory and court approval) by a subsidiary of Brookfield Asset Management, a Canadian holding company with no experience in the nuclear sector, specializing in the takeover of companies in difficulties. In July 2017, the owners of V.C. Summer in South Carolina pulled the plug on the construction of two AP1000 units designed by Westinghouse after spending an estimated US$9 billion. In the last days of the year, the only two other reactors under construction in the U.S., at the Vogtle site in Georgia, received the State Public Services Commission's permission to continue construction—for the time being.

The French state-owned nuclear builder and service company AREVA was bailed out by the government with a US$5.3 billion cash injection and subsequently broken up. AREVA's reactor building and servicing branch AREVA NP was taken over by state utility EDF, effective from the end of 2017, and relaunched in a "back to the future" (Reuters) initiative as *Framatome* (EDF 75.5%, Mitsubishi Heavy Industry 19.5%, Assystem 5%). After a loss of over 90 percent of its stock value since 2007, AREVA was delisted in August 2017. The year has also seen the French Nuclear Safety Authority ASN granting exceptional permission to EDF to use a sub-standard reactor pressure vessel at the Flamanville EPR, which is still under construction. The pressure vessel has been found with a level of carbon significantly exceeding technical specifications and is part of an ongoing quality-control scandal pointing to decades of irregularities and forged documents, impacting tens of thousands of pieces in dozens of nuclear plants around the world. On top of the economic fallout of scandals and challenging ageing issues, nuclear operators struggled with low electricity prices and constantly dropping costs of their main competitors, wind and solar in particular. In countries like the United States, many nuclear power plants have continued to operate only because of massive government subsidies.

The WNISR2017 *has been presented around the world since September, with events (in chronological order) in Salzburg (Austria), Astana (Kazakhstan), Ottawa (Canada), Washington D.C. (U.S.), Berlin (Germany), Macao and Beijing (China). For the first time, the entire 267-page report has been translated into Chinese. The report has received broad acclaim and* media coverage *has been comprehensive. The Chinese version of the Summary & Conclusions will be made available on* www.WorldNuclearReport.org *shortly.*

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Footnotes

[1] An operating nuclear plant can provide about eight to nine times more electricity per installed kilowatt than a photovoltaic plant.

[2] WNISR considers that a unit is in Long-Term Outage (LTO) if it produced zero power in the previous calendar year and in the first half of the current calendar year. This classification is applied retroactively starting on the day the unit is disconnected from the grid. WNISR counts the startup of a reactor from its day of grid connection, and its shutdown from the day of grid disconnection.

Koizumi supports bill aiming at zero nukes

It seems that the anti-nuke movement in Japan has taken a major step forward with former PM Koizumi's backing for a Diet bill to quickly bring Japan to "zero nukes".

January 10, 2017

Junichiro Koizumi-led group pitches bill calling for 'immediate halt' to Japan's reliance on nuclear power

https://www.japantimes.co.jp/news/2018/01/10/national/politics-diplomacy/junichiro-koizumi-led-group-pitches-bill-calling-immediate-halt-japans-reliance-nuclear-power/#.Wlo1mHkiGot

by Tomohiro Osaki
Staff Writer

A group advised by former Prime Minister Junichiro Koizumi on Wednesday unveiled details about a bill calling for an "immediate halt" to Japan's reliance on nuclear power to prevent a recurrence of the 2011 Fukushima disaster. The group is seeking to submit the bill to an upcoming Diet session in cooperation with opposition parties.

Sporting his signature leonine hairdo, Koizumi, one of Japan's most popular prime ministers in recent memory, made a rare appearance before reporters with his unabated frankness, lashing out at Prime Minister Shinzo Abe over his persistent pro-nuclear stance.

"You may think the goal of zero nuclear power is hard to achieve, but it's not," Koizumi said, adding that he believes many lawmakers of the ruling Liberal Democratic Party support nuclear power passively out of respect for Abe, but that they could be persuaded to embrace a zero-nuclear policy under a different leader.

"Judging from his past remarks, I don't think we can realize zero nuclear power as long as Abe remains in power. But I do think we can make it happen if he is replaced by a prime minister willing to listen to the public," Koizumi told a packed news conference organized by Genjiren, an anti-nuclear association for which he serves as an adviser along with Morihiro Hosokawa, another former prime minister.

Claiming that the March 2011 triple meltdown at the Fukushima No. 1 nuclear power plant exposed the "extremely dangerous" and "costly" nature of atomic power — with a means of disposing of spent fuel still not in sight — the bill drafted by Genjiren calls for Japan's "complete switch" to renewable energy.

Specifically, it demands that all active nuclear reactors be switched offline immediately and that those currently idle never be reactivated. It also defines the government's responsibility to initiate steps toward a mass decommissioning and to map out "foolproof and safe" plans to dispose of spent fuel rods.

The bill sets forth specific numerical targets, too, saying various sources of natural energy, including solar, wind, water and geothermal heat, should occupy more than 50 percent of the nation's total power supply by 2030 and 100 percent by 2050.

That Japan has experienced no mass power shortage following the shutdown of all 48 reactors in the wake of the 2011 crisis, except for a handful since reactivated, is in itself a testament to the fact that "we can get by without nuclear power," Koizumi said.

A 2017 white paper by the Ministry of Economy, Trade and Industry shows Japan's reliance on nuclear power has plunged to a mere 1 percent after the Fukushima meltdowns. The vast majority of Japan's power is supplied by sources such as liquefied natural gas, coal and oil.

Although the controversy over nuclear power has rarely emerged as a priority in recent parliamentary debates, the creation of the main opposition Constitutional Democratic Party of Japan may herald a breakthrough.

Later Wednesday, Genjiren pitched the bill to the CDP in a meeting with some of its members, including former Prime Minister Naoto Kan, who was in power when the Fukushima crisis erupted.

The CDP seeks to submit its own "zero nuclear power" bill to a regular Diet session slated to kick off later this month, positioning itself as a clearer anti-nuclear alternative to Abe's ruling party than its predecessor, the Democratic Party.

The DP, which until recently held the most seats among opposition parties in both houses of the Diet, had failed to go all-out in crusading against nuclear power under the previous leadership of Renho, who goes by only one name.

At a party convention last March, Renho balked at adopting an ambitious target of slashing Japan's reliance on nuclear power to zero by 2030 after reportedly facing resistance from party members beholden to the support of electricity industry unions.

In a preliminary draft unveiled Wednesday, the CDP's bill-in-the-making called for ridding Japan of nuclear power "as soon as possible."
For memory:

Koizumi's nuclear power questions

- Nov 11, 2013

https://www.japantimes.co.jp/opinion/2013/11/11/editorials/koizumis-nuclear-power-questions/#.Wlo2dnkiGot

While political repercussions continue over former Prime Minister Junichiro Koizumi's surprise calls for ending nuclear power generation in Japan, what the once popular leader points out are all sensible and legitimate questions about Japan's energy policy that remain unanswered by members of the Abe administration. Any energy policy that fails to squarely answer the questions posed by Koizumi will not have any credibility.

Koizumi, who kept largely out of the media spotlight after retiring as lawmaker in 2009, has been speaking out in recent months that Japan should end its reliance on nuclear power. He says the Fukushima nuclear disaster changed his perception of nuclear power as a low-cost and safe source of energy and now says, "There is nothing more costly than nuclear power." He urges the government to divert the massive energy and money needed to maintain nuclear power in Japan into more investments in the development and promotion of renewable energy sources.

Many of his former Liberal Democratic Party colleagues initially tried to dismiss Koizumi as a retired politician who has nothing to do with the party today. Prime Minister Shinzo Abe, who served in key Cabinet and LDP positions during Koizumi's 2001-2006 rule, said it is "irresponsible" to commit to ending nuclear energy at this point. Meanwhile, hopes have emerged within the opposition camp that an alliance with Koizumi — who drew strong popular support while in office — on the zero nuclear agenda could provide them with ammunition against the LDP's dominance in the Diet.

The political ripple effects — and some criticism over his flip-flop after promoting nuclear power while in office — aside, what seems missing in the controversy are discussions on the very real and pressing issues highlighted by Koizumi. He points to poor prospects for finding a permanent storage site for highly radioactive waste after spent fuel is reprocessed. This problem — for which Japan's nuclear power industry has long been likened to a "condominium without a toilet" — has been set aside since well before the Fukushima crisis.

Abe has told the Diet that a technology has been established to store such waste in geological layers deep underground. Koizumi says the problem is that despite the existence of this technology, the government has been unable for more than a decade to find a candidate site anywhere in Japan. And this technology, Koizumi says, might be problematic in this quake-prone country — a point that Abe conveniently neglects to mention. Given the safety concerns over nuclear power following the triple meltdowns at the Fukushima plant, it is even more doubtful that a candidate site will ever be found, Koizumi says. Thus radioactive waste will continue to pile up as long as nuclear power plants are operated.

Japan's nuclear fuel cycle program is at a standstill. Completion of a fuel reprocessing plant in Rokkasho, Aomori Prefecture, has been delayed for years, and the Monju fast-breeder reactor in Tsuruga, Fukui Prefecture, has been idled for much of the time since a sodium leak and fire in 1995. Meanwhile, storage space for spent nuclear fuel from reactors around the country, and in the Rokkasho complex, is nearly 70 percent full.

As Koizumi points out, the myth that nuclear power is cheaper than other sources of energy is thrown in doubt when the expenses for siting nuclear plants, their future decommissioning and waste disposal are included. And on top of this there is the massive cost of dealing with the aftermath of the Fukushima No. 1 meltdowns, including compensation, which far exceeds the financial capacity of its operator, Tokyo Electric Power Co. This is necessitating the injection of a huge amount of taxpayer money.

Abe's rebuttal is that increased fossil fuel imports for thermal power generation to make up for the nuclear plant shutdowns is costing the nation trillions of yen a year. But his rhetoric does not answer the question whether nuclear power is really the affordable source of energy — as it has long been touted to be by the government — especially after the costs of compensation and decontamination in the wake of the Fukushima nuclear crisis are taken into account.

Abe has vowed to scrap the nuclear phaseout policy of the Democratic Party of Japan-led administration that his LDP ousted from power last year. But the prime minister has yet to present a new vision for the nation's energy policy — except to say that he would reduce as much as possible Japan's reliance on nuclear power while maximizing energy-saving efforts and development of alternative energy.

While the future of Japan's energy policy remains elusive and the Fukushima nuclear crisis is continuing, Abe has been pushing for the sale of Japanese nuclear power plant technology overseas as part of his bid to boost infrastructure exports. When Mitsubishi Heavy Industries and France's Areva clinched a joint-venture deal in October to build a nuclear power plant with four advanced reactors in Turkey, Abe said Japan "is responsible for helping improve the safety of atomic power in the world by sharing the experience and lessons" from the disaster at the Fukushima plant — whose situation he has described as "under control."

At home the Abe administration and the LDP are pushing for the restart of some idled nuclear reactors once they have cleared a new set of safety criteria, even though radiation-contaminated water continues to leak from the Fukushima compound nearly 2½ years after the meltdowns.

Abe should lay out a new energy vision that will fully address the doubts about nuclear power raised by Koizumi. His legitimate concerns are likely shared by a large part of the public — a majority of whom, according to media surveys, oppose restart of the idled nuclear reactors. As Koizumi says, only Japan's political leaders can set the direction for the nation's energy policy. The Abe administration has an obligation to choose a path that ensures Japan will not have to contend with another nuclear power plant disaster in the future.

Two ex-prime ministers team up on 'bill' to end nuclear power

http://www.asahi.com/ajw/articles/AJ201801110038.html
By AKIRA MINAMI/ Staff Writer
Former Prime Ministers Junichiro Koizumi and Morihiro Hosokawa on Jan. 10 announced the drafting of a "bill" to immediately halt all nuclear power plants in Japan and require electricity needs to be met with renewable sources by 2050.
In a news conference, Koizumi said while it would be difficult phasing out nuclear energy under the Abe administration, the proposal would pave the way for a major shift in the country's energy policy.
"We will definitely abolish all nuclear plants in the near future with support from a majority of the public," said Koizumi, who has been campaigning to reduce Japan's nuclear dependency to zero.
"Once the bill begins to be discussed in the Diet, citizens will be awakened (to face the nuclear issue)."
The bill was drafted by the confederation for scrapping nuclear plants and promoting natural energy (Genjiren). Koizumi and Hosokawa serve as advisers for the group, which is headed by Tsuyoshi Yoshiwara, former president of Johnan Shinkin Bank.
Koizumi emphasized his intention to build closer ties with the Constitutional Democratic Party of Japan (CDP), an opposition party that aims to introduce a zero nuclear plant bill.
Other pillars of Koizumi and Hosokawa's bill include a ban on resuming operations of existing nuclear reactors and building new ones, withdrawal from the nuclear fuel recycling project and a freeze of nuclear plant exports.
After the news conference, Genjiren called on CDP members to reconsider their planned bill that would exceptionally allow nuclear plants to resume operations in an emergency, such as when Japan cannot import oil.
"The name of the game is the immediate halt on nuclear plants," said lawyer Hiroyuki Kawai, secretary-general of Genjiren.
The group is scheduled to discuss the issue with Kibo no To (Hope), another opposition party that supports phasing out nuclear energy, on Jan. 12.

Japanese coal criticised

January 13, 2018

EDITORIAL: Coal as a major power source represents huge step backward
http://www.asahi.com/ajw/articles/AJ201801130012.html
Japan is facing mounting international criticism over its coal-fired thermal power generation goals while the rest of the world is striving to reduce its carbon footprint.
Japanese utilities have a raft of plans to build new coal-fired power plants despite the fact that coal generates far larger amounts of carbon dioxide
when burned than other fuels for power generation. These projects could throw a monkey wrench into the policy campaign to stem global warming.

The government should rethink its policy decision to position coal as a “mainstay power source” to stop unbridled expansion of the use of coal in thermal power generation.

Since the catastrophic accident at the Fukushima No. 1 nuclear power plant in 2011, low-cost coal-burning thermal power generation has been greatly expanded in Japan to compensate for the loss of electricity generated with atomic energy.

Now, coal-fired power plants account for over 30 percent of all electricity produced in the nation. The expansion will likely continue with private-sector utilities planning to build 40 or so new coal-fired power stations in the coming years.

If all these plans are implemented, Japan’s overall coal-fired power generation capacity will increase by about 40 percent, causing its CO2 emissions to surge to levels far above the government’s estimates for years to come.

Japan’s coal expansion drive is criticized roundly by international environmental groups, a situation that is threatening to put the nation into international isolation along with the United States, where the Trump administration is promoting the use of coal as a fuel for power generation.

A major change in the world’s attitude toward coal came in 2015 with the Paris climate accord, which prompted many industrial nations in Europe to accelerate their efforts to reduce coal consumption. China, a leading power consumer, has also switched to curbing its consumption of coal.

In the world of business, there has been a growing trend toward pulling the plug on coal-related investments.

Even if it is unrealistic to try to slash Japan’s coal-fired power generation sharply right now, the government should at least realize that an energy policy that runs counter to the powerful global trend cannot be sustained over the long-term.

Swift actions should be taken to remake Japan’s energy policy through the review of the nation’s basic energy supply plan that is now being debated within the government.

First of all, the government should abandon its official position that coal is “a fuel for important baseload power sources.” This concept was introduced in the last revision to the basic energy plan in 2014.

It should also take steps toward steadily lowering the nation’s dependence on coal, as well as on nuclear power, through redoubled efforts to expand the use of renewable energy sources and reduce total energy consumption itself.

Among fuels for thermal power generation, natural gas, which produces less CO2 emissions, should be promoted as a mainstay power source.

The new basic energy plan needs to make these policy shifts clear.

Also important are efforts to cut CO2 emissions from thermal power plants.

The current regulations for thermal power plants based on the energy saving law and other related legislation only provide a weak system to slash CO2 emissions, mainly through requirements of certain levels of efficiency in power generation by utilities.

The system’s ability to lower the nation’s overall CO2 emissions is in doubt.

The power supply industry is making efforts to cut CO2 emissions, but only on a voluntary basis.

Many other countries have introduced a wide variety of more effective measures to cut greenhouse gas emissions, including a carbon tax, imposed on the burning of carbon-based fuels according to the amounts of CO2 emissions, emissions trading and regulatory restrictions on emissions by power suppliers.

Japan should also consider introducing such measures, and quickly.

Stricter regulations on CO2 emissions would make it difficult to operate coal-fired power plants profitably. We urge utilities planning to build new coal-fired power plants to reconsider their plans in response to the changing business environment.

--The Asahi Shimbun, Jan. 13

US-Japan pact on nuclear energy set to be renewed automatically

January 16, 2018

Japan, US decide against reviewing atomic energy accord to maintain status quo
https://mainichi.jp/english/articles/20180116/p2a/00m/0na/017000c#cxrecs_
The Japan-U.S. agreement on the peaceful use of atomic energy is set to be renewed without a review because both countries intend to maintain the status quo of their respective policies.

- 【Related】Unfinished nuclear fuel reprocessing plant faked safety records: NRA
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- 【Related】Editorial: Time to scrap nuclear fuel cycle, not just Monju reactor

It is set to be confirmed on Jan. 16 that the accord, which is officially known as the "Agreement for Cooperation Between the Government of the United States of America and the Government of Japan Concerning Peaceful Uses of Nuclear Energy," will be renewed in July.
Japan, which has pledged to the international community that it will not possess plutonium without specific purposes for using the material, cannot easily change its nuclear fuel cycle project, in which plutonium and the remaining uranium are extracted from spent nuclear fuel and reprocessed into mixed oxide (MOX) fuel for use in nuclear plants. The agreement explicitly allows Japan to promote the project.
The United States, which is cooperating with Japan in promoting exports of nuclear plants, has shown consideration to Tokyo's position.
The government of Prime Minister Shinzo Abe regards exports of atomic power stations as one of the pillars of its growth strategy. Since Japanese and U.S. companies, including Hitachi Ltd. and General Electric Co., are involved in exports of nuclear plants, the bilateral accord is indispensable for exports to other countries. This view is shared by the U.S. administration of President Donald Trump.
As the Japan-U.S. alliance is of growing significance in countering the threat posed by North Korea and other issues, neither Tokyo nor Washington prioritized a review of the agreement on the peaceful use of atomic energy.
U.S. Deputy Secretary of Energy Dan Brouillette said when he visited Japan in October 2017 that there is no reason for renegotiating the accord.
During a summit meeting in Tokyo the following month, Prime Minister Abe and President Trump apparently did not bring up the issue.
Speculation spread in Japan that calls for a review of the agreement could emerge after Prime Minister Abe appointed Taro Kono, who is critical of the nuclear fuel cycle project, as foreign minister as part of a Cabinet reshuffle in August 2017.
Since he became foreign minister, however, Kono has not intervened in nuclear energy policy, which is outside his jurisdiction.
Kono stopped short of mentioning a possible review of the accord when he appeared in a BS11 TV program aired on Jan. 11.
"The agreement forms the basis for Japan's peaceful use of atomic energy," Kono said, although he expressed concerns about the accord saying, "Japan needs and has a duty to create a situation in which we can explain with confidence how the country intends to use plutonium to the international community."

After the agreement is automatically extended on July 16, the accord can be scrapped in six months if either Japan or the United States notifies the other. Some officials within the U.S. Department of Defense and the State Department's Bureau of International Security and Nonproliferation are concerned about Japan's stockpiling of a massive amount of plutonium, which can be converted into nuclear weapons.
A source close to the Japanese Foreign Ministry is optimistic about the agreement. "Since there is mutual trust between Japan and the United States, Washington won't raise questions about the agreement for now," said the source.
Still, the possibility cannot be ruled out that the United States will call for a review of the accord.

Japan-US nuclear energy pact set to renew automatically in July 2018
https://mainichi.jp/english/articles/20180116/p2a/00m/0na/005000c
A nuclear energy cooperation agreement between Japan and the U.S. will renew automatically in July 2018, it is expected to be confirmed on Jan. 16.

- 【Related】Gov't set to continue nuclear fuel cycle project despite Monju closure

The existing accord, officially called the Agreement for Cooperation Between the Government of the United States of America and the Government of Japan Concerning Peaceful Uses of Nuclear Energy, recognizes Japan's extraction of plutonium from spent nuclear fuel and use of mixed oxide (MOX) fuel as part of its "nuclear fuel cycle." Renewing the pact will enable Japan to continue with its nuclear fuel cycle policy.
However, after the pact is renewed, if either Japan or the U.S. gives notice, then the agreement will be halted after six months -- which would mean that Japan's nuclear policy would be more easily affected by the will of the U.S.
The nuclear energy agreements that the U.S. has in place with other countries control the handling of nuclear materials and related equipment -- from the standpoint of non-proliferation -- whenever the U.S. provides nuclear technology to those other nations.
Under the existing agreement between Japan, a non-nuclear nation, and the U.S., nuclear fuel cycle operations such as the reprocessing of spent nuclear fuel and also uranium enrichment are recognized, in what is considered an exceptional case.
With the pact coming into effect in July 1988, the 30-year deadline of the current agreement will be reached on July 16, 2018. As long as neither Japan nor the U.S. give notice to withdraw six months prior to the deadline, the pact will be automatically renewed.
The Japanese government did try to negotiate with the U.S. about maintaining the agreement as it is. However, the administration under U.S. President Donald Trump has not been in a position to negotiate, and so the pact looks set to renew automatically, without any serious negotiations taking place.

Nukes: Are they worth it?

January 22, 2018

EDITORIAL: Backing Hitachi nuke project in Britain risks taxpayer money

http://www.asahi.com/ajw/articles/AJ201801220018.html

Using taxpayer money to help finance a company's project to build a new nuclear power plant overseas would **force the public to shoulder the huge risks of a questionable policy undertaking to rescue the embattled nuclear power industry.**

It is highly doubtful that massive public financing for such a project will receive broad support from the public.

The government is considering providing enormous loans to aid Hitachi Ltd.'s project to build and operate a new nuclear plant on the island of Anglesey off northwest Wales.

But the risks involved in the nuclear power business have surged globally since the 2011 Fukushima nuclear disaster, due mainly to sharp rises in construction costs caused by stricter safety standards.

Toshiba Corp.'s nuclear debacle in the United States, which has thrown the company into a financial crisis, is still fresh in our memories.

As Tokyo Electric Power Co.'s predicament has dramatically demonstrated, should a severe nuclear accident occur, the operator of the plant would face financial liabilities of a tremendous magnitude related to damages caused by the disaster.

If Hitachi's nuclear project fails, the government-affiliated financial institutions that provide financing for the project will incur heavy losses, which may eventually have to be covered with taxpayer money.

The government should rethink its headlong rush to help finance the project and make careful reassessments of the risks involved as well as the necessity of the measure from a policy perspective.

According to the plan, a British company that has been acquired by Hitachi will build two reactors with an eye to the beginning of operations in the mid-2020s.

The cost of the project, which is currently estimated at 3 trillion yen ($27.08 billion), will be covered with loans from Japanese and British lenders and investments from newly recruited business partners.

Hitachi will make the final decision on whether to build the reactors, possibly next year, after assessing the commercial viability of the project.

While major Japanese banks remain cautious about providing loans for the project, the public sector is notably keen to back it.

The government-affiliated Japan Bank for International Cooperation (JBIC) is ready to extend hundreds of billions of yen in loans for the project. In addition, the government is considering applying the trade insurance system to all the loans extended by Japanese commercial banks, which are expected to total in the hundreds of billions of yen.

This would mean the government will effectively guarantee all the private-sector loans. The government-affiliated Development Bank of Japan (DBJ) is also willing to chip in with funding.

The administration of Prime Minister Shinzo Abe is eager to support the project because it wants to salvage the floundering nuclear power industry.

The catastrophic accident at the Fukushima No. 1 nuclear power plant has seriously endangered the future of Japan's atomic energy industry by making it effectively impossible to build new reactors at home.

The Ministry of Economy, Trade and Industry, which regulates the power industry, makers of nuclear power generation equipment and major electric utilities are all pinning their hopes on overseas markets as they are facing the challenge of maintaining related technological and human resources under the current situation.

But it should not be forgotten that exporting nuclear power technology is a private-sector business. The risks involved should be borne by the private-sector companies that are engaged in the business.
If the government undertakes the risks, it needs to show the business is beneficial for society as a whole. Can the government make any argument that convinces many Japanese of the importance of supporting the Hitachi project?
The Abe administration and the business community have been working in tandem to promote exports of technology for nuclear power plants and other infrastructure.
As Hitachi Chairman Hiroaki Nakanishi is set to soon become the new chairman of Keidanren (Japan Business Federation), the nation's leading business lobby, the government's plan to support the company's nuclear project will be seen as a sign of mutual back-scratching between the public and private sectors if it lacks economic and policy rationality.
There are fundamental questions about Japan's efforts to sell its nuclear technologies overseas despite the devastating nuclear accident, in the first place.
The government and other organizations involved should rigorously re-examine the plan from a broad perspective and offer convincing and detailed explanations about its decision to the public.

Phasing out bill should be debated in Diet

February 24, 2018

EDITORIAL: Opposition CDP's zero nuclear bill merits earnest debate in Diet
http://www.asahi.com/ajw/articles/AJ201802240020.html
In what amounts to a direct challenge to the Abe administration, the main opposition Constitutional Democratic Party of Japan has drafted a bill to phase out nuclear power generation.
The proposal deserves serious consideration by the Diet and should serve as a platform to review the government's frayed energy policy.
The CDP plans to submit the bill to the Diet in March after rallying support from other opposition parties.
The central provision would require the government to pursue a policy goal of shutting down all nuclear reactors in Japan within five years after the legislation takes effect.
It proposes an ambitious goal for expanding the use of renewable energy sources, cast as the principal ingredient of the strategy, that far exceeds the target set by the government.
The CDP's bill is a full frontal challenge to the energy policy adopted by the Abe administration and the ruling camp, which views atomic energy as a vital core power source.
Since the 2011 Fukushima nuclear disaster, the Japanese public has shown profound distrust in the government's energy policy. Opinion polls have repeatedly shown a majority are opposed to restarting offline nuclear reactors.
While working on the bill, the CDP held meetings with citizens across Japan to hear their concerns about nuclear power.
The party's move has also been prompted by a powerful global energy trend: the decline of nuclear power and rapid rise of renewable energy.

While many of the elements of the bill make good sense, certain provisions concerning the time frame and process of pursuing the policy goal raise issues that need more careful consideration.
Terminating nuclear power generation within only five years would cause some “side effects.” Japan’s carbon dioxide emissions will remain at high levels, for instance, due to expanded use of thermal power generation by burning fossil fuels. Growth of renewable power generation could lead to increases in electricity charges.
The CDP’s bill doesn’t make clear how to tackle these problems, which need to be overcome to push forward without nuclear power.
The party needs to bolster the feasibility of its energy policy proposal by devising specific and convincing steps to deal with these challenges.
The Abe administration is currently working on a new “basic energy plan,” a legally mandated medium- to long-term energy policy blueprint.
The advisory council tasked with the work has indicated that the administration intends to maintain its basic energy policy stance, which stresses the importance of making active use of nuclear and coal-burning thermal power generation.
There has been no in-depth policy debate on key challenges facing the nuclear power policy, such as how to dispose of radioactive waste from nuclear power plants and the dismal outlook of the nuclear fuel recycling program. Government policymakers and advisers have also failed to consider seriously how much growth of renewable power generation we can realistically expect.
The Diet, which is composed of elected representatives of the people, has a responsibility to exert pressure on the reluctant government into responding to radical changes in the energy situation.
Even though it has an overwhelming majority in both houses of the Diet, the ruling coalition of the Liberal Democratic Party and Komeito should not be allowed to let the CDP’s energy bill wither on the vine.
The government’s decisions concerning which energy sources should be used in what way directly affect people’s lives and that of society.
The submission of the bill should trigger serious and constructive debate between the ruling and opposition camps to lay out a new vision for the nation’s energy future and a road map to realize it.

Time to rethink priorities

March 9, 2018
Editorial: 7 years after Fukushima meltdowns, time to review insistence on nuclear power
https://mainichi.jp/english/articles/20180309/p2a/00m/0na/013000c
Japan has no choice but to make fundamental changes to its energy policy. Weren't we all convinced of that when the crisis at the Fukushima nuclear power plant broke out seven years ago, and we were faced with the horrors and the massive impact of a nuclear disaster?

- 【Related】Civic group proposes bill for Japan to exit nuclear power
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- 【Related】Gov't reluctant to review energy plan as nuclear power policy could further hurt Cabinet
- 【Related】Editorial: Time to scrap nuclear fuel cycle, not just Monju reactor

And yet, time has passed with little change in policy or society. Rather, whether out of sheer **inertia or habit**, the past seven years have been spent on maintaining nuclear power plants.

Steps are being taken toward resuming the operation of nuclear reactors that had been halted, and though permitting the continued use of aging reactors had once been an exception, it is becoming more the rule. Japan also keeps holding out hope for the nuclear fuel cycle, which has repeatedly proven to be a failure. The process by which policy decisions are being made has not changed, which means there is no framework through which to turn the public's desire to break free from its dependence on nuclear power into reality. Although Japan's "Basic Energy Plan" maintains that the country will "lower dependence on nuclear power," it also regards nuclear power as "an important baseload electricity source." Moreover, some engaged in the ongoing discussions to review the plan have not only suggested the rebuilding of aging nuclear plants, but the construction of new and additional facilities.

While debate over energy policy in the very country that caused the 2011 nuclear disaster has stalled, energy policy around the world has seen great changes.

Last year, the global cumulative installed capacity of solar power amounted to a total of around 400 gigawatts, while that of wind-generated power reached approximately 540 gigawatts, which was an increase of 10 times and 2.5 times, respectively, since 2010. The installed capacities of such renewable energy surpass that of not only nuclear power, but also of coal-fired thermal power.

One reason for this change is that costs relating to renewable power have dropped. According to the International Energy Agency (IEA), since 2010, solar-power generation has dropped in cost by 70 percent, while wind-power generation has dropped by 25 percent. The IEA predicts that there will be a worldwide energy shift, in which coal will cease to be the major supplier of power, as it is overtaken by renewable energy sources.

In contrast to the growth seen in renewable energy, the proportion of the world's total power generation accounted for by nuclear energy has been falling since it peaked in the 1990s, and now stands at around 10 percent.

It is true that new nuclear power reactors are being built in countries such as China and India, but it would be ill-advised to take that fact alone as evidence that the world's nuclear power industry is growing. The aging of nuclear reactors is progressing in major industrialized nations. As a result of toughened safety measures in the wake of the Fukushima disaster, the cost of building nuclear reactors has ballooned, making the construction of new or additional nuclear facilities difficult even among major consumers of nuclear power such as France and the U.S. That's even truer in Japan.

Probably the most accurate take of the world's nuclear power market is that it is on the decline. Even China, which is marginally supporting the nuclear energy market, is increasingly being seen as a major force behind the expansion of renewable energy, more so than nuclear power. Japan, which is stubbornly trying to maintain nuclear power, is already falling behind global trends.

There is, however, a slight hint that change may be afoot within the Japanese government.

First, there has been a shift in the Ministry of Foreign Affairs. At a gathering for the International Renewable Energy Agency, Foreign Minister Taro Kono voiced his regret over the lack of a shift in Japan's energy policy toward renewable energy. A report released in February by an expert panel consulted by the foreign minister explicitly stated, "The notion that nuclear and coal-fired power are necessary as baseload electricity sources to secure a stable supply of power is a thing of the past," adding that expanding renewable energy and increasing energy efficiency were top priorities.

Objections are expected to arise from the prime minister's office and the Ministry of Economy, Trade and Industry (METI), which insist on keeping nuclear power a baseload power source. But we have come to a point where even METI cannot avoid addressing renewable energy, evidenced in a meeting of experts set

up at the end of last year to discuss the introduction of massive amounts of renewable energy and power grid reform.
Under current regulations, when renewable energy producers try to link to existing power transmission lines, they are often turned away for the reason that there are "no openings." This occurs because of a rule that power transmission lines must be kept open to the fullest to prepare for accidents, and out of consideration for electricity that will be transmitted by power plants whose operations are currently stopped or are in the planning stages.
Internationally, however, there is more flexibility in the use of transmission lines, allowing for more expansion of renewable energy. Japan may be lagging far behind the rest of the world, but we welcome the consideration that is finally being given to the renewable energy market in Japan, and urge the powers that be to make reforms for the efficient use of power transmission lines that suit actual flows of electricity.
Of course, there are many obstacles to such change. For example, realizing the large-volume injection of a variable power source like renewable energy will require making scrupulous adjustments to supply and demand using weather forecast technology. To adjust for varied supply, there will be a need to secure pumped-storage hydroelectricity and thermal power. The release of information and data possessed by major utilities is also crucial.
In the case that power transmission lines need to be increased or reinforced, renewable energy producers may be required to foot the massive costs, which raises concerns that potential newcomers will be discouraged from entering the renewable energy industry. Such roadblocks need to be reconsidered. The development of batteries that can store power when amounts exceeding demand are generated is another challenge. Efforts to bring renewable energy generation costs down to international levels are indispensable.
Assessing global trends, which power sources should we invest our limited resources in? The answer is crystal clear if we look squarely at reality.

Climate change: Where is the long-term vision?

March 10, 2018
Long-term climate plan needed
https://www.japantimes.co.jp/opinion/2018/03/10/editorials/long-term-climate-plan-needed/#.WqZInYhG1_8
Legislation promoting ways to adapt to climate change, recently submitted to the Diet, will require both national and local governments to work out plans to cope with and reduce damage from global warming, such as worsening floods due to extreme weather, intrusion of new diseases and decline in the quality of agriculture. Despite measures taken to fight climate change, further rises in global temperatures in coming decades appear unavoidable, the impact from which is already affecting our lives today. Adapting to climate change will require steady efforts based on a long-term strategy, so the efforts need to start today.
The Paris accord was adopted in 2015 by both developed and developing countries at a United Nations conference on climate change. Based on voluntary efforts by participants to cut their greenhouse gas emissions, the agreement aims to keep the rise in average global temperature from pre-industrial levels well below 2 degrees Celsius and pursue efforts to cut the increase even closer to 1.5 degrees. There is no guarantee, however, that the goal will be achieved. The United States, the world's second-largest emitter after China, has announced its departure from the Paris agreement under the administration of President

Donald Trump. The sum total of plans submitted by countries taking part in the accord is deemed insufficient to keep temperature rises below the levels feared to cause severe damage, such as more frequent natural disasters and destruction of ecosystems.
Global warming is progressing. The world's average temperature is already about 1 degree above pre-industrial levels. A special report of the United Nations Intergovernmental Panel on Climate Change warns that the average temperature may climb to 1.5 degrees above pre-industrial levels as early as the 2040s. The Meteorological Agency says Japan's average temperature has been rising by 1.2 degrees every century. One forecast says the temperature here will increase faster than the global average, increasing by as much as 5.4 degrees by the end of the 21st century compared with 100 years earlier.
Under the proposed legislation, local governments will be urged to develop plans to adapt to climate change — either alone or in cooperation with others — by taking their own conditions into account. The environment minister will assess the impact of global warming every five years, and the national government will review its adaptation plan, devised in 2015, on the basis of the assessment. The National Institute for Environmental Studies in Tsukuba, Ibaraki Prefecture, will serve as the center for analyzing the effects of global warming. The legislation also calls on the nation to push technological cooperation with developing countries on measures to adapt to climate change.
The legislation, once enacted, will make it easier for national and local governments to secure funding for measures to cope with global warming. It is also hoped that the legislation will facilitate inclusion of measures to mitigate the impact of climate change in the government's other programs and policies. A measure to build a higher seawall to guard against rises in sea levels due to global warming, for example, can be combined with anti-tsunami steps taken in coastal areas deemed at high risk of a major earthquake. Greater chances of flooding due to climate change may require a long-term effort to move communities and their public facilities, such as municipal offices, hospitals and schools, to higher and safer ground.
Japan is already experiencing various problems associated with climate change, such as more frequent and severe flooding caused by torrential rains, increases heatstroke cases, and lower crop yields due to higher temperatures. Assuming that the rises in temperature will continue, steps may need to be taken to develop new varieties of farm products that withstand warmer weather or encourage farmers to grow other types of crops. Agricultural experimental stations in each prefecture may not be fully equipped to develop such new varieties. The government should take the initiative for broad cooperation among national institutions, universities and the experimental stations.
Global warming may bring to Japan diseases now unknown in this country. Mosquitoes that spread dengue fever will likely become widespread. Changes in ecosystems are also likely to intensify. It will be important for both national and local governments to try to foresee what could happen and take steps to prepare for and mitigate the potential damage. While pushing measures to reduce the emission of greenhouse gases and contain climate change, Japan needs to work out a long-term strategy to live with the changes wrought by global warming.

Time to rethink Japan's energy policy

March 18, 2018

Time to rethink the nation's post-3/11 energy policy

https://www.japantimes.co.jp/opinion/2018/03/18/editorials/time-rethink-nations-post-3-11-energy-policy/#.Wq6jbH_A-os

The disaster at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant seven years ago — in which three of its six reactors suffered core meltdowns after a giant tsunami crippled its emergency power supply and cooling system — swept away the safety myth of nuclear energy in this country. Nearly 50,000 people of Fukushima Prefecture are still displaced from their homes today and the return of residents to areas around the plant remains slow even after evacuation advisories were lifted following decontamination efforts. These facts testify to the lasting damage that a severe nuclear power plant accident can have on people's lives.

A vast majority of citizens remain wary of the safety of nuclear power — just as they were right after the disaster. According to a recent media opinion survey, more than 80 percent of respondents said they remain concerned with the risk of severe accident at a nuclear power plant. More than 60 percent called for phasing out nuclear energy in the future, while another 11 percent demanded the immediate scrapping of all nuclear power plants.

The government's current energy policy, including the use of nuclear energy, doesn't appear to reflect popular sentiment and the changing reality surrounding nuclear power. The Abe administration and the power industry have pushed for the reactivation of nuclear reactors idled in the wake of the Fukushima accident once they have cleared screening by the Nuclear Regulation Authority under safety regulations that were revamped to become what the administration has touted as the world's most stringent levels. The restart of the reactors, however, has remained slow. Since the new regulations were introduced in 2013, only six reactors at four plants run by Kyushu, Kansai and Shikoku Electric Power have been reactivated following the NRA's nod and the consent of host local governments. The operation of one of them — Reactor No. 3 at Shikoku Electric's Ikata plant in Ehime Prefecture — was ordered suspended in a court injunction issued in December in response to one of dozens of lawsuits filed across Japan seeking a halt to nuclear power plant operations. The share of nuclear power in the nation's electricity supply remained a mere 2 percent as of 2016 — compared with around 30 percent before the 2011 disaster. The feasibility of the government's energy mix target of nuclear energy accounting for 20-22 percent of the power supply in 2030 is in question.

The government's pledge in its 2014 basic energy plan to reduce the nation's dependency on nuclear energy as much as possible may have been a response to widespread popular sentiment against nuclear power. But in the seven years since 3/11, nuclear power has become less competitive vis as vis other power sources in many countries around the world due to rising construction costs and more stringent safety requirements. The economic advantages of nuclear power plants in Japan have also been challenged, particularly in view of the massive cost of dealing with the aftermath of the Fukushima plant accident. The government has extended various support measures to power companies that run nuclear reactors as they face an increasingly competitive environment with the liberalization of the electricity business.

The past seven years have also witnessed a significant decline in the cost of renewable energy sources such as wind and solar power, which have rapidly gained market share in power production around the world. Japan has lagged sharply behind this global trend, however. Foreign Minister Taro Kono, speaking at a gathering of the International Renewable Energy Agency in Abu Dhabi in January, called Japan's energy policy "lamentable" in that it is aiming for a 22-24 percent share of renewables in the electricity supply by 2030 even though such energy sources account for 24 percent of global power supply on average today.

The government's energy plan calls for maximum efforts to expand the use of renewable energy to reduce dependency on nuclear power. Following the introduction in 2012 of the feed-in tariff system, the share of renewables has indeed increased to account for around 15 percent of electricity generation. At the same time, some government policies raise questions about its commitment to boosting the use of renewable energy, such as its decision to allow major power companies the right to restrict the supply of solar and wind-generated electricity to their power transmission networks.

The world's energy landscape has significantly changed since the March 2011 Fukushima nuclear disaster. Seven years on, the government should revisit the lessons of the Tepco plant accident and reconsider whether it should continue to promote nuclear power despite the increased social and economic costs, or make a clear turn toward the greater use of renewable energy.

High time to reassess the economics of nukes

April 1, 2018

Reassess the economics of nuclear power

https://www.japantimes.co.jp/opinion/2018/04/01/editorials/reassess-economics-nuclear-power/#.WsNA-X8uCos

The recent decision by Shikoku Electric Power Co. to decommission the aging No. 2 reactor at its Ikata nuclear facility in Ehime Prefecture serves as yet another reminder that tightened safety regulations and market conditions in the aftermath of the 2011 Fukushima crisis are imposing a heavy financial burden on power companies that run nuclear power plants.

Whether or not they push for reactivating the reactors idled in the wake of the 2011 accident, both the government and the power industry are urged to reassess the economics of nuclear power to determine whether they are still worth the cost.

The Ikata reactor is the ninth at six nuclear power plants across Japan to be decommissioned after the 2011 disaster, not including the six at Tokyo Electric Power Co.'s Fukushima No. 1 plant, which was crippled by the meltdowns at three of its six reactors in March 2011 after the plant was flooded by giant tsunami in the Great East Japan Earthquake. All of the reactors were aging and nearing the 40-year limit on their operation, and the power companies were faced with the question of whether to decommission the reactors or apply to the Nuclear Regulation Authority for approval of a one-time extension of their operation for another 20 years — which would have entailed costly additional investments to bump up their safety under the post-Fukushima rules.

Shikoku Electric, which had already decided to scrap the No. 1 reactor at Ikata, reportedly determined that reactor 2, with a relatively small output capacity of 566,000 kilowatts, wouldn't be able to recoup the safety investments — estimated at nearly ¥200 billion — needed to get the NRA's approval if its operation were to be extended by 20 years. The power company had already spent roughly ¥190 billion on extra safety features on the plant's reactor 3 to clear the NRA screening under the revamped standards adopted in 2013. That unit, with a larger output capacity, was reactivated in August 2016 after the NRA granted approval, but its operation was ordered suspended in a Hiroshima High Court decision in December. Such a litigation risk is also believed to have weighed on the company's decision regarding the fate of reactor 2.

Most of the reactors that have been tagged for decommissioning have relatively small output capacity, which makes them unlikely, as in the case of the No. 2 unit at Ikata, to generate enough earnings to cover the cost of the safety investments. However, two of them — reactors 1 and 2 at Kansai Electric Power Co.'s Oi plant in Fukui Prefecture — had a capacity of over 1 million kilowatt each. The extra safety investments that Kansai Electric has made to seek restarting its other reactors was estimated to have topped ¥800 billion, and additional spending to extend the operation of Oi units 1 and 2, with their unique structures requiring major work, could have expanded the entire cost beyond ¥1 trillion.

Major power companies that run nuclear power plants long monopolized the electricity markets in their respective regions. That changed with the liberalization of the electricity retail business that was completed in 2016, exposing them to tough competition. Added to that is the decline in electricity demand due to power-saving efforts and the declining population in rural markets. The extra cost of restarting the aging reactors come as an increasingly heavy burden on the power companies.

Meanwhile, 14 reactors at seven power plants have cleared the NRA's screening since 2013, and seven reactors at five plants have resumed operations. Two more — reactor 4 at the Oi plant and reactor 4 at Kyushu Electric Power's Genkai plant in Saga Prefecture — are expected to restart in May. However, the No. 6 and No. 7 units at Tepco's Kashiwazaki-Kariwa plant in Niigata Prefecture — the world's largest in terms of output capacity — cleared the NRA screening in December, but the prospect of their restart remains unknown due to opposition from the local governor.

Kyushu Electric will also have to decide whether to seek a restart of the No. 2 reactor at the Genkai plant — which in 2021 will have reached 40 years since its operation began and has a relatively small capacity. Tepco has not made a decision on what to do with the reactors at its Fukushima No. 2 plant — despite requests from Fukushima Prefecture to decommission the facility.

The government has a target of nuclear power accounting for 20 to 22 percent of the total electricity supply in 2030 — which is expected to require some 30 reactors in operation. The feasibility of meeting that target should be reviewed given the circumstances surrounding nuclear power plants.

Pushing renewables but remaining dependent on nukes

April 10, 2018

Japan pushes renewables, keeps nuclear in energy plan through 2050

https://mainichi.jp/english/articles/20180410/p2g/00m/0dm/063000c

TOKYO (Kyodo) -- Japan will accelerate the development of renewable energy and keep its current policy of lowering its dependence on nuclear power as it aims for a low-carbon society, a government panel report on the country's energy plan through 2050 showed Tuesday.

The long-term policy comes as Japan lags behind the global trend to invest in renewables, and nuclear power is no longer deemed a cheap energy source in the wake of the core reactor meltdowns at the Fukushima Daiichi plant in 2011, with utilities required to invest massively to meet tougher safety regulations.

"Japan will keep the policy of lowering its dependency on nuclear power generation as much as possible while seeking to expand economically independent and carbon-free renewable energy," the report by the eight-member panel said. The members include scholars and business executives.

The report did not set out numerical percentages of the country's future energy mix in 2050. An official at the Ministry of Economy, Trade and Industry said it is hard to predict a specific energy scenario as it depends on how technological developments in energy sources progress.
The most recent targets set out in 2015 seek to have renewable sources account for 22 to 24 percent and nuclear 20 to 22 percent of electric power generation in fiscal 2030.
Under the 2015 Paris climate accord, Japan aims for an 80 percent cut in greenhouse gas emissions by 2050 from 2013 levels.
The report acknowledged that while there have been global movements to phase out nuclear power following the Fukushima crisis, efforts have also been made to enhance the "safety, economic feasibility and mobility" of nuclear power generation.
Japan should first regain public trust in nuclear power following the Fukushima disaster, triggered by the March 2011 massive earthquake and tsunami, and strive to "strengthen personnel, technology and industry base" in pursuit of nuclear reactors with enhanced safety, the report stated.
"There have been concerns that our country's high-level nuclear technology and personnel will be lost following the Fukushima crisis. The panel members pointed out the need to maintain them to enhance safety of nuclear reactors," the ministry official said.
The official said the report puts an emphasis on the development of renewable energy out of a "sense of crisis," with the country currently slow to invest in such energies.
"Honestly speaking, Japan does not have competent companies in the field of renewable energy and we rely heavily on imports of renewable technology, such as solar panels. The panel is concerned Japan should recoup in the long-term," the official said.
Noting that output of solar and wind power generation tends to be influenced by the weather, the panel called for the development of batteries to store surplus renewable energy and converting it to hydrogen.
As for thermal power generation, the report said it will remain a major power source in 2050 but inefficient coal plants should be phased out with more focus on gas plants.
The report is set to be reflected in a separate government energy plan through 2030 that is due to be finalized this summer.

Japanese plant in Turkey?

March 15, 2018

Japan's nuclear export to Turkey in doubt as costs estimate doubles
http://www.asahi.com/ajw/articles/AJ201803150046.html
THE ASAHI SHIMBUN
The future of a Japanese-led nuclear power plant construction project in Turkey is in doubt after estimated costs more than doubled to over 4 trillion yen ($37.5 billion).
It will also be difficult to complete the plant, planned in the Sinop district on the Black Sea coast, by the target year of 2023, according to sources close to the project.
Plans call for the construction of four new-type reactors co-developed by Mitsubishi Heavy Industries Ltd. (MHI) and a French partner. Trading house Itochu Corp. and other Japanese companies also plan to get involved.

The Japanese side unofficially informed its Turkish counterpart of the bloated cost this year, and the Turkish side expressed its “disappointment,” the sources said.
Initially, the total project cost was estimated to be around 2.1 trillion yen ($19.7 billion). However, it became clear during the course of a feasibility study that the four reactors would cost more than 1 trillion yen each.
The project partners were expected to shoulder the construction expenses and recoup the cost of their investment through revenue from power generation.
But if construction costs increase and the operator cannot charge more for electricity, it would be difficult for the project to turn a profit.
Still, the Japanese government intends to proceed with the project, and the Japanese side will soon submit its final feasibility report to the Turkish government.
The Japanese side will report that if the plan goes ahead, the construction will require financial support from the Turkish government and that electricity charges will be increased from initial estimates.
It remains unclear whether the Turkish side will accept those conditions, the sources said.
The project has strong backing from the Abe administration, which is pushing exports of Japanese nuclear technology as part of its growth strategy.
However, tougher safety standards introduced after the triple meltdown at the Fukushima No.1 nuclear power plant in 2011 have made it difficult for Japanese companies to make money in the global nuclear power industry.
(This article was written by Yasuaki Oshika and Tsuneo Sasai.)

Time to switch to green

April 13, 2018

Editorial: Japan must make concerted push to switch to green energy economy
https://mainichi.jp/english/articles/20180413/p2a/00m/0na/017000c
An expert committee at the Ministry of Economy, Trade and Industry recently finalized long-term energy plan recommendations through the year 2050. Solar, wind and other renewables were given pride of place as "main power sources," and we commend the committee for its proactive attitude to expanding green energy, a sector in which Japan lags behind countries in Europe and elsewhere.

- 【Related】Japan pushes renewables, keeps nuclear in energy plan through 2050

However, there are many obstacles that must be overcome to realize this renewable energy future. To make sure this goal does not end up a mere flight of fancy, we call on the government to develop tactics that will get Japan steadily to its green energy goals.
The long-term energy plan recommendations were drawn up with the Paris Agreement limiting global warming in mind, and form the compass needle by which Japan's energy policy is plotted. Indeed, the government is looking to finalize Japan's revised basic energy plan as early as this summer, and it will reflect the committee's ideas.
The ultimate goal is for Japan to free itself entirely from carbon-based energy. That means ending dependence on fossil fuels -- oil, coal, and natural gas. Expansion of renewable energy plays the leading role in accomplishing this.

However, there are difficulties with renewables, including instability due to changes in the weather, high costs, and patching green energy generation sources into the electricity distribution network. That is likely why the committee recommendations set the target ratio of Japan's energy mix made up of renewables at 22 to 24 percent in 2030 -- the same as it is under the current basic energy plan.
For the sake of the long-term strategy and overcoming the aforementioned obstacles, the recommendations call for a plan to concentrate efforts on developing essential technologies such as storage batteries, hydrogen fuel systems, and smart electricity distribution systems. This idea is based on the belief that Japan cannot catch up with European countries and China if it uses existing technologies, and that it is necessary to put more efforts into developing next-generation technologies.
Creating new technology always takes time and money. Thus, the government must lay out a truly concrete path to get the work done. To cultivate renewables as the "main energy source," we call on Japan to leverage knowhow from the private and public sectors to make the best of existing high-efficiency electricity distribution technologies and the like, and to secure power sources that can compensate for the instability inherent in green energy generation.
One aspect of the recommendations is the positioning of nuclear power. The long-term energy strategy calls for atomic energy to be "reduced as much as possible," but also retains it as one option to help Japan free itself of fossil fuels. It would be difficult for the government to earn the public's understanding for retaining nuclear power by dressing it up as a just policy to wean the country off carbon.
Japan must end its dependency on nuclear power as quickly as possible. Making renewables this country's main energy source is a must for that to happen.
See also:
https://www.japantimes.co.jp/opinion/2018/04/14/editorials/boost-renewable-energy-sources/

Niigata governor quitting will affect nuclear future

April 18, 2018

Niigata governor to quit
https://www3.nhk.or.jp/nhkworld/en/news/20180418_35/
Niigata Governor Ryuichi Yoneyama has announced he's stepping down over an alleged sex scandal. His sudden departure throws into question the future of a nuclear power plant in the central Japan prefecture. Yoneyama has been cautious about the plant operator's efforts to restart the facility.

Yoneyama held a news conference on Wednesday, the day before a weekly magazine was expected to run a story about the scandal.

Yoneyama revealed that he had tendered his resignation earlier in the day to the chairperson of the prefectural assembly.

He said he decided to resign to avoid further turmoil and take responsibility for his actions. He added that he wanted to offer his sincere apology for undermining the trust of many people.

Yoneyama was elected governor in October 2016, with the recommendation of the Japanese Communist

Party, the Liberal Party, and the Social Democratic Party.

He has been cautious about the restart of the Kashiwazaki-Kariwa nuclear power station in the prefecture.

It is run by Tokyo Electric Power Company, the operator of the Fukushima Daiichi nuclear plant, which was crippled by the March 2011 earthquake and tsunami.
The utility has been seeking local consent to restart the Kashiwazaki-Kariwa plant.

Governor quits over sex scandal, affects nuclear reactor restart
https://mainichi.jp/english/articles/20180418/p2g/00m/0fp/074000c
April 18, 2018 (Mainichi Japan)
NIIGATA (Kyodo) -- Niigata Gov. Ryuichi Yoneyama said Wednesday he will resign after admitting to a sex scandal in a move affecting the approval process for the restart of Tokyo Electric Power Company Holdings Inc.'s nuclear reactors in the central Japan prefecture.

- 【Related】Niigata governor to decide in few days if he'll resign over alleged affair
- 【Related】TEPCO's Niigata nuclear plant set to clear screening to restart reactors

"I sincerely offer apologies for betraying the trust of many people," Yoneyama told a press conference, admitting that his relationship with a woman, as described in a weekly magazine due out Thursday, may "look to some as prostitution."
Shukan Bunshun magazine alleged in an online teaser article Wednesday that the 50-year-old governor has been paying money to have sex with a 22-year-old college student. At a news conference Wednesday, the governor said he gave a woman he met online "presents and money so she would like me more."
Since being elected governor in 2016, Yoneyama has refrained from approving the restart of the No. 6 and 7 reactors at the Kashiwazaki-Kariwa nuclear complex.
The governor has said he cannot make the decision until the prefectural government completes its own assessment of what caused the Fukushima Daiichi nuclear disaster in 2011.
All seven Kashiwazaki-Kariwa units are boiling water reactors, the same as those at the Fukushima Daiichi nuclear plant where three of six reactors melted down in the days after a massive earthquake and tsunami in March 2011. Last December, two reactors at the Kashiwazaki-Kariwa complex cleared safety reviews under the stricter, post-Fukushima regulations.
On Tuesday, Yoneyama said he would consider whether to quit over a forthcoming magazine article about a "woman issue." Calls for his resignation were growing in the Niigata prefectural assembly.
The gubernatorial election to pick Yoneyama's successor is expected to be held in early June. Yoneyama will resign with two and a half years of his term remaining.
The seven-reactor Kashiwazaki-Kariwa complex is one of the world's largest nuclear power plants with a combined output capacity of 8.2 million kilowatts.
Facing huge compensation payments and other costs stemming from the Fukushima disaster, Tepco is keen to resume operation of its reactors to improve its financial performance.
The Japanese government of Prime Minister Shinzo Abe also supports restarting nuclear reactors that have cleared post-Fukushima safety reviews.
Yoneyama won the Niigata governorship in October 2016 with the support of the Japanese Communist Party and the Social Democratic Party, which are both opposed to nuclear power. He defeated contenders including a candidate backed by Abe's Liberal Democratic Party and its junior coalition partner Komeito.

Itochu withdraws from Turkey nuke project over costs

April 25, 2018

Japan's Itochu withdraws from nuclear power plant project in Turkey
https://www.japantimes.co.jp/news/2018/04/25/business/corporate-business/japans-itochu-withdraws-nuclear-power-plant-project-turkey/#.WuBr4n8uCos
Kyodo
Major trading house Itochu Corp. is backing away from a nuclear power plant project in Turkey because of a surge in safety-related costs, sources close to the matter said Tuesday.
Itochu withdrew at the end of March from a consortium that had been conducting a feasibility study for a 4,500-megawatt plant in the Black Sea coast city of Sinop. Another Japanese company, Mitsubishi Heavy Industries Ltd., will continue participating in the study.
It is now deemed difficult for the plant to become operational in 2023 as targeted, amid surging costs linked to safety measures and with total costs for the project ballooning to more than double the initially estimated ¥2 trillion (about $18.5 billion).
Safety-related costs to build nuclear plants have soared since the 2011 nuclear disaster at the Fukushima No. 1 plant, triggered by a magnitude 9 earthquake and ensuing tsunami.
Japan and Turkey agreed on the project in 2013, with the government of Prime Minister Shinzo Abe eager to export nuclear technology to emerging economies such as Turkey and India as part of the government's growth strategy.

Radical changes needed for Japan's energy strategy

April 21, 2018

EDITORIAL: Radically new thinking needed for Japan's energy strategy
http://www.asahi.com/ajw/articles/AJ201804210024.html
An expert panel reviewing the nation's energy strategy for the period to 2050 has proposed a number of initiatives to meet challenges stemming from radical changes in the global energy landscape.
The strategy is centered on ways to reduce the nation's carbon footprint to combat global warming.
The industry ministry panel sensibly argues that renewable energy sources like solar and wind power should become the "mainstay" of energy production.
Regrettably, however, its proposal remains wedded to the nation's energy policy legacy. It is based, for instance, on the assumption that nuclear power generation will continue. As a result, the strategy fails to serve as a convincing vision for the nation's energy future.
The ideas will be incorporated into the revised Basic Energy Plan that the government intends to revise this summer. They will also constitute core components of the long-term plan to reduce Japan's greenhouse gas emissions.
The Diet, along with related the ministries and agencies, should try to chart a path to a better future for the nation's energy supply through debate based on a broader perspective.
In developing its proposal, the panel took stock of the policy implications of the Paris climate agreement.

To achieve the government's official target of an 80-percent reduction in Japan's greenhouse gas emissions by 2050, it is vital to promote a shift to carbon-free energy sources.
The panel calls for "exploring all options" in this regard.
What is especially notable about the panel's proposal is the statement that renewable energy sources should become "main power sources that are economically viable."
Given that Japan has fallen behind the global trend of rapid expansion of renewable energy, the new energy strategy should be designed to move up the government's clean energy agenda.
Promoting green energy, however, requires dealing with a broad array of tough challenges, such as lowering costs that are higher than in many other countries, enhancing the power grid and developing more efficient storage batteries. The government needs to act swiftly to devise a specific plan to accelerate the use of renewable energy sources.
The panel contends that atomic energy is an option for building a low-carbon society on grounds that nuclear power generation doesn't emit carbon dioxide.
But it offers no viable solutions to the raft of problems plaguing nuclear power, such as the erosion of public trust in this energy source in the aftermath of the 2011 Fukushima nuclear disaster, difficulties over the disposal of radioactive waste and the problem-plagued nuclear fuel recycling program.
Any attempt to keep the nation dependent on atomic energy without offering solutions to these problems will never gain broad public support.
A growing number of countries have been adopting powerful policy measures to curb CO2 emissions, such as a carbon tax, which is a fee imposed on the use of carbon-based fuels according to the amounts of the CO2 emissions, and emissions trading initiatives.
But the panel's proposal doesn't refer to any such steps, making the strategy a less-than-satisfactory policy response to harmful climate change.
To be sure, there are so many unpredictable variables that make it difficult to map out a plausible energy policy vision for three decades down the road, ranging from future technological innovations, the long-term economic viability of various energy sources and the political situation in countries supplying energy sources.
It is, therefore, important for the government to be ready to make flexible policy reviews in response to changes in relevant variables.
The Ministry of Economy, Trade and Industry says it will consider creating a new organization in which experts would analyze situations concerning energy supply and related technological trends to provide materials helpful for policy decisions.
The new body should be based on a system to ensure that members can offer a wide range of ideas and information from viewpoints unfettered by influence from the forces promoting the current policy so that timely and reasonable policy proposals can be made.
The development of the energy policy has been led by the ministry, the industries it regulates and a small number of experts linked to them.
This traditional approach to policy development should be changed to enable the government to make effective policy responses to drastic changes occurring in the sector, which is in a transitional period.

London steps in to cover (Hitachi's) losses

May 9, 2018

London offers to backstop all debt for Hitachi's UK nuke plant project
https://mainichi.jp/english/articles/20180509/p2a/00m/0na/023000c
TOKYO -- The British government has proposed to Hitachi Ltd. that London backstop all loans to cover a new nuclear power plant in the country to be built and operated by a subsidiary of the Japanese firm.

- 【Related】Hitachi requests British PM's support for nuclear plant construction
- 【Related】Japanese gov't to guarantee bank loans for Hitachi's nuclear plant project in Britain

The Japanese government had been planning to guarantee the loans. However, London has signaled its willingness to up its financial commitment to the project with the debt guarantee, after Hitachi had called for increased support. With the move, Hitachi is expected to approve continued investment in the plant within the month.
On May 3, Hitachi Chairman Hiroaki Nakanishi met with British Prime Minister Theresa May in London to discuss UK government backing for the plant. It appears British officials indicated they would provide backing for the project including loan guarantees, and urged Hitachi to move ahead.
Hitachi, which bought the UK nuclear station development operation in 2012, plans to have the plant up and running in the mid-2020s. According to a source close to the project, it is expected to cost about 3 trillion yen (about 20.2 billion pounds, or $27.4 billion). The financing structure being considered would see 2 trillion yen of that covered by loans from British and Japanese financial institutions, with the remaining 1 trillion yen invested by Hitachi and both national governments.
Japan's three megabanks plus the government-backed Japan Bank for International Cooperation are set to provide loans for the project. Initially, the financing from the big banks was set to be guaranteed by the wholly Japanese government-owned Nippon Export and Investment Insurance body. However, in late April the British government apparently suggested to Hitachi that the UK was willing to cover loans for the plant issued by both Japanese and British financial firms. Just before this, Hitachi had told London that it may pull out of the project if Britain was not ready to up its support.
Under the loan guarantee, any nuclear plant project investment losses due to accidents or other causes may ultimately have to be covered by Britain's public purse. While the move does not directly lessen Hitachi's own risk as compared to the Japanese government guaranteeing the debt, London stepping in to cover losses should the project fail provides more assurance of continuing British support.
(Japanese original by Ryo Yanagisawa and Takayuki Sakai, Business News Department)

Japan's latest energy plan

May 16, 2018

Japanese government releases latest energy plan
https://www3.nhk.or.jp/nhkworld/en/news/20180516_34/

Japanese government officials have released the country's medium-to-long term energy policy. The plan focuses on making better use of solar power and other renewables to help fight climate change.

The policy is reviewed every 3 years. The new plan outlines targets toward 2050 in line with the Paris accord. It aims to reduce Japan's generating costs for renewable energy to international levels. The goal is to make renewables the country's main source of power.

The continued development of nuclear technology is still included as one way toward a carbon-neutral society.

But the plan does not include new construction of nuclear plants, calling for reducing reliance on nuclear energy as much as possible.

The total energy-mix target is unchanged from the previous plan. It puts renewables at 22 to 24 percent and nuclear power at 20 to 22 percent. It also puts thermal generation at about 56 percent.

Some panel members have urged a review of the energy-mix ratio. Experts say Japan may be lagging behind the global trend in promoting renewable resources.

Industry ministry officials say they will seek opinions on the plan, and aim for Cabinet approval as early as July.

Energy future: Govt's approach "outdated"

May 18, 2018

EDITORIAL: METI's new energy agenda is still powered by old thinking

http://www.asahi.com/ajw/articles/AJ201805180028.html

The government's new energy policy agenda is wedded to an old, outdated approach, turning its back on growing domestic and overseas movements toward new policy goals.

It clearly suggests that the government is failing to see the big picture.

The Ministry of Economy, Trade and Industry (METI) on May 16 unveiled a draft of the government's fifth basic energy plan intended for Cabinet approval this summer.

The draft says the government should maintain its traditional energy policy principles, making it clear that the new plan will be similar in many ways to the current one.

As in the past basic energy plans, nuclear and coal-based thermal power stations are described as "important base load power sources" despite the tough business situations for them.

In the world, radical structural changes are beginning to occur in energy supply and consumption. One important and growing trend is "decarbonization" of the energy mix, which means replacing fossil fuels with renewable energy sources such as solar and wind power.
Another is dispersed power generation, or widespread use of small-scale power-generation facilities combined with storage batteries and other necessary equipment for more efficient production and consumption of electricity. These trends will have far-reaching effects on society.
The draft energy plan raises some serious questions and concerns about the government's vision for the energy future of the nation. If it adheres to the traditional energy policy, can the government make effective responses to the powerful, transformative changes occurring in the energy sector? Will this stance not cause Japan to fall behind key energy policy trends in the world?
We cannot support the proposed new basic energy plan.

UNREALISTIC POWER SOURCE GOALS

The basic energy plan is supposed to define a medium- to long-term direction for the government's energy policy and is reviewed periodically by the government.
Since 2014, when the current basic plan was endorsed by the Cabinet, myriads of significant changes concerning energy have taken place both at home and abroad.
Renewable energy has been spreading at an accelerating pace in both industrial and emerging countries due to a spurt of technological innovations and declining costs.
The Paris climate accord to stem global warming has been negotiated and put into effect, creating strong headwinds for coal-burning thermal power generation, which emits large amounts of greenhouse gasses.
The costs of nuclear power generation have risen sharply mainly because of tighter safety standards introduced in many countries following the 2011 Fukushima nuclear disaster. As a result, production of electricity using atomic energy has been on the wane, especially in industrial nations.
Businesses have responded quickly to the changes. Business investment and technology development efforts in the sector have been focused mostly on such areas as renewable energy development, control on power transmission and consumption and power storage, creating huge new markets. Japan has been lagging behind these new trends.
But METI is refusing to face up to the changing reality.
Hiroshige Seko, the minister of economy, trade and industry, said, "We don't think there has been any major technological change, and it is too early to alter the (energy policy) framework." He could not be more grossly mistaken.
The biggest mistake METI has made is its decision to remain committed to the policy targets for the energy mix it set in 2015 under the current basic plan. The document says the government should step up its efforts to achieve the targets.
The targets are based on the assumption that nuclear power generation and renewable energy will account for around 20 percent each of Japan's overall power production in fiscal 2030. Under the plan, about 30 nuclear reactors will be running then, far more than the number of offline reactors that have been restarted so far, eight.
Accomplishing the nuclear power targets will require extending the life of many aging reactors and building many new ones. Experts have criticized the targets as "unrealistic."
Meanwhile, use of renewable energy sources has been growing steadily, provoking calls for raising the share target among lawmakers in both the ruling and opposition camps.

The vision for the nation's energy future laid out in the draft new energy plan is badly out of synch with the major trends at home and abroad. It cannot serve as an effective road map for policy efforts in this era of great transition.
METI should first reconsider the energy source targets themselves. It needs to sharply lower the share of nuclear power generation while substantially raising that of clean energy.

NUCLEAR POLICY SHENANIGANS KEPT INTACT

There are also many problems with specific policy proposals.
As for atomic energy, the key issue, the draft contains two key principles--promoting reactor restarts to maintain nuclear power generation as the core power source and "lowering the nation's dependence (on nuclear power) as much as possible."
In reality, however, Prime Minister Shinzo Abe's administration has been pressing ahead with plans to bring offline reactors back on stream. The proposed new policy would allow the administration to continue pushing the nation gradually back to heavy dependence on nuclear power and making stopgap responses concerning the sticky issue of disposal of radioactive waste and the troubled nuclear fuel recycling program.
The Abe administration should confront the harsh realities concerning nuclear power generation, including the fact that a majority of the people are opposed to reactor restarts.
It should totally abandon its efforts to keep the nation dependent on atomic energy while pulling the wool over the people's eyes.
If its new energy policy calls for lowering the nation's dependence on nuclear power, the government is responsible to swiftly work out specific plans to achieve the goal.
METI has proposed to turn clean energy into a "mainstay power source" with good reason. As specific measures to do so, however, the document only refers to ideas that have already been discussed.
The ministry needs to plan an effective "next move" to deal with obstacles to promoting renewable energy, including higher costs than in many other countries.
The past basic energy plans were all focused on "stable supply" and designed to preserve the continuity of the policy traditions.
But this stance has led to such serious evils as denials of obvious failures and absurdities, including the nuclear fuel recycling debacle, and rigidities like adamant refusal to change course.
With regard to the development of the new plan, METI decided to maintain the policy "framework" intact at an early stage, limiting the scope of debate.
The ministry has remained skeptical about the viability of renewable power generation, which is in the process of evolution, while assigning a major role to both nuclear power and coal thermal generation despite the raft of problems plaguing them. This stance seems to be a sign of inertia and inability to make gutsy decisions of the organization.

LAY OUT GRAND VISION FOR NEW AGE OF ENERGY

It is no doubt difficult to foresee the future. That makes multifaceted and transparency policy debate all the more important.
The Foreign Ministry has reportedly lobbied METI to sharply raise the target share for alternative energy sources in unofficial negotiations.
The Environment Ministry is critical of METI's proposal to make expansive use of coal.
Clearly, exhaustive, cross-ministry debate on the nation's energy future is in order.

Politicians also have a crucial role to play. Legally, the Diet has no power to reject the government's basic energy plan. The legislature is only briefed on the plan after the government decides on it.
But the Diet needs to get more actively involved in the process. It should take such steps as seeking opinions from experts and holding intensive discussions on related issues.
The government has a duty to present a viable future vision for the nation's energy supply system, which is part of vital infrastructure for social activities and people's lives, and chart a course toward that vision. Then it needs to thrash out concrete policy measures to realize the vision.
Unless it sends out convincing messages about a sustainable energy future for the nation, the government cannot open up a new age of energy.
--The Asahi Shimbun, May 18

May 16, 2018

Japan Announces Ambitious Plans For 20%-22% Nuclear Share By 2030
https://www.nucnet.org/all-the-news/2018/05/16/japan-announces-ambitious-plans-for-20-22-nuclear-share-by-2030
Policies & Politics
16 May (NucNet): Japan's government is committed to nuclear power accounting for at least one-fifth of the nation's electricity supply in fiscal year 2030, calling it an "important baseload energy source", according to a draft proposal.
For the first time, the government will specify the 20%-22% ratio in its basic energy plan. The draft was due to be presented today to an advisory panel with the Ministry of Economy, Trade and Industry, which oversees the nuclear industry.

The draft says the government will "further intensify efforts to achieve the target" and continue to push for nuclear fuel cycle policy in tandem with the export of nuclear technology.

The basic energy plan sets the government's mid- and long-term energy policy and is reviewed roughly every three years.

The government expects to gain Cabinet approval for the plan, the fifth of a series, this summer. The last one, approved by the Cabinet in 2014 and the first after the 2011 Fukushima-Daiichi accident, did not mention the breakdown of each energy source, although it described nuclear power as an "important baseload energy source."

The Japan Atomic Industrial Forum said about 30 reactors must be brought back online to meet the 20%-22% target.

The goal is achievable, according to the government, if existing reactors are allowed to operate for 60 years, beyond the 40-year lifespan in place under stringent regulations implemented after Fukushima-Daiichi.

Japan shut down all 42 commercial nuclear reactors after the accident. According to the International Atomic Energy Agency, the country's nuclear share in 2017 was about 3.6%. Before Fukushima, Japan generated about 30% of its electricity from nuclear and planned to increase that to 40%.

Last week the Ohi-4 nuclear reactor unit in Fukui Prefecture was connected to the grid as it approaches commercial operation. Ohi-4 will become the eighth nuclear plant at five sites to be restarted under new regulatory standards introduced following Fukushima-Daiichi.

Completing Shimane No.3 reactor

May 22, 2018

Power plant operator seeks consent for new reactor
https://www3.nhk.or.jp/nhkworld/en/news/20180522_21/
Chugoku Electric Power is seeking the consent of local governments to start the screening process to switch on a new nuclear reactor in western Japan.

The power company's No. 3 reactor at the Shimane Nuclear Power Plant was almost completed before the accident at the Fukushima Daiichi nuclear power plant in 2011. It's in the city of Matsue in Shimane Prefecture.

Under new regulations introduced after the Fukushima accident, the facility must pass a stringent screening process. Local governments must give their consent for the process to go ahead.

Chugoku Electric President Mareshige Shimizu visited the city and the prefectural offices on Tuesday.

Shimizu told Governor Zembee Mizoguchi that the reactor is essential for establishing a stable supply of power, reducing carbon dioxide emissions and stabilizing electricity rates.

The president handed the governor a consent request.

Mizoguchi replied that he will give the prefecture's response after consulting a safety committee whose members include local residents, as well as the prefectural assembly and neighboring municipalities.

This is the second time an operator has begun to start procedures to operate a new reactor since the Fukushima accident.

Meiji University professor Tadahiro Katsuta, who specializes in nuclear power policy, says he believes technological advances have made reactors safer.

But he says other aspects should be considered, including the social circumstances, such as the demand for power and the effectiveness of evacuation plans.

He said residents should be allowed to express their views and time should be given for discussion.

Nukes as clean energy?

23.05.2018_No101 / News in Brief
World Needs To Get Serious About Nuclear Energy, Says US DOE Official
https://www.nucnet.org/all-the-news/2018/05/23/world-needs-to-get-serious-about-nuclear-energy-says-us-doe-official

23 May (NucNet): If the world is serious about reducing emissions and improving economies, governments must consider all options when it comes to carbon-free power, including clean, reliable nuclear energy, Dan Brouillette, deputy secretary of the US Department of Energy, said.

Mr Brouilette said the Ninth Clean Energy Ministerial in Copenhagen, Denmark, which pens today, brings together the world's top energy officials to discuss of policies and programmes that will promote the transition to a global clean energy economy.

But frequently the definition of "clean energy"does not include nuclear energy—the world's second largest source of low-carbon electricity, following only behind hydropower.

Mr Brouilette said the US, Canada, and Japan are launching the Nuclear Innovation: Clean Energy (Nice) Future initiative, whose aim is to make sure nuclear has a seat at the table during discussions about innovation and advanced clean energy systems of the future.

Innovative nuclear systems will play a critical role in worldwide decarbonisation, including use in many energy intensive applications such as desalination, industrial process heat, integrated nuclear-renewable systems, flexible electricity grids, hydrogen production and energy storage.

Mr Brouillette said the Nice Future initiative is gaining momentum. More than a dozen countries have already expressed interest in joining. **The initiative engages various organisations and stakeholders to focus on full-scale nuclear for baseload electricity** as well as innovative, next-generation technologies and integrated renewable-nuclear energy systems across four key areas.

More information about the Nice Future initiative: https://bit.ly/2KPCVfp

see also : **https://www.energy.gov/ne/nuclear-innovation-clean-energy-future**

Nukes become issue again in governor race

May 24, 2018
Nuclear policy in focus as campaigning begins in Niigata governor race
https://mainichi.jp/english/articles/20180524/p2g/00m/0dm/077000c

NIIGATA, Japan (Kyodo) -- Official campaigning began Thursday for next month's gubernatorial election in Niigata, with three contenders filing their candidacies for a race that could have a bearing on the possible restart of the world's largest nuclear power plant.
Voters in the central Japan prefecture could also effectively hand down a judgment on Prime Minister Shinzo Abe following the recent series of scandals involving his administration including allegations of cronyism against the prime minister over a heavily discounted land sale and a vet school project.
The three candidates running for the June 10 election are Satoshi Annaka, a 40-year-old independent and former city assembly member from Gosen, Niigata; Hideyo Hanazumi, 60, backed by Abe's Liberal Democratic Party; and anti-nuclear former prefectural assembly member Chikako Ikeda, 57, endorsed by five opposition parties.
The LDP's junior coalition partner Komeito is expected to support Hanazumi, who has yet to clearly state whether he would approve the restart of the Kashiwazaki-Kariwa nuclear plant, sought by Tokyo Electric Power Company Holdings Inc.
Delivering a speech in the city of Niigata, Ikeda pledged to seek ways to "break with nuclear power" and promote the use of renewable energy. She also said she will continue safety checks of the nuclear plant and share the results with the public for a thorough discussion.
Hanazumi told an audience in the village of Awashimaura that he will improve medical and welfare services. "I will do all I can do to create a lively and comfortable prefecture to live in."
Annaka is opposed to nuclear power and has vowed to enhance agricultural policies.
The election comes after former Governor Ryuichi Yoneyama, who was reluctant to restart the nuclear complex, stepped down last month just before a weekly magazine disclosed that he had been paying several women for sex.

Hitachi still negotiating with UK (Wylfa nuclear power station)

29.05.2018_No105 / News in Brief
https://www.nucnet.org/all-the-news/2018/05/29/hitachi-agrees-to-continue-negotiations-with-uk-over-new-nuclear-at-wylfa
Hitachi Agrees To Continue Negotiations With UK Over New Nuclear At Wylfa
Plans & Construction
29 May (NucNet): Hitachi has agreed to continue negotiations with the UK on a planned £20bn nuclear power station in Wales after the government in London expanded financial support to ease the Japanese group's concerns about the project's price tag.
The Tokyo-based conglomerate's board voted on 28 May 2018 to move ahead with talks.

The vote means the board has accepted the principle of a tripartite investment structure under which Hitachi, the UK government and state-backed Japanese entities would become equal investment partners

According to reports in Japan and the UK, the UK is proposing an equal equity split of about £6.5bn among Hitachi, the UK public-private consortium and a group of government-backed Japanese entities.

Negotiations are said to be continuing on the make-up of the consortiums and other financial details.

The Financial Times reported that another key factor is the strike price – the guaranteed level at which the

plant sells electricity – which is still under discussion.

The newspaper said the UK government is expected to back a price about £15 a megawatt hour lower than the £92.50/MWh negotiated for the Hinkley Point C nuclear plant that is under development in the UK by EDF.

Nucler developer Horizon is planning to build and operate two Hitachi UK Advanced-Boiling Water Reactor (ABWR) units at Wylfa Newydd on the island of Anglesey in north Wales. The company submitted its site application in April 2017.

Last year British media reported that South Korea's state-owned Korea Hydro and Nuclear Power (KHNP) was in early talks to buy a stake in the project. The reports said KHNP, a subsidiary of Korea Electric Power Corporation, could invest in Horizon as a minority shareholder along with the governments of Japan and the UK.

Toshiba withdraws from Texas project for economic reasons

Toshiba Confirms Withdrawal From South Texas Project New-Build
https://www.nucnet.org/all-the-news/2018/06/01/toshiba-confirms-withdrawal-from-south-texas-project-new-build
Plans & Construction
1 Jun (NucNet): Japan's Toshiba Corporation is to withdraw from the project to build two of its advanced boiling water reactors (ABWRs) at the existing South Texas Project nuclear site in the US.
Toshiba America Nuclear Energy Corporation, the Japanese company's wholly owned US subsidiary, reached an agreement in March 2008 to build the third and fourth reactors for utility NRG Energy's South Texas Project.

But Toshiba said in a statement on 31 May 2018 that the project, which has failed to find investors, is **no longer financially viable**. Toshiba said its board had decided that Toshiba America Nuclear Energy Corporation will withdraw from the project.

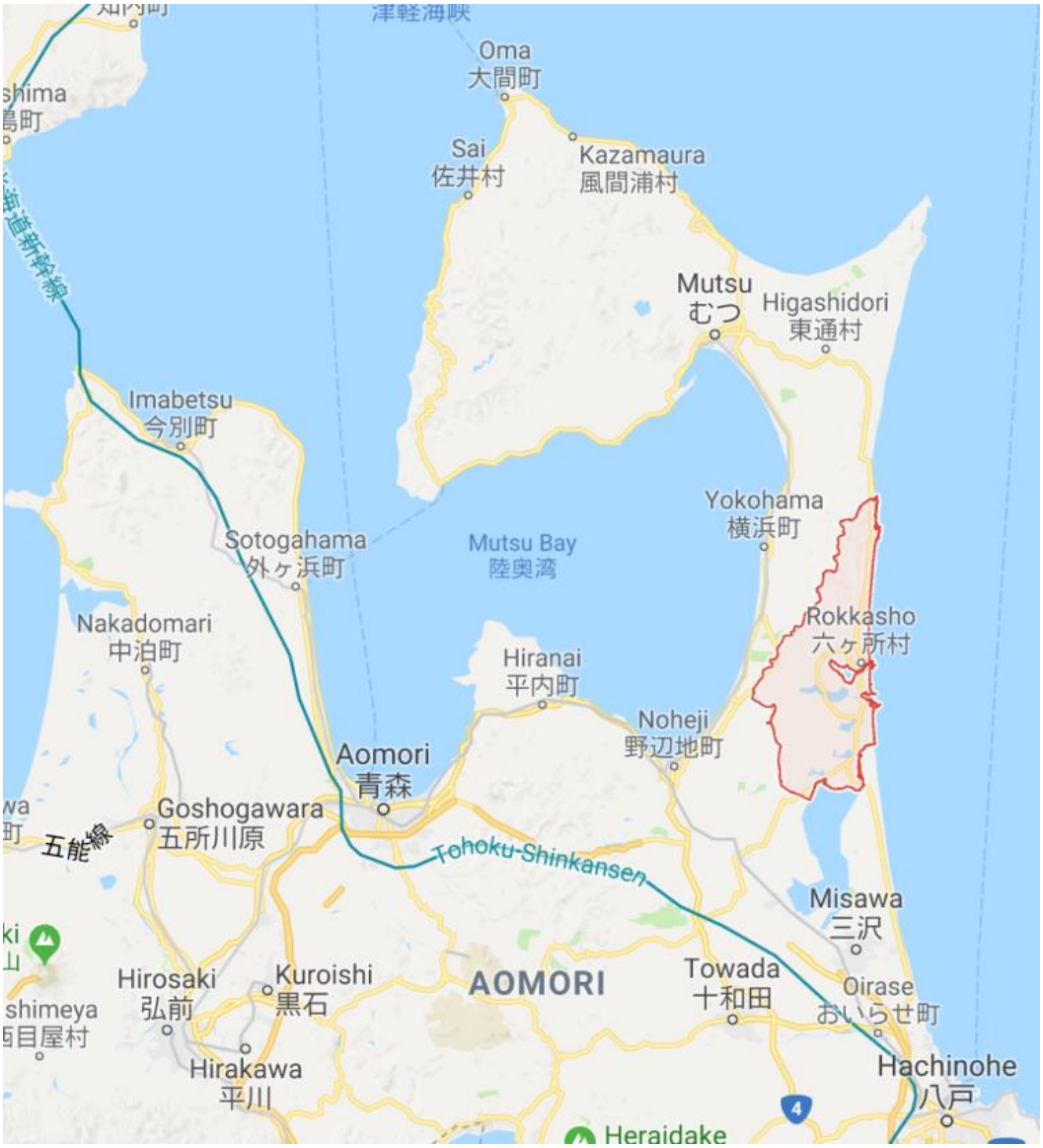
"Toshiba will proceed with the necessary procedures for the withdrawal with all related parties, and target its early completion," the statement said. It expects to complete its withdrawal by the end of this year.

In 2007, NRG Energy filed an application with the US regulator for the construction of the two new units at South Texas.

In 2011 NRG abandoned and wrote off its investment in the project, citing US regulatory uncertainty in the wake of Japan's 2011 Fukushima-Daiichi nuclear accident.

There are two 1,280 MW pressurised water reactors in commercial operation at the site.

Mayor election in Rokkasho & nuclear risk



June 10, 2018

Mayor election in Rokkasho Village, Aomori Prefecture, Japan: A small village where world nuclear risk is at stake.
https://fukushima311voices.com/2018/06/10/mayor-election-in-rokkasho-village-aomori-prefecture-japan-a-small-village-where-world-nuclear-risk-is-at-stake/
Don't let the Rokkasho nuclear fuel reprocessing plant start!
The Rokkasho village mayor election takes place on June 24, 2018.
We are calling for people to send encouraging comments for Ms Junko ENDO, anti-nuclear fuel cycle candidate!

For FB users, please write messages in the Facebook page of the candidate Ms Junko ENDO's political group "Rokkasho Mura ni atarashii kaze wo okosu kai" (Group to raise a new wind in Rokkasho Village)

The Facebook page is in Japanese, but you are most welcome to post your comments in your mother language. In fact, they prefer different foreign languages so that they can show that support is arriving from all over the world!

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Text below is partly based on an original text of Kiyohiko YAMADA with additions by Kurumi Sugita and Jon Gomon.

A brief historical and geographical reminder

There is a nuclear fuel cycle center in Rokkasho village, located at the root of Shimokita Peninsula in Aomori Prefecture, situated in the northernmost part of the main island of Japan.

On April 9, 1985, the governor of Aomori Prefecture decided to accept the center, composed of three facilities:

- a uranium enrichment (note 1) plant,
- a fuel reprocessing plant,
- and a low-level radioactive waste repository.

Afterwards, two facilities have been added:

- a temporary storage facility of high-level radioactive waste returned from overseas after reprocessing,
- and a MOX (note 2) fabrication plant.

Who is operating the nuclear fuel center?

This nuclear fuel cycle center of Rokkasho village is operated by Japan Nuclear Fuel Limited (JNFL), notorious for its incompetent management to say the least. In October 2017, Japanese Nuclear Regulation Autority (NRA) reported that JNFL violated safety measures. See a Mainichi Shimbun article below: Unfinished nuclear fuel reprocessing plant faked safety records: NRA (Mainichi Shimbun, October 11, 2017)

" The NRA concluded on Oct. 11 that Japan Nuclear Fuel Ltd. (JNFL) has violated safety measures after it was learned that the firm failed to carry out the required checks and nevertheless continued to write down "no abnormalities" in safety check records. There has been a spate of incidents such as the flow of rainwater into facility buildings at the plant in the Aomori Prefecture village of Rokkasho.

The plant, which is scheduled to reprocess spent nuclear fuel, was on the verge of hosting a final-stage NRA safety inspection, but the checkup is likely to be postponed considerably as JNFL now has to prioritize in-house inspections of all facilities at the plant. "

Major problems of the Rokkasho reprocessing plant

The Japanese nuclear fuel cycle collapsed with the fast breeder reactor "Monju"

The Japanese government persisted to continue research and development on the fast breeder reactors, even though they had been abandoned elsewhere in the world. It was in December 2016 that the government decided to finally decommission the prototype reactor "Monju".

The government is still trying to start the operation of the Rokkasho reprocessing plant in the first half of 2021 fiscal year, even though the prospect of the fast breeder reactor's commercialization has become improbable. There is a contradiction here. Why start a reprocessing plant when there is no usage plan for the end product (see below as for Mox fuel usage)? One possible reason is that for quite a while former

Liberal Democratic Party (LDP) ministers have been hinting at the possibility to possess nuclear weapons. They may want to have a plutonium extraction plant which can produce eight tons of plutonium annually.

Surplus Plutonium problem

The Japanese government has ordered the power companies to reprocess the total amount of used nuclear fuel resulting from nuclear power plants' operation. When there was no reprocessing plant in Japan, the reprocessing was entrusted to the UK and France. After that, a national reprocessing plant was built in Tokai village in Ibaraki prefecture, and then the construction of the private reprocessing plant in Rokkasho village in Aomori Prefecture was started in 1993.

The total amount of plutonium remaining in these reprocessing plants is about 48 tons. Since the commercialization of the fast breeder reactor has become improbable, the government wants to use the plutonium as MOX fuel at nuclear power plants (called plu-thermal in Japan).

However, since the TEPCO Fukushima Daiichi nuclear accident of March 11, 2011, the plu-thermal project is not progressing and it has become difficult to use up the surplus plutonium. If the Rokkasho reprocessing plant is put in operation, it will create a surplus of eight tons of plutonium annually. The possession of such an amount of plutonium will most certainly increase tensions in Asia.

Risks involved in the Rokkasho plant

① The reprocessing plant is on a fault

Japan is riddled with geological faults, and there is no stable stratum. The Rokkasho reprocessing plant is not on a stable stratum at all. A big active fault of about 100 km lies in the Pacific Ocean side. Scientists warn that in case of a big earthquake, a magnitude 8 tremor could seriously damage the reprocessing plant.

The operating company insists that a big earthquake will not occur in Rokkasho, but their seismograph is installed on bedrock, and is set so that it does not indicate more than a seismic intensity 3. Why? It is because when seismic intensity higher than 3 is detected, it is necessary to make a total inspection of the reprocessing plant.

② Hakkoda and Towada volcanoes are nearby

Recently, Hakkoda Mountain and Lake Towada, major tourist destinations in Aomori Prefecture not far from the plant, came to be monitored as a possible origin of a volcano-related catastrophe.

With a volcanic eruption, cinders and volcanic ash can fall thick in the vicinity of the reprocessing plant. This may make it difficult to secure external power supplies, to drive emergency power vehicles, and/or to secure cooling water. In addition, if the small volcanic ash can clog filters and destroy equipment.

③ Fighter jets fly near Rokkasho

Within 30km of the Rokkasho reprocessing plant, there is Misawa Airbase used by the US Air Force and Japanese Air Self Defense Force. There is also the Amagamori bombing exercise ground within 10km. Fighter jets exercising in Amagamori fly over the Ogawara port, passing through the vicinity of the reprocessing plant to repeat the training.

There is no doubt that a major disaster will occur if a fighter plane crashes into the reprocessing plant. Considering that the reprocessing plant is planned to go into operation in the coming years, it is very unlikely that the US Misawa Airbase and exercise ground would be relocated before the reprocessing operation begins.

Possibility of a serious accident

In the reprocessing project application submitted by JNFL, the following list cites as possible serious accidents:

① criticality in the dissolution tank,
② criticality by a transfer error of the solution containing plutonium,
③ evaporation to dryness by the loss of the cooling function,
④ explosion caused by hydrogen generated by radiolysis,
⑤ an organic solvent fire in a cell of the plutonium refining facility,
⑥ the damage to the used fuel aggregates in the fuel storage pool,
⑦ leakage from piping of liquid high-level radioactive waste storage facilities to cells.
If any of these major accidents occur simultaneously, or if the accident is triggered by a crash of a fighter plane or a volcanic eruption, the scale of the accident would be more than prepared for. However, the range of nuclear disaster prevention of the reprocessing plant is limited to a radius of 5 km only.
Existing radiation exposure of the entire Aomori prefecture and of the Pacific Ocean is already too high
After the Fukushima Daiichi nuclear accident, many tanks were created on the site of the Fukushima nuclear power plant to store the tritium contaminated water after processing the radioactive water by the multi-nuclide removal facility (Advanced Liquid Processing System = ALPS). In Fukushima prefecture, tritium contaminated water is not discharged in the ocean because of the opposition of fishermen, while in Rokkasho the same tritium water was released in a large amount during the active testing. Fishermen in Iwate once required that the reprocessing plant drainage be discharged in Mutsu Bay and not in the Pacific Ocean. The person in charge in Aomori Prefecture refused, saying, “Mutsu Bay would die”.
*****
Because of all these risks which involve not only Rokkasho village or Aomori Prefecture but the whole world, we need the village mayor who says NO! to Rokkasho Nuclear Fuel Center. **Please write either in a FB page or leave your comment at the bottom of this blog article page which we will transfer.**
Reminder:
For FB users, please write messages in the Facebook page of the candidate Ms Junko ENDO’s political group “Rokkasho Mura ni atarashii kaze wo okosu kai” (Group to raise a new wind in Rokkasho Village)
The Facebook page is in Japanese, but **you are most welcome to post your comments in your mother language**. In fact, they prefer different foreign languages so that they can show that support is arriving from all over the world!

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Profile and manifesto of the candidate Ms Junko ENDO in English coming up soon

Profit comes first

June 20, 2018

Hitachi CEO promises to prioritize profitability in U.K. nuclear power plant project
https://www.japantimes.co.jp/news/2018/06/20/business/corporate-business/hitachi-ceo-promises-prioritize-profitability-u-k-nuclear-power-plant-project/#.Wyo1jYoyWos
JIJI

Hitachi Ltd. will put profitability first in a nuclear plant construction project in the United Kingdom, President and CEO Toshiaki Higashihara told shareholders Wednesday.
The machinery-maker will base any decision about the project on economic rationale and take the concerns of its shareholders into account, Higashihara said. The project is expected to cost some ¥3 trillion.
Hitachi officials told the shareholders that the company will reduce risk connected to its wholly owned British nuclear unit by reducing its stake in the subsidiary to less than 50 percent through the solicitation of outside investment.
They also said the company plans to aim for further growth by expanding businesses abroad, including railway operations.
Hitachi shareholders approved the appointments of 12 board members, including Higashihara and Chairman Hiroaki Nakanishi.
Nakanishi recently became the first Hitachi executive to assume the post of chairman at Keidanren, Japan's largest business lobby.

Clean energy for Japan

June 25, 2018

Japanese firms shift to clean energy despite state's enduring commitment to nuclear power
https://www.japantimes.co.jp/news/2018/06/25/business/japanese-firms-shift-clean-energy-despite-states-enduring-commitment-nuclear-power/#.WzDNqIoyWos

by Hidetoshi Takada
Kyodo
As Japan's government clings to nuclear power even after the Fukushima crisis, the private sector is moving ahead with greater use of renewables to power their operations amid growing international awareness of climate change.
As Japan's government clings to nuclear power even after the Fukushima crisis, the private sector is moving ahead with greater use of renewables to power their operations amid growing international awareness of climate change.
For instance, in March Daiwa House Industries Co. became a member of both RE100 (Renewable Electricity) and EP100 (Energy Productivity), two global initiatives by the Climate Group.
RE100 is a global, collaborative initiative of influential businesses committed to using 100 percent renewable electricity, while EP100 brings together companies committed to doubling energy productivity to lower greenhouse gas emissions. Among RE100's 136 members are U.S. General Motors Co. and Dutch consumer goods giant Unilever.

Printer-maker Ricoh Co., the first Japanese firm to join RE100, was followed by five firms such as online stationery retailer Askul Corp. and retail giant Aeon Co., aiming to meet the electricity needs of their global operations with renewable energy between 2030 and 2050.

Daiwa House says it is the world's first company in the construction and housing sectors to join both campaigns and the first to declare it is taking bold action, as part of EP100, among Japanese firms. Currently, there are 15 EP members. Daiwa aims to achieve both goals by 2040.

Katsuhiro Koyama, general manager of Daiwa's environment department, spurred debate over achieving the targets after returning to Japan from the COP23 global climate round in Germany last November.

He had previously taken a cynical view of such tech giants as Apple Inc., Google Inc. and Microsoft Corp. participating in the RE100 clean energy initiative, seeing it as an "atonement for their sins" for consuming huge amounts of electricity.

But as one of the Japanese delegate members to the global conference, Koyama said he was "inspired" by the firms' "serious aspirations to leverage clean energy producers" after hearing various discussions.

The Osaka-based Daiwa group has invested an estimated ¥46.6 billion in the construction of its own solar, hydro and wind-power plants nationwide since 2007, producing power equivalent to about 60 percent of the group's annual use of 481 million kilowatt hours. Meanwhile, it doubled its electricity use efficiency in fiscal 2016 compared to fiscal 2005.

Japanese businesses became much more aware of renewable energy in the wake of the Hokkaido Toyako summit in 2008, in which the Group of Eight countries set a long-term target to reduce greenhouse gas emissions. The 2011 Great East Japan Earthquake, which triggered the suspension of all nuclear power plants, also sparked public concerns over the country's energy mix.

The ratio of renewable energy to the nation's entire power output capacity has risen from 10 percent in fiscal 2010 to 15 percent in fiscal 2016, according to the Agency for Natural Resources and Energy, boosted by a feed-in tariff system that obliges utilities to buy electricity generated by renewable energy at fixed prices. The scheme has attracted businesses large and small — even individuals — to pour money into the field of photovoltaics as they requires less effort to install and operate in a shorter period of time compared to other types of energy sources, said Yushi Inoue, a research director at think tank Mitsubishi Research Institute.

Individual power producers are actively trying to connect with grids in northeastern Japan, and in a recent offering sought to supply "more than three times what we can accept," according to a spokesman of Tohoku-Electric Power Co., the regional utility.

The region, part of which was devastated by the mega-quake seven years ago and the subsequent nuclear disaster, has a number of favorable locations for wind power plants.

Meanwhile, a similar scheme in Europe that utilizes renewable energy certificates and a guaranteed origin of electricity generated from such sources has gained momentum among environmentally conscious firms, particularly after the 2008 summit in Hokkaido. The tradable green certificate proves "environmental added value" created by renewable energy producers, and can be purchased by electricity users.

Despite the financial burden, Ajinomoto Co. switched its energy source to renewables for its entire annual electricity use of 4.5 million kilowatt hours at its Tokyo headquarters and major sales bases at home in the business year to March 2018.

Japan's major seasoning- and food-maker extended the move to its four group arms in April, aiming to boost its renewable energy use to 50 percent of the group's total energy consumption by fiscal 2030.

The targeted figure is part of various nonfinancial targets compiled for the first time in its three-year business management plan that started in fiscal 2017, said Mototsugu Shiratsuchi, general manager of the environment management support group of Ajinomoto.
Although the volume of certified renewable energy is fairly small relative to the entire clean energy output in Japan, it has been steadily rising — reaching 378 million kilowatt hours in the year to March 2018, according to the Japan Quality Assurance Organization, the accreditation body.
Japan Natural Energy Co., the leading certificate issuer, has over 150 firms as long-term clients, such as Sony Corp., Asahi Breweries and about 300 customers on a one-time contract basis.
The company is the pioneer in the field with about an 80 percent market share, according to the accreditation body.
President Masaru Terakoshi said that one of Japan's global carmakers employed the certificate as part of its corporate social responsibility policy for 15 years but terminated a contract with the issuer two years ago.
The automaker, however, is set to repurchase the warrant this year following re-examination of how it can apply the certificate to its production activity.
Terakoshi declined to specify which automaker, but the example indicates that Japan's multinational corporations are becoming more aware of taking leadership roles in the fight against climate change.
"Otherwise, companies face a risk of losing clients," he said, as most of the world backs the landmark Paris accord goal of effectively reducing net carbon dioxide and other greenhouse gas emissions to zero in the second half of this century.
The tradable certificate is widely used. Some hotels, for example, buy the warrants to show that their banquets are sustained by clean energy.
In its latest draft energy mix plan, due to be finalized this summer, the Ministry of Economy, Trade and Industry called nuclear power "an important baseload energy source." This stance appears to conflict with public opinion, which shifted after the 2011 Fukushima disaster. In addition to public sentiment against nuclear power plants, the government's tougher safety standards led to the shutdown of all reactors.
In the fiscal year through March 2017, fossil fuels accounted for 83 percent of Japan's electricity output capacity. Renewables are currently at 15 percent.
The ministry proposes that nuclear power should account for 20-22 percent of the country's power sources in 2030, and renewables 22-24 percent, which still lags behind the equivalent figures seen for major European nations in 2015.

TEPCO still eyeing new nuclear plant

Experts from the Nuclear Regulation Authority (NRA) examine a geological layer at the site of the Higashidori nuclear power plant in Aomori Prefecture, on Dec. 14, 2012. (Mainichi)

TEPCO willing to resume Higashidori nuclear plant construction

https://mainichi.jp/english/articles/20180630/p2g/00m/0dm/004000c

June 30, 2018 (Mainichi Japan)

TOKYO (Kyodo) -- Tokyo Electric Power Holdings Inc. will launch a new site survey for its nuclear plant construction in northeastern Japan, suspended after the 2011 Fukushima disaster, with the company's president expressing readiness Friday to push the project forward.

- 【Related】Proposed storage of spent nuclear fuel sparks resistance in Aomori Pref. city
- 【Related】Election Battlegrounds: Area merger overshadows nuclear power debate in Aomori

TEPCO said it will conduct a full-fledged geological survey to devise stronger safety measures and see whether future facility expansion is possible on the site of the Higashidori nuclear power plant in Aomori Prefecture.

The survey will be carried out from later this year or early next year to around 2020, it said. Tepco has said it would seek participation of other companies in the Higashidori construction project.

"As we restart the (Higashidori) project, I want to make sure that a new plant would excel in safety," President Tomoaki Kobayakawa told a press conference, adding, "The geological survey is a very significant step to move forward on the joint development of Higashidori."

Construction of new nuclear power plants has stalled in Japan due to heightened safety concerns following the crisis at the Fukushima Daiichi plant, triggered by the March 2011 earthquake and tsunami disaster. The resumption of existent nuclear plants' operations has also been slow after the government implemented stricter safety regulations.

TWPCO expects the Higashidori project to expand its revenue as it faces huge compensation payments in connection with the Fukushima nuclear crisis and plant decommissioning costs.

TEPCO has asked major utilities, including Tohoku Electric Power Co., Chubu Electric Power Co., and Japan Atomic Power Co., to cooperate in the joint construction and operation of the Higashidori plant.

TEPCO said Friday it hopes the utilities would decide around 2021 whether to join the project by taking into account the results of the geological survey.

The company plans to build two reactors at the site, with construction of the No. 1 reactor having started in January 2011.
June 29, 2018

TEPCO to begin survey for new nuclear plant
https://www3.nhk.or.jp/nhkworld/en/news/20180629_39/
A Japanese electric power company that's grappling with the aftermath of a nuclear meltdown accident says it will begin a geological survey for a possible new nuclear plant.

Tokyo Electric Power Company, or TEPCO, said on Friday the survey is planned from the 2nd half of fiscal 2018 through fiscal 2020 in Higashidori in Aomori Prefecture, northern Japan.

It will be the first full-scale survey at the site since the March 2011 accident at TEPCO's Fukushima Daiichi nuclear plant.

The power company was due to start running its first reactor in Higashidori in March 2017. But construction has been suspended since the nuclear accident and the site remains vacant.

TEPCO says the survey will involve drilling to check soil and the structure underground. It says it will also consider how the new plant could meet tougher regulations introduced after the 2011 accident.

The company plans to ask other power companies to jointly build and operate the Higashidori plant, as it faces mounting costs to decommission the Fukushima reactors and pay compensation.

The deputy chief of TEPCO's Aomori office, Yoshinori Ono, said he hopes the potential partners will decide whether to join the project in around fiscal 2020.

Nukes: How many restarts yet?

July 3, 2018

Nuclear reactor restarts likely as Cabinet OKs new energy plan
By SHINICHI SEKINE/ Staff Writer
http://www.asahi.com/ajw/articles/AJ201807030061.html
A new wave of nuclear reactor restarts became more likely as the government approved the new Basic Energy Plan on July 3, confirming that nuclear power will remain a key component of Japan’s energy strategy.
The latest Basic Energy Plan, which charts the nation’s mid- and long-term energy policy, marks the fifth in a series that is required by law to be reviewed about every three years.
The second plan to be revised under the administration of Prime Minister Shinzo Abe stated for the first time that the country will strive to make renewable energy a major power source, although it noted fluctuations in output due to weather conditions.
Renewables can become a viable source of a stable power supply when they are combined with rechargeable batteries and hydrogen, according to the plan.

The plan also maintained the reliance on coal-fired thermal power as a base-load energy source despite high emissions of carbon dioxide.
The Abe administration decided to promote nuclear energy when it revised the plan in 2014, reversing the policy of the previous government led by the then-Democratic Party of Japan, which pledged to phase out nuclear power by 2039 in the face of mounting public concern over the safety of nuclear power following the 2011 Fukushima nuclear disaster.
Under the latest plan, the ratio of nuclear energy, renewables and coal thermal power in the nation's overall energy as of fiscal 2030 will remain at 20-22 percent, 22-24 percent and 26 percent, respectively, in line with the government's target set three years ago.
Experts say about 30 reactors need to be reactivated to achieve the 20-22 percent target, but only nine have gone back on line so far after they cleared the more stringent reactor regulations that took effect after the Fukushima accident.
The plan did not touch on the need for building a new nuclear plant in light of the widespread public opinion against nuclear energy. The last Basic Energy Plan did not mention the subject, either.
The latest plan re-endorsed using the nuclear fuel cycle, in which plutonium extracted from spent nuclear fuel at nuclear plants is used to generate power.
But the plan, noting calls from the United States, said that Japan "will make efforts to cut the stockpile of plutonium."
Japan holds a total of 47 tons of plutonium, equivalent to 6,000 Nagasaki-type atomic bombs, a source of criticism from the United States and other countries.
The country has failed to reduce its plutonium stockpile due to little progress in the nuclear fuel cycle over decades.
The project to operate the Monju prototype fast-breeder reactor in Fukui Prefecture, the core part of the nuclear fuel cycle, rarely worked over 20 years due to numerous glitches. The government finally decided to pull the plug on it in 2016.
Burning a mixed oxide form of plutonium and uranium has not spread among conventional nuclear reactors, although it was considered a way to reduce the plutonium stockpile.
In its attempts to export nuclear plants, the country has hit major problems wherever it has pitched them. But the government will maintain the export policy as a key component of the administration's strategy for expanding the Japanese economy.
According to the Basic Energy Plan, "Japan is determined to make a positive contribution to enhancing the safety of nuclear energy and the peaceful use of nuclear energy" through exports of nuclear plants.

Toward a reduction of the plutonium stockpile?

July 3, 2018
Tokyo plans shift toward renewable energy, planning for first time to cut plutonium stockpile
https://www.japantimes.co.jp/news/2018/07/03/national/tokyo-eyes-renewable-energy-plans-cut-plutonium-stockpile/#.WztfKIoyVLM
Kyodo, Staff Report
Japan will shift further toward renewable energy and cut dependence on fossil fuels and nuclear power, according to the country's energy plan approved Tuesday by the Cabinet.

Ahead of the automatic July renewal of the U.S.-Japan agreement on the peaceful use of nuclear energy, the plan for a medium- to long-term energy policy also mentioned that Japan will work to reduce its plutonium stockpile for the first time.

The increased focus on renewables under the 2015 Paris climate accord underscores the nation's daunting challenge to reduce greenhouse gas emissions drastically in the years ahead.

The government, which updates the energy plan roughly every three years, kept its goals the same for its mix of energy sources in fiscal 2030 but did not give specific numbers for fiscal 2050 — the year when it has to clear its specific commitment in fighting global warming.

Toward 2030, the government aims to have renewables account for 22 to 24 percent, fossil fuels 56 percent and nuclear power 20 to 22 percent of the country's electricity generation, the energy plan showed.

With its 2016 energy self-sufficiency ratio below 10 percent, resource-poor Japan needs to secure stable energy supplies for economic activity and national security while also ensuring the safety of nuclear power generation following the 2011 Fukushima accident.

The country also needs to accelerate efforts to fight global warming, now that it has set the goal of achieving an 80 percent cut in greenhouse gas emissions in fiscal 2050 from 2013 levels.

The energy plan calls for supporting the development of a sustainable market for renewables, such as solar, wind and geothermal power, and encourages the use of hydrogen.

Placing a priority on safety, the nation will cut dependence on nuclear power generation "as much as possible," the energy plan said.

Still, it also acknowledged that nuclear power is one of the viable choices to achieve a shift away from using coal and other fossil fuels and cut greenhouse gas emissions.

Much of the country's nuclear power plants have been taken offline since the Fukushima disaster. The administration of Prime Minister Shinzo Abe is seeking to restart plants that have cleared safety checks.

The Japan-U.S. nuclear pact currently enables Japan to continue its spent-fuel reprocessing program for 30 years to July 2018.

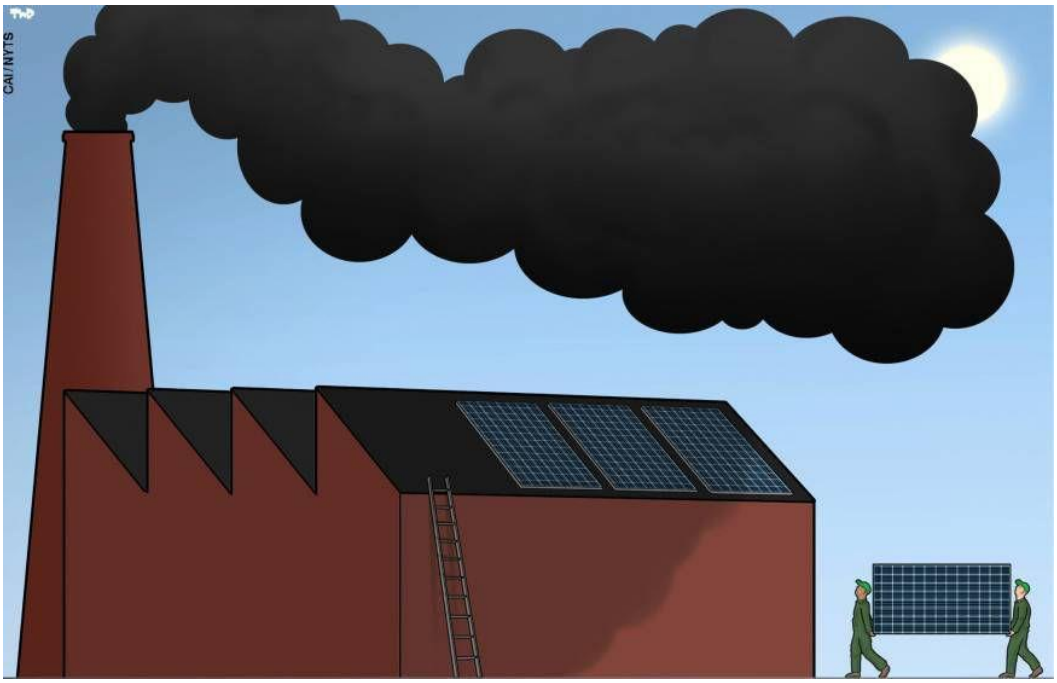
Spent fuel from nuclear reactors is reprocessed to extract uranium and plutonium, which is then recycled into fuel called mixed oxide, or MOX, for use in fast-breeder reactors or conventional nuclear reactors.

In a June 21st open letter to International Atomic Energy Agency Director General Yukiya Amano that expressed concern about the management of plutonium stocks, three anti-nuclear groups said efforts to restart nuclear reactors, especially those that use MOX fuel, to meet the long-term energy goal for nuclear power were unrealistic.

"Our analysis over recent years, and to the present, indicates that Japan will fail to meet its nuclear restart target of 30 gigawatts by 2030 by a wide margin. Many more nuclear reactors are likely to be decommissioned" in the coming years joining the 17 that have been declared such since 2011, said a letter jointly signed by Hideyuki Ban, co-director of Citizens' Nuclear Information Center, Aileen Mioko Smith, director, Green Action, and Shaun Burnie, a senior nuclear specialist at Greenpeace Germany.

"In addition to the four reactors that have resumed operation with partial MOX fuel cores, it is uncertain how many of the remaining six reactors that have received MOX approval will actually restart during the next 10 years. They are all confronted with multiple challenges, including seismic faults, as well as legal and political opposition," the letter added.

Decarbonisation & Japan



July 3, 2018

Japan's energy and decarbonization challenge
by Tomoaki Nakanishi
The government has just reviewed its energy strategy or Basic Energy Plan — the first review in four years. In the 2017 COP23 United Nations Climate Change Conference held in Bonn, Germany, an international network of nongovernmental organizations awarded the Fossil of the Day prize to Japan. But in reviewing its energy strategy, Japan has declared that it will meet the challenge of developing new energy sources and technologies and achieving decarbonization under a long-term timetable stretching to 2050 by taking into consideration the Paris agreement adopted at the 2015 COP21 conference.
The energy landscape has undergone rapid changes in recent years.
First, the prices of energy from renewable sources have fallen on a global scale and new endeavors to develop new technologies for decarbonization, such as energy storage and digital control technologies needed for large-scale introduction of renewable energy, have started with the participation of a wide range of industrial sectors.
Second, new risks that are qualitatively different from conventional geopolitical risks have arisen with the rising presence of emerging powers such as China and India.
Third, competition for dominance in technological development for decarbonization has kicked off among major countries and energy companies, leading people to anticipate the emergence of a society in which technologies will serve as key resources.
In foreseeing the situation in 2050, it must be recognized that the degree of uncertainty for the future is extremely high. At the same time, the high degree of uncertainty means that there will be possibilities in the future. In facing an era of both uncertainty and possibilities, it will be important not only to set an ambitious goal to pursue the possibility of every option but also to consider multiple scenarios that should be scientifically reviewed on the basis of the latest technological trend and global situation for flexible adjustments.

To begin with, Japan, poor in domestic energy resources, is an insular country with no power transmission networks connected with other nations. Therefore it has tried to cope with its intrinsic situation by exploring the possibility of every energy source to achieve the best mix of 3E+S — energy security, economic efficiency and environmental protection with safety serving as the major premise.

In developing Japan's energy strategy, the recent experience of Germany offers a useful suggestion. Germany is trying to achieve decarbonization by fading out nuclear power and expanding renewable energy sources. But now it faces difficulty in reducing its dependency on coal-fired thermal power generation although its use of renewable energy sources is expanding. It must be noted that as a result, its reduction of carbon dioxide emissions has become slow and household electricity bills have risen.

It also must not be forgotten that a nation like Germany, which can sell or buy electricity to and from neighboring countries through international power transmission networks, can absorb to some extent the fluctuation of power output from renewable energy sources by means of export and import of electricity.

In any case, each country is trying to build an optimum energy system under its given conditions, which are different from one country to another. In this situation, it is important to develop an energy policy under the 3E+S approach.

Let me discuss individual energy sources. The first is a zero-carbon emission power source consisting of renewable energy sources and nuclear power.

After the Great East Japan Earthquake of 2011, Japan reviewed its nuclear power policy from scratch. While seeking to reduce the dependency on nuclear energy for power supply as much as possible, the energy policy aims to squarely tackle the problem of the high cost of renewable energy sources — which remain relatively high compared with overseas — so as to turn the renewables into a major power source.

In view of the fact that nuclear power is an important option already in use for achieving decarbonization, Japan will immediately start seeking reactors excellent in safety, flexibility and economic efficiency as well as developing back-end technologies to win back public trust in nuclear power.

The second is coal-fired thermal power. Currently Japan has highly advanced technologies to utilize coal. For example, by introducing an integrated gasification combined cycle (IGCC), which uses a high-pressure gasifier to turn coal and other carbon-based fuels into pressurized gas, and an integrated gasification fuel cell cycle (IGFC), a fuel cell-based power cycle consuming gasified solid fuels such as coal and biomass fed directly to fuel cells operation at high temperature, it will become possible to cut carbon dioxide emissions significantly even compared with the latest coal-fired plant currently in use. (IGCC will be able to reduce the emissions by about 10 percent more and IGFC 30 percent.) Japan is currently building a large, commercial-use IGCC power plant and carrying out a demonstration experiment of IGFC.

Japan can greatly contribute to reducing global greenhouse gas emissions by passing its highly efficient coal-utilization technologies to countries that have no other choice but to rely on coal as an energy source. Japan, on the other hand, will phase out its low-efficiency coal-fired power generation.

Japan's journey toward 2050 has just begun. It will try to accomplish an ambitious goal of achieving an 80 percent reduction in greenhouse gas emissions on multiple scenarios that will be scientifically reviewed. Although the goal is ambitious, the approach will be flexible. Concrete measures must be worked out from now on.

To achieve the goal, the government and the private sector must fully cooperate. In partnership they will push innovative technological development in areas needed for decarbonization, such as power storage, use of hydrogen, nuclear power, diversification of energy sources and heat utilization.

In the financial market, where environmental, social and governance criteria are gaining importance recently, energy companies and the financial sector will have dialogue to build a funding circulation

mechanism, in which they will jointly write a scenario to change the energy landscape and pursue decarbonization.
Since the annual global carbon dioxide emissions top 30 billion tons, with Japan emitting roughly 1.1 billion tons, it is clear that worldwide proliferation of non-carbon technologies is indispensable. Japan will serve as a bridge to link energy-consuming nations and resource-rich countries.
Japan is determined to contribute to and fulfill development of new energy sources/technologies and decarbonization, a long-term goal of humankind, by implementing policies under the new basic energy plan.
Tomoaki Nakanishi is former director of the International Affairs Office of the Natural Resources and Energy Agency at the Ministry of Economy, Trade and Industry.

Reusing nuclear fuel

July 18, 2018

Japan OKs reuse of nuclear fuel from scrapped reactors for 1st time
https://mainichi.jp/english/articles/20180718/p2g/00m/0dm/075000c
The No. 1 and No. 2 reactors (from right to left) at Kansai Electric Power Co. (KEPCO)'s Oi Nuclear Power Plant in Oi, Fukui Prefecture, are seen from a Mainichi Shimbun helicopter. (Mainichi)
TOKYO (Kyodo) -- Japan's nuclear watchdog on Wednesday granted its first approval for a plan to reuse nuclear fuel taken out of decommissioned reactors in operational ones.

- 【Related】Nuclear watchdog OKs restart of aging nuclear plant hit by tsunami
- 【Related】TEPCO willing to resume Higashidori nuclear plant construction
- 【Related】Court rejects suspension of Oi nuclear power plant

The decision will allow Kansai Electric Power Co., the operator of the Oi nuclear power plant in central Japan, to load some nuclear fuel assemblies from its scrapped No. 1 and No. 2 reactors into its No. 3 and No. 4 reactors that resumed operation this spring.
A nuclear fuel assembly consists of fuel rods and those at the Oi plant in Fukui Prefecture are the same in size and interchangeable.
Fuel at a nuclear power plant is normally considered spent after three to five years of loading. Kansai Electric has stored some fuel assemblies from the No. 1 and No. 2 reactors that are still usable.
Of the 629 nuclear fuel assemblies from the two old reactors that the power company has decided to scrap, 264 are still usable. The remaining 365 units are expected to be sent to the Rokkasho plant in northeastern Japan for reprocessing.
A total of 216 new nuclear fuel assemblies prepared for the No. 1 and No. 2 reactors will also be used in the other two reactors at the Oi plant, according to Kansai Electric.
The Nuclear Regulation Authority will give its formal approval after hearing opinions from the Japan Atomic Energy Commission and other parties concerned.

In March, Kansai Electric notified the government of its plan to decommission Oi's aging No. 1 and No. 2 reactors. With a capacity of 1,175 megawatts each, the reactors would have been in operation for 40 years in 2019.
Since the 2011 Fukushima accident, most of the country's nuclear reactors remain offline.
Opposition to restarts remains strong in Japan despite the administration of Prime Minister Shinzo Abe maintaining its pro-nuclear policy.

Nuclear Japan-US pact on reprocessing extended

July 18, 2018

Japan To Continue Fuel Cycle Policy As Nuclear Pact With US Is Extended
https://www.nucnet.org/all-the-news/2018/07/18/japan-to-continue-fuel-cycle-policy-as-nuclear-pact-with-us-is-extended
18 Jul (NucNet): A nuclear pact between Japan and the US has been automatically extended, allowing Tokyo to continue to reprocess spent nuclear fuel, extract plutonium and enrich uranium.
The bilateral Japan-US pact, which came into force in July 1988, puts Japan in the position of being the only country without nuclear arms that is allowed to reprocess spent nuclear fuel, press reports said.

Japan has long limited its nuclear research, development and energy uses to peaceful purposes.

However, there are reports that the US is increasingly concerned about Japan's growing reserve of plutonium, a material which can be used to create nuclear weapons.

An energy policy plan approved by Japan earlier this month re-endorses using the nuclear fuel cycle, in which plutonium extracted from spent nuclear fuel at nuclear plants is used to generate power.

But the plan, noting calls from the US, said that Japan will make efforts to cut its stockpile of plutonium, which can be used in making nuclear weapons.

According to the Japan Atomic Industrial Forum (Jaif), Japan holds about 47 tonnes of plutonium. Of that 47 tons, around 10 tonnes were stored within Japan and the remainder in the UK and France as of the end of 2016, according to government data.

Spent nuclear fuel containing plutonium from nuclear power plants in Japan is sent to the UK and France for reprocessing and eventual fabrication into uranium-plutonium mixed oxide (MOX) fuel before being returned to Japan.

Most nuclear power plants in Japan remain offline following the 2011 Fukushima-Daiichi nuclear accident and need to pass revised safety regulations before they can be restarted.

The administration of prime minister Shinzo Abe has maintained its pro-nuclear policy, saying that plants

able to clear the new stricter safety checks will resume operations.

The energy plan calls for a nuclear share of around 20-22% by 2030. Jaif has said about 30 reactors must be brought back online to meet the target.

Nuclear regulators are also still assessing the safety of a planned spent nuclear fuel reprocessing plant in northeastern Japan after delays to its commissioning.

When fully operational the Rokkasho plant, a key pillar of the country's nuclear fuel recycling policy, will be able to produce around eight tonnes of plutonium a year, the Japan Times reported.

Pinning hopes on nuclear exports

July 29, 2018

Japan and Hitachi pin nuclear export hopes on U.K. project in Wales
https://www.japantimes.co.jp/news/2018/07/29/business/japan-hitachi-pin-nuclear-export-hopes-u-k-project-wales/#.W13MncIyWos
by Junko Horiuchi
Kyodo
A nuclear power plant project in Britain is giving Japan a glimmer of hope for spurring infrastructure exports, a key growth strategy of Prime Minister Shinzo Abe.
Hitachi Ltd. and the U.K. government started official talks last month on building new reactors in Wales, with a goal of firing them up in the first half of the 2020s.
The outlook for the ¥3 trillion project is unclear, with both sides facing a string of challenges in the talks going forward.
For Tokyo, the plan is one of its few remaining major overseas projects on the horizon, with other nuclear power generation plans discontinued or facing cancellation.
The government's bet on nuclear power plants as a pillar of infrastructure exports comes as the likes of Germany, Italy, Taiwan and South Korea are pulling out of atomic power generation.
Critics argue that a surge in safety costs and accident worries caused by the 2011 Fukushima disaster, in addition to the lack of viable disposal solutions for radioactive waste, mean there is no justification for keeping faith in nuclear energy. Compounding the sector's decline is the rapidly dropping cost of tapping such renewable energy sources as wind and solar power.
Still, some emerging economies look like they will need new nuclear power plants, and Japanese builders see few chances to construct new ones anytime soon in Japan.
"The Japanese government has been pushing hard for exports of nuclear power plants but it's clear that it's not going well," said Tadahiro Katsuta, a professor at Meiji University. "The government will spare no effort in giving momentum to the exports."

If the project in Britain proves successful, it will give the government "a good excuse" to push harder abroad, he said.

Before the official talks began, Hitachi had told Britain it might not take part in the project to build two advanced boiling water reactors on the Isle of Anglesey in Wales, because the price tag had soared higher than initially estimated.

But an offer by London to shoulder about two-thirds of the cost convinced Hitachi stay in. Tokyo welcomed its decision to begin the talks.

"The nuclear business overseas is significant … it would lead to strengthening and maintaining human resources and technology for nuclear power in Japan," Minister of Economy, Trade and Industry Hiroshige Seko told a news conference.

Under the agreement, the British government will subsidize much of the cost through direct investment and loan guarantees, according to sources close to the matter.

"We are currently examining the financial and cost issues of the project, before making a final decision in 2019 on whether to invest in the project," Hitachi Chief Financial Officer Mitsuaki Nishiyama said Friday at a news conference to announce earnings.

For Hitachi, nuclear power is a core operation. It wants to increase revenue from the business by more than 33 percent to ¥250 billion over the four years through March 2022, mainly through boosting overseas revenue.

Rival Toshiba Corp. exited overseas nuclear operations after incurring huge losses in the United States, a decision that could cripple Tokyo's efforts to promote Japanese nuclear plants abroad.

Mitsubishi Heavy Industries Ltd., is pursuing a nuclear power plant project in Turkey. But it hit a snag when it saw safety-related costs surge and trading house Itochu Corp. walked away from the project.

In another blow to the government, Vietnam in 2016 decided to abandon a plan to build its first nuclear power plant with Japanese assistance due to tight state finances.

Those failures have led to an increased focus on the new power station in Wales. But London and Hitachi still need to address such issues as how to spread the remainder of the costs among Hitachi, local companies and Japan-backed financial institutions. They also need to determine who should be held liable if there's a major accident.

They are also at odds over how much the electricity produced at the plant should cost. Britain at one point offered a price some 20 percent lower than what Hitachi wanted, a source familiar with the matter said.

"A key focus of discussions with Hitachi has been and will continue to be achieving lower-cost electricity for consumers," Greg Clark, British business and energy secretary, told Parliament last month.

The two sides also need to talk to residents and win over those worried about the new power station.

"We have a major multinational and two governments supposed to be democracies playing a high-stakes game of poker … without any transparency or scrutiny for the people that they are representing," Mei Tomos, a resident of Wales, said at a news conference in Tokyo during a recent visit to Japan.

"We have seen the destruction which nuclear power can cause. It is really too much to expect us to take the same risks. Even if such an accident didn't happen at Anglesey we will still be faced with over a hundred years of storage of nuclear waste on site which presents a massive danger to us," another resident, Robert Davies, said at the news conference.

Shimane 3

August 13, 2018

Japan's Chugoku Electric Asks Regulator To Assess Shimane-3
https://www.nucnet.org/all-the-news/2018/08/13/japan-s-chugoku-electric-asks-regulator-to-assess-shimane-3
Plans & Construction
13 Aug (NucNet): Japanese utility Chugoku Electric Power Company has asked the Nuclear Regulation Authority to assess the compliance of the unfinished Shimane-3 nuclear power plant with post-Fukushima revised safety standards.
In February 2018, Chugoku Electric announced plans to apply for permission to begin operation of Shimane-3, which is still under construction in Shimane Prefecture, southwest Japan.

Chugoku Electric said at the time it would seek to obtain the consent of both the prefecture and local municipalities before filing an application for an operational permit with the NRA.

According to the Japan Atomic Industrial Forum, construction of the 1,325-MW advanced boiling water reactor unit is "almost complete". Construction began formally in 2007.

Shimane-3 was scheduled to come online in 2012 but all reactors in Japan were shut down and new build projects suspended following the March 2011 accident at Tokyo Electric Power Company's Fukushima-Daiichi nuclear station.

The NRA's revised safety standards came into force in July 2013.

US firm withdraws from Hitachi plant in Wales

August 17, 2018
U.S. firm pulls out of building Hitachi nuclear plant in Britain
http://www.asahi.com/ajw/articles/AJ201808170035.html
Major U.S. construction firm Bechtel Corp. is to withdraw from its key role in building a nuclear power plant in Britain due to concerns over the Hitachi Ltd.-helmed project's profitability, sources said Aug. 16.
Bechtel made the decision based on its assessment that the drastic rise in construction costs would make it hard to make money on the project, the sources said.
The withdrawal deals a blow to Tokyo-based **Hitachi, which lacks experience in nuclear power plant construction**. The conglomerate could now face further difficulties in financing the project.
The Japanese government supports the construction project as an "export of nuclear power generation technologies," but even so, its future is becoming more and more uncertain.
Hitachi plans to build a nuclear power plant equipped with two reactors on the island of Anglesey in Wales. Overall costs are expected to reach about 3 trillion yen ($27 billion), mainly due to measures to meet safety standards strengthened globally after the 2011 accident at the Fukushima No. 1 nuclear power plant.

According to the sources, however, the overall costs estimated by Bechtel are higher than Hitachi's, making it impossible for Bechtel and Hitachi to agree on the price tag.
As a result, Bechtel decided to withdraw from its key role in construction and only offer a consulting service.
In 2012, Hitachi purchased a British nuclear power plant operator, Horizon Nuclear Power Ltd., to export its nuclear power generation technologies as a whole.
It was the first time for Hitachi to preside over the construction of an entire nuclear power plant, including not only reactors but also reactor buildings and related facilities.
Hitachi then formed a consortium with Bechtel and major Japanese engineering company JGC Corp. in 2016. Bechtel was chosen because it had constructed nuclear plants in the United States.
The consortium was expected to steer the nuclear plant's design and construction, with Bechtel taking the key role in the project. Now, a question mark hangs over whether Hitachi will be able to find a new partner that can replace Bechtel.
An idea has emerged that Horizon Nuclear Power, now a subsidiary of Hitachi, will be in charge of the construction while receiving advice from Bechtel and Japanese electric power companies.
One Hitachi executive played down the significance of Bechtel's withdrawal from its role in construction. "It only means that roles of companies will change. The impact to the project is not big," the executive said.
However, if Horizon replaces Bechtel, it faces the risk that the construction costs will become higher than anticipated.
Hitachi is aiming to lower its stake in Horizon from the current 100 percent to less than 50 percent as a condition for the start of construction of the nuclear plant, and so it is asking other companies to invest in Horizon.
But if other companies are concerned over Horizon's risk, they will hesitate to invest in it. As a result, Hitachi will face bigger difficulties in raising funds for construction and proceeding with the project.
(This article was written by Keiichi Kitagawa and Hisashi Naito.)

Nuke tie-up?

August 22, 2018

4 firms in talks over nuclear business tie-up
https://www3.nhk.or.jp/nhkworld/en/news/20180822_20/
Four Japanese companies are negotiating a possible tie-up in the nuclear power business. They are utilities Tokyo Electric Power Company and Chubu Electric Power Company, and electronic makers Hitachi and Toshiba.

People familiar with the matter say the 4 firms are in talks on a future tie-up in the operation of nuclear power plants, their construction and maintenance.

The 4 companies are all involved in operating or manufacturing of boiling water reactors, which are the same type of reactors at the Fukushima Daiichi nuclear power plant.

The plant is in the process of decommissioning after a disaster occurred there in March 2011 following a

powerful earthquake and tsunami.

Hitachi and Toshiba are having difficulties to gain new orders for building nuclear plants in Japan, where the Fukushima disaster has effectively halted their construction.

The 2 makers are also facing a tougher business environment overseas, where stricter safety requirements have pushed up construction costs for nuclear power plants.

The 4 companies are discussing multiple plans, including one that calls for merging their nuclear businesses in the future.

However, their talks may not go smoothly as TEPCO is engaged in decommissioning the Fukushima plant and the 4 firms have different stances on overseas business.

Time to choose renewables

A large-scale solar power plant that started operation in Niigata in July (Provided by Orix Corp.)

August 27, 2018

EDITORIAL: Time is now to turn renewables into 'mainstay' energy sources
http://www.asahi.com/ajw/articles/AJ201808270016.html
A large-scale solar power plant that started operation in Niigata in July (Provided by Orix Corp.)
We know which direction we should be going.
The problem is how we should go about getting there. It is time to be working out strategies and putting them into practice over the years to come.

The latest edition of Japan's basic energy plan, which was approved by the government in July, includes a passage saying that efforts should be made to turn renewable energy options, such as solar and wind power, into "mainstay" power sources.

A substantial expansion in the use of renewables, which does not involve carbon dioxide (CO2) emissions, is indispensable for achieving the double goals of fighting global warming and becoming less reliant on nuclear power. The use of renewable energy sources also comes with the big advantage of domestic availability for Japan, a country poor in natural resources.

Many other nations are already speeding up efforts in that direction on the back of technological innovations and a sharp drop in costs. It is all too natural for Japan to follow that global trend.

The latest plan, however, also appears indecisive in some respects. For example, its future introduction target for renewables remains unchanged from a previously stated goal.

A mountain of challenges remains to be solved to make sure that the whole shebang will not end up as mere slogans. Ideas on how they could be solved should be sought both in Japan and abroad, and the undertaking should be sped up across the entire society.

NUMERICAL GOAL SHOULD BE RAISED

The latest plan, revised for the first time in four years, says in one passage, "We should address challenges squarely toward the goal of introducing renewable energy options in large scales and turning them into mainstay power sources that are self-reliant in economic terms."

Given that, the plan is too halfhearted in sticking to the previous goal of having renewable energy account for 22 to 24 percent of the total power to be generated in fiscal 2030.

The share of renewables has already grown to some 15 percent in Japan. The possibility has emerged that the numerical goal will be achieved ahead of the initially planned date.

Many European nations are aspiring to even higher levels. For example, the ruling coalition of Germany has agreed on setting a target share of 65 percent for renewables in 2030.

Japan should also pursue possibilities for raising the share of renewables to a maximum.

The first thing to be done in that respect is to lift the existing restrictions on the use of the power grid, which are practically serving as a barrier against power generated from renewable energy sources.

Renewable energy power producers often hesitate about working out development plans because major electric utilities, which own the power grid equipment, explain to them that they don't have enough capacity in their transmission capability.

Some leeway, in fact, is reserved in their transmission capacity, including a part that is kept unused in providing against a time of technical failures. The industry ministry and the power industry are discussing possible improvements to the operation of the power grid.

There is a pressing need for developing fair and transparent rules to allow a maximal use of the equipment that is currently available.

PAIR OF DRAWBACKS TO OVERCOME

Overcoming a pair of drawbacks is key to the goal of getting renewable energy options on a stable track of expansion. One is the cost of power generation, which remains higher than in other countries, whereas the other lies in the instability of the power supply potential, which varies depending on the weather.

The slowness of cost reduction in Japan is partly attributable to the feed-in tariff (FIT) system, which was introduced in 2012. The system has certainly been a driving force behind a spread of renewable energy sources, but experts have also pointed out that it is helping to allow the renewables industry to preserve its high-cost structure.

The FIT system is an assistance measure for guaranteeing a certain level of income to renewable energy power producers. The cost for doing so is added on top of electricity rates in the name of a levy, and the

total burden borne by the public has grown to some 2 trillion yen ($18 billion) a year. The system should inevitably be reviewed to keep that amount to a minimum.
The essential thing is to prompt competition and efficiency improvement on the part of power producers while at the same time ensuring the potential for growth will not be ruined. There are a variety of ways to do so, such as expanding a mechanism for purchasing electric power from a producer that has presented a lower price during a bidding process.
There should perhaps also be discussions on shifting the focus of policy initiatives in the coming years from direct subsidization through the FIT system to carbon tax, to be imposed on CO2 emissions, and to emissions trading. The use of market mechanisms would help allow renewables to become self-reliant at an earlier date.
In the meantime, how to level out variability in the output of wind and solar power will emerge as a major challenge as their output grows. There is no choice, for the time being, but to rely mostly on thermal power for that purpose, but the use of other means is indispensable for reducing CO2 emissions.
More specifically speaking, a variety of options are available, including the use of storage batteries and the development of a power grid that allows electric utilities to supply power to each other on a broader, regional scale. Different technological means should be assessed carefully for their extent of progress and economic efficiency so the most effective components can be combined and put to use.

DIFFERENT ROLES FOR PUBLIC, PRIVATE SECTORS

The effort to turn renewables into mainstay energy sources would take decades to complete. Sorting out the roles to be played by the public and private sectors and allowing a broad array of actors to work together are essential in overcoming hurdles and pressing ahead with that effort.
An important task to be done by the central and local governments is to develop an environment that allows private-sector players to actively engage in research, development and investments. Apart from designing the FIT and other basic systems, there is also a mountain of other things to do, such as working out rules for the use of offshore areas as wind farms and providing information on land plots that are suitable for hosting renewable power plants.
Businesses, which are the main players of action on the ground, should be ready to quickly seize business opportunities and pinpoint social agenda. Renewables account for a core part of energy-related investments overseas, thereby giving rise to a gigantic growth market.
There has been a noteworthy move in Japan's industrial circles, which appeared to be starting a bit late. More than 100 entities, including major businesses, local governments and other groups, in July set up the Japan Climate Initiative, a platform for working together to help spread the use of renewables and disseminate information on them. Its corporate participants come from a broad array of industrial sectors such as manufacturing, financing and construction.
An attempt to reshape society into one that is sustainable on the fronts of energy and the environment has now turned into a global swell and is generating new development opportunities. That momentum should be allowed to infiltrate public administrative bodies, businesses, consumers and other parties so that it will serve as a driving force for opening up a new age to come.
--The Asahi Shimbun, Aug. 26

Hitachi & General Electric planning joint development of modular reactors

October 15, 2018

Hitachi, GE to jointly develop next-generation nuclear reactors

https://mainichi.jp/english/articles/20181015/p2g/00m/0bu/043000c#cxrecs_s

TOKYO (Kyodo) -- Hitachi Ltd. and General Electric Co. will jointly develop a new type of nuclear power plant with small modular reactors, sources close to the matter said Monday.

- 【Related】Hitachi to end own-brand TV sales in Japan, strengthen tie with Sony
- 【Related】Nuclear power should be 'baseload power source': Hitachi president
- 【Related】Hitachi, Mitsubishi Heavy, Toshiba to delay nuclear integration project

The two companies, which have been long-time partners in the nuclear business, aim to commercialize the reactors, said to be cheaper to produce and safer to run, in the 2030s, the sources said.

With construction of nuclear power plants stalled in Japan following the 2011 Fukushima nuclear crisis, Hitachi has been looking to expand its nuclear plant business overseas.

A small modular reactor can be mostly assembled at a plant and brought to a power plant site, cutting time and costs needed for the plant's construction work.

A conventional nuclear power plant usually costs about 1 trillion yen ($8.9 billion) to build. Construction in Japan would cost more after Japan raised safety requirements for nuclear reactors in the wake of the meltdowns of reactors at the Fukushima Daiichi power plant triggered by the major earthquake and ensuing tsunami in March 2011.

The small modular reactor, though offering a smaller output, is designed to be set up underground to better contain radioactive materials in the event of an accident.

Hitachi has been building boiling water reactors, the same type of reactor that suffered meltdowns in Fukushima. None of those reactors have been restarted in Japan after going offline following the nuclear crisis.

The company had been planning to build two nuclear reactors in Britain but is currently reviewing the project due to expanding costs, expecting to make a final decision in 2019.

Nukes growing but slower than Govt. hoped

November 1, 2018

Japan's nuclear industry growing but likely to miss government's 2030 target
https://www.japantimes.co.jp/news/2018/11/01/national/japans-nuclear-industry-growing-likely-miss-governments-2030-target/#.W9sHzzGNyos

by Aaron Sheldrick **and** Osamu Tsukimori
Reuters
The domestic nuclear industry will miss a government target of providing at least a fifth of the country's electricity by 2030, analysis shows, but the sector is showing signs of life more than seven years since the Fukushima crisis.

With eight reactors running and one more set to come online in November, nuclear has this year overtaken nonhydro renewables in power output for the first time since the 2011 catastrophe, when all of the country's nuclear plants were idled.

Yet operators can expect as few as six units to restart in the next five years, and fewer than 20 by 2030, the analysis shows. That is far short of the 30 needed to meet the government target reiterated this year.

Based on the analysis, the world's third-largest economy may get about 15 percent of its power from nuclear in 2030, compared with a government target of 20 to 22 percent.
"It's impossible to meet the target, that's pretty much confirmed," said Takeo Kikkawa, an energy studies professor at Tokyo University of Science, who sat on an official panel that reviewed the country's energy policy this year.

He said he did not expect another round of restarts before 2020.

One major trading house predicts nuclear will account for 14 percent of power production in 2030, according to a presentation given at a private seminar this year and shown to Reuters.

Nuclear remains an unpopular energy option in Japan and the country will reboot only a fraction of the 54 reactors it had before the disaster.

Six reactors at the Fukushima No. 1 nuclear power plant are being dismantled in a decadeslong exercise that is fraught with technological challenges and radioactive waste. Operators have decided to decommission another 10 units across the country since Fukushima. The Nuclear Regulation Authority created new safety standards from scratch after the disaster highlighted failings in the industry and its overseers. All reactors must be re-licensed before restarting.

Yet Japan's nuclear industry, which before Fukushima operated the world's third-largest number of reactors and provided about 30 percent of the country's electricity, has staged a significant recovery.
The turnaround has exceeded expectations of analysts and the utilities themselves. Kansai Electric Power and Kyushu Electric Power, for instance, have won approval to restart or are on course to win approval for all the reactors they applied to re-license.
Those units are far from Tokyo and are pressurised water reactors (PWR), unlike the boiling water reactor (BWR) designs favored in eastern Japan, including those that melted down at Fukushima.

Many court cases are pending for reactors in the eastern part of the country. Local political support varies, and the regulator is locked in disputes with operators over earthquake risk assessment.

The older BWR technology used in many of the reactors under review is also an issue because the stigma of Fukushima hangs over them.

“When you come to the BWRs, the issue becomes very politicized,” said Nobuo Tanaka, the chairman of the Sasakawa Peace Foundation who was the head of the International Energy Agency between 2007 and 2011 after a stint in the industry ministry.

The reputation of Fukushima plant operator Tokyo Electric Power Company Holdings Inc. also looms large, Tanaka said.

“Tepco does not have any support as a nuclear operator,” he said. The utility has to be removed from the equation before progress on BWR reactors can be made, he said.
Tepco has reached the first stage of approval, but faces strong opposition from local residents. But Japan’s utility lobby group said progress was being made.

“The safety reviews of PWR plants took time but they have been progressing steadily and there have been some developments in the BWR category as well,” Satoru Katsuno, the chairman of Japan’s federation of electric utilities and president of Chubu Electric, said of the outlook for restart approvals.

Chubu Electric has been locked in a dispute for years with the regulator over disaster resilience measures at its Hamaoka plant, which uses BWR reactors.

The analysis suggests that Japan will rely on fossil fuels, particularly liquefied natural gas and coal, as the pace of renewables expansion slows. That will make it harder to meet its emissions targets under international agreements.

The government estimates costs for replacement fuel — mostly LNG — to compensate for idled reactors totaling ¥14.6 trillion across the industry in the six years through March.

The lack of realistic energy targets makes it harder for the industry to plan for investment, utility officials say. And the issue of disaster resilience is not going away: a big earthquake struck Hokkaido in September and left a nuclear plant reliant on backup generators.

See also:

Nuclear industry growing, but slower than government hoped
http://www.asahi.com/ajw/articles/AJ201810310064.html

Nukes & Japan

November 2, 2018

In careful moves, Japan's nuclear industry makes a comeback

http://www.asahi.com/ajw/articles/AJ201811020021.html

REUTERS
IKATA, Ehime Prefecture--On a side street near a darkened shopping arcade full of abandoned storefronts in southwestern Japan, the Sushi Ko restaurant is unusually busy on a weekday.

Balancing a tray full of drinks, Sachiyo Ozaki said most of her restaurant's customers were there because of an industry shunned elsewhere: nuclear power.

"He drives a minivan to take workers to the plant," she said, gesturing towards a man sitting at the counter. Pointing to another man sipping a beer, she added, "And he works in construction, so they've been busy, too."

"We're all for nuclear power, and you can print that," Ozaki said.

In the mostly residential neighborhood around her restaurant, hotel rooms and local inns were also packed with workers preparing to reopen Shikoku Electric Power's Ikata nuclear plant, nestled next to Japan's inland sea at the base of the verdant Sadamisaki peninsula.

Nearly eight years after an earthquake and tsunami triggered nuclear meltdowns at Tokyo Electric Power's Fukushima No. 1 nuclear power plant, the battered industry is making a quiet and somewhat unexpected return in Japan.

Ikata is a poster child for that recovery. In September, a court reversed a decision that had idled Shikoku Electric's sole nuclear reactor for about a year, paving the way for the operator to re-open the facility last week.

Regional utilities like Shikoku Electric have aggressively fought a string of lawsuits since 2011, hiring veteran lawyers to beef up their legal teams. At the same time, they wooed towns where nuclear plants are based, visiting with residents door to door while the government kept up a stream of generous subsidies for local projects.
Thanks in large part to this strategy, Japan is on track to have nine reactors running in the near future.

That is a far cry from the 54 running before 2011--all of which were idled after the Fukushima disaster--but more than analysts and experts expected, considering it seemed at the time like the end of the road for the country's nuclear industry.

A Reuters analysis calculates that as few as six more reactors are likely to restart within the next five years, eight will mostly likely be mothballed and that the prospects for two dozen others is uncertain.

Despite that cloudy outlook, nuclear power recently overtook renewables like wind and solar in Japan's energy mix for the first time since Fukushima.

COURT BATTLES

Japan embraced nuclear power after World War II, spurred by the promise of clean energy and independence from foreign suppliers.

But the botched Fukushima disaster response sowed public distrust in the industry and the government.

Given that skepticism, some see a recent run of court victories by utilities as the resurgence of an alliance of industry, government and host communities that for decades promoted the construction of nuclear facilities.

"If our losing streak continues, we could see 20 to 25 reactors come back online," says Hiroyuki Kawai, a prominent anti-nuclear lawyer who represented citizens in a suit against Shikoku Electric.

Since 2011, hundreds of citizens represented by volunteer lawyers like Kawai have filed nearly 50 lawsuits against the Japanese government and utilities in 25 district and appellate courts.

In Ikata, Shikoku Electric spent months gaining approval for a restart from the tougher post-Fukushima regulator, rebooting one of its plant's three reactors in 2016. But in December 2017, an appellate court issued a temporary injunction keeping the reactor, already idled for routine maintenance, shut down for nine more months.

In response, the company pulled more staff into its legal department and drafted its head of nuclear power to supervise the team. The utility also recruited outside lawyers who had handled cases for other operators.

"There are only a handful of lawyers knowledgeable about nuclear litigation, so they're popular and sought after," said Kenji Sagawa, the deputy general manager of the company's Tokyo office.

Yoshiaki Yamanouchi, 76, began his career in nuclear litigation in 1973 when he represented Shikoku Electric in a landmark suit brought by Ikata residents seeking to stop the plant from opening.

He still represents the utility and works with other companies, advising younger lawyers fighting similar cases, which he calls "superficial," in far-flung district courts.

"Utilities, in particular Shikoku, have gotten much smarter about fighting for the plants they know they can reopen and mothballing others that would cost too much time and money," Yamanouchi said. The utility is decommissioning two of the three reactors at Ikata.

Shikoku Electric would not disclose how much it has spent fighting legal challenges, but said it was a fraction of the cost of idling a plant.

Every month a nuclear reactor sits inoperative, the utility spends 3.5 billion yen ($31 million) for additional fuel at its conventional power plants. Shikoku has also spent 190 billion yen on safety upgrades to meet stricter rules set by the Nuclear Regulation Authority.

Activists have seen some victories. Western Japan's Kansai Electric Power Co., Inc., has had its reactors slapped with temporary injunction orders multiple times over the years. All of these decisions were later overturned by higher courts.

"Before Fukushima, these utilities won by default--now, they have to work harder," said Yuichi Kaido, a lawyer who has spent three decades dueling Yamanouchi in court.

Shikoku Electric still faces several lawsuits and injunction requests. A Hiroshima court rejected a request from residents to extend the suspension of the Ikata reactor on Oct. 26, a day before the operator restarted it.

A COMPANY TOWN

The quiet revival of Japan's nuclear industry is most tangible in rural areas like Ikata, which are home to the bulk of the country's nuclear plants.

Ikata is best known for its "mikan" mandarin oranges harvested on terrace farms on the sides of steep hills overlooking the Seto Inland Sea and Uwa Sea.

The town, with 9,500 residents, relies on nuclear power for a third of its annual revenue. Since 1974, Ikata has received more than 101.7 billion yen in such payments.

These funds literally built the town; Ikata's roads, schools, hospitals, fire stations and even five traditional "taiko" drums for festivals were all paid for with subsidies.

"My biggest struggle now is finding one or two more pillars for this town other than nuclear power," said Ikata Mayor Kiyohiko Takakado.

The town and utility's mutual dependence stretch back decades.

Kiyokichi Nakamoto was a city councilman in Ikata when he successfully wooed the utility to his hometown. On the walls of the dim parlor of his home are framed commendations from two prime ministers, thanking him for his contributions to Japan's energy policy.

"We were a poor village with only farming and fishing," the 90-year old said. Had the town failed to attract the plant, Ikata would have gone broke, Nakamoto said.

In the wake of the Fukushima disaster, Shikoku Electric campaigned to reassure residents of their plant's safety. Employees wearing the company's blue uniforms went from house to house to explain how their plant was different from Fukushima No. 1--and therefore safe.

"If something like Fukushima happened here, our reputation would be destroyed in an instant," said orange farmer Shigeto Suka, 54, as he checked the still-green mikan on branches.

He and other farmers in Yawatahama, a neighboring town 15 kilometers from the plant, worry that even a hint of contamination would devastate their brand.

After the 2011 nuclear disaster, Fukushima's farmers and fishermen were unable to sell their produce because of fears over contaminated food. Dozens of countries still have restrictions on Fukushima produce.

For others in the area, the Ikata plant feels like an inextricable part of life.

Hiroshi Omori, 43, spent most days over the summer at Shikoku Electric's visitors' house overlooking the Ikata plant. His three young children take free art classes there while Omori and other parents wait in air-conditioned rooms sipping water and tea.

But Ikata is projected to shrink to 5,000 residents over the next 20 years, and Takakado recently said he found it hard to imagine an industry that could replace nuclear power.
This year he joined dozens of other mayors across Japan to voice their support for the industry and ask the government to clarify its position on building new plants or replacing old ones.

"I'm just trying to prevent the town from losing even more people," he said.

Turnaround?

November 1, 2018

Japan's nuclear industry growing but likely to miss government's 2030 target

https://www.japantimes.co.jp/news/2018/11/01/national/japans-nuclear-industry-growing-likely-miss-governments-2030-target/#.W9sHzzGNyos

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Japan to reconsider Turkey nuclear project

December 4, 2018

Japan to scrap Turkey nuclear project
https://asia.nikkei.com/Economy/Japan-to-scrap-Turkey-nuclear-project?fbclid=IwAR1E1VLkj7ksYepPmzqA3NRnO9TczA7a_iHYJeVezQN86Z-xZheO26fooCE

asia.nikkei.com - décembre 4, 2018
TOKYO -- A Japan-led public-private consortium is set to abandon a Turkish nuclear power project that had been touted as a model for Tokyo's export of infrastructure, Nikkei has learned.

The delayed project's construction costs have ballooned to around 5 trillion yen ($44 billion), nearly double the original estimate, making it difficult for lead builder Mitsubishi Heavy Industries and its partners to continue with the plans.

The increase was due to heightened safety requirements in the wake of the 2011 meltdown at Japan's Fukushima Daiichi nuclear power plant. The recent fall in the Turkish lira has also contributed to the cost increases.

The decision to cancel the project, now in final negotiations among the parties, comes as a blow to Japan's nuclear industry, which is looking for avenues for growth overseas as it becomes increasingly unlikely that a new plant will be built at home post-Fukushima.

The Japanese and Turkish governments agreed in 2013 on the project, with an alliance of Japanese and French businesses centered on Mitsubishi Heavy to build four reactors in the city of **Sinop on the Black Sea**. Initial plans had construction beginning in 2017, with the first reactor coming online in 2023.

Mitsubishi Heavy submitted the revised cost estimate to the Turkish government in a late-July report. Though the company worked to rethink the overall costs, apparently no compromise could be reached with the Turkish government on financing terms, as well as prices for the electricity generated by the plant. Top Mitsubishi Heavy executives have said the company's decisions would be based "within the scope of what is economically rational."

Despite the nuclear plant's cancellation, the Japanese government intends to continue support for Turkey's energy sector, and new frameworks for cooperation are under consideration. Details remain to be settled, but building an advanced coal plant with reduced carbon dioxide emissions appears to be among the proposals on the table.
Japan's Ministry of Economy, Trade and Industry and nuclear plant builders such as Mitsubishi Heavy have worked in tandem to pursue nuclear projects overseas. With the Turkish plan canceled, the only remaining overseas project will be a plant in the U.K. planned by Hitachi. Hitachi signed a memo to advance the project in June with the British government, and parties are hurrying to iron out a final deal. But hurdles remain, including requests from London to trim the total cost.

Japan's effort to line up more overseas projects is aimed in part to maintain the scale of the country's nuclear power industry, as well as its skill in related technologies. If the energy sector remains mired in a harsh business environment, industry consolidation could accelerate.

In 2017, global investment toward building new nuclear projects plunged roughly 70% year on year to $9 billion, according to the International Energy Agency. With safety costs rising, nuclear has grown less competitive with other forms of energy.

A number of aging Japanese reactors are set to be decommissioned soon, with Kansai Electric Power planning to scrap the Nos. 1 and 2 reactors at its Oi plant in Fukui prefecture, and Tohoku Electric Power the No. 1 unit at a plant in Miyagi Prefecture's Onagawa. Meanwhile, new nuclear projects have hit a standstill in the face of deep public wariness.

December 7, 2018

Japan reconsidering Turkey nuclear project

https://www3.nhk.or.jp/nhkworld/en/news/20181207_15/

The Japanese government and a consortium of private firms are reconsidering involvement in a nuclear power plant project in Turkey. They say the cost of the planned venture has skyrocketed.

The government has been supporting the consortium consisting of Mitsubishi Heavy Industries and other private Japanese firms.

The export of infrastructure is a pillar of the Abe administration's growth strategy.

After conducting research into the project, the consortium decided that the cost of building a nuclear power plant on the Black Sea coast would be over 35 billion dollars, more than double the initial estimate.

The increase is due to higher safety requirements implemented after the 2011 disaster at Japan's Fukushima Daiichi nuclear plant.

The Japanese side had asked Turkey to increase the purchasing price of power generated at the nuclear plant.

But Japanese Prime Minister Shinzo Abe and Turkish President Recep Tayyip Erdogan were unable to reach consensus in talks in Argentina earlier this month.

Japan's trade and industry minister Hiroshige Seko is expected to discuss the matter with Turkish government officials as early as January.

Taiwan changes targets

06.12.2018_No242 / News in Brief

Taiwan's Cabinet Confirms Plans To Abolish 2025 Nuclear Phaseout Target

https://www.nucnet.org/all-the-news/2018/12/06/taiwan-s-cabinet-confirms-plans-to-abolish-2025-nuclear-phaseout-target
Policies & Politics
6 Dec (NucNet): Taiwan's cabinet today announced it has agreed to abolish the target it had previously set of making Taiwan a nuclear-free country by 2025, instead opting to make the planned nuclear phaseout a more long-term objective.
The announcement follows a referendum last month in which voters decisively rejected the nuclear phaseout, 59% to 41%.

The referendum asked whether voters agreed to repeal a paragraph in Article 95 of the Electricity Act, which states that "all nuclear-energy-based power-generating facilities shall cease to operate by 2025".

Press reports in Taiwan quoted cabinet spokeswoman Kolas Yotaka as telling a press conference today that the cabinet had agreed to delete Article 95-1 of the Electricity Act and that the proposal would be sent to the Legislative Yuan, or parliament, for consideration.

Ms Totaka said that during the meeting, Premier Lai Ching-te said the government's goal of promoting a non-nuclear Taiwan remained unchanged, but the deadline will be cancelled, according to the report.

The so-called 2025 Non-Nuclear Homeland goal was a policy pledged by president Tsai Ing-wen during the 2016 presidential election. The goal was to phase out nuclear power by 2025, while increasing the percentage of renewable energy and natural gas, and reducing the use of coal.

Taiwan has four commercially operational nuclear power reactors at two sites – Kuosheng and Maanshan. According to data by the International Atomic Energy Agency, nuclear power provided about 9% of Taiwan's electricity output in 2017.

Chinshan, Taiwan's third nuclear power station, has two units which were permanently shut down earlier this month, according to the IAEA. Operator Taipower announced yesterday that it intends to decommissions Chinshan-1.

Construction of a fourth nuclear power station at Lungmen was suspended following the March 2011 Fukushima-Daiichi accident in Japan. Two of four planned units were almost completed at the time the project was discontinued.

Hitachi may delay decision on Welsh plant

December 17, 2018

Hitachi may delay final decision on nuclear plant project in Wales
https://www.japantimes.co.jp/news/2018/12/17/business/corporate-business/hitachi-may-delay-final-decision-nuclear-plant-project-wales/#.XBgJJ2lCeos

JIJI
Hitachi Ltd. may have to delay its final decision, planned for 2019, on a nuclear plant construction project in Britain.

By the end of this year, Hitachi hoped to select a company that will acquire an equity stake in a British nuclear business subsidiary that will operate the project. However, according to informed sources, it is now difficult to secure an investor by the year-end.

Therefore, a final decision on the project will likely be delayed. This in turn could force a postponement of the start of plant operations, which is currently slated for the early 2020.

Through the subsidiary, Hitachi plans to start constructing two reactors on the island of Anglesey in Wales as early as 2020.

To reduce management risks associated with the project, Hitachi aims to lower its equity ownership of the subsidiary from the current 100 percent to less than 50 percent.

But Hitachi's negotiations with the British government on financial assistance to ensure profitability of the project have not been concluded, and the company has yet to start full efforts to invite applications for investment in the subsidiary, the sources said.

With the total project cost estimated at ¥3 trillion, well over the initial plan, Hitachi agreed in June with the British government to start full-scale negotiations in order to get the project going.

The two sides have discussed the possibility of the British government providing loans of more than ¥2 trillion or acquiring an equity stake worth some ¥300 billion, but they are believed to have not yet reached an agreement.
Prime Minister Shinzo Abe may hold talks with his British counterpart, Theresa May, in January.

Hitachi plans to decide carefully whether the nuclear project is still feasible while looking at the results of the bilateral summit talks, the sources said.

Focusing on nukes will lead Japan nowhere

December 25, 2018

Editorial: Japan must ditch nuclear plant exports for global trends in renewable energy
https://mainichi.jp/english/articles/20181225/p2a/00m/0na/011000c

Projects to export nuclear power plants, a pillar of the "growth strategy" promoted by the administration of Prime Minister Shinzo Abe, appear to be crumbling.

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Factors behind the failures include ballooning construction costs due to strengthened safety standards after the triple core meltdowns at Tokyo Electric Power Co.'s (TEPCO) Fukushima Daiichi Nuclear Power Station in March 2011, and growing anti-nuclear sentiments around the world.

Nothing else can be said but that the export projects have effectively failed. The prime minister's office and the Ministry of Economy, Trade and Industry must bear the responsibility of continuing to promote these exports despite a massive change in the attitude toward nuclear power plants.

"We are really stretched to our limit," Hitachi Chairman Hiroaki Nakanishi recently said of the company's nuclear power plant construction plan in Britain. The statement came at a regular press conference of the Japan Business Federation, or Keidanren, indicating that continuing the project is not feasible.

Hitachi coordinated closely with the Japanese government to advance the U.K. project. The company was to build two nuclear power reactors in midwestern Britain through a local subsidiary, and to start operating the facilities in the first half of the 2020s.

But, the total estimated cost of the project has skyrocketed from the initial figure of 2 trillion yen to 3 trillion yen due to growing safety measure costs. Hitachi, hoping to distribute financial risk, sought investments from major power utilities and other firms, but the negotiations hit a snag due to the lowered profitability of the project.

In a bid to secure profits at an early stage, Hitachi requested that the British government raise the price of the electricity to be generated by the plants, which was guaranteed to be purchased in advance. This arrangement also hit a wall as confusion spread in the British political sphere over the nation's planned exit from the European Union. Hitachi, which has a stake in the local subsidiary, would lose some 300 billion yen if the project was cancelled.

Similar trouble has arisen in Turkey. A plan to export nuclear power plants, which began from a close relationship between Prime Minister Abe and Turkish President Recep Tayyip Erdogan, has also run aground.
Under the original plan, Mitsubishi Heavy Industries and other businesses were to build four midsized reactors in Turkey along the coast of the Black Sea at a total estimated cost of 2.1 trillion yen. The amount has more than doubled to 5 trillion yen, due in part to increased cost estimates for earthquake-proof measures. This development now requires the Japanese and Turkish governments to extend additional financial support for the project, but the two sides have apparently failed to reach an agreement.

The Abe administration has thrown its weight behind the export of nuclear power plants as a major element of its economic "growth strategy," with the trade ministry choreographing the moves for the projects. The ministry regards nuclear power generation as one of the main sources of power generation, always protecting and promoting the nuclear power industry.

However, after the Fukushima nuclear disaster in 2011, building such plants within Japan has become difficult, and the ministry hoped to maintain the size of the nuclear power industry through exports and the transference of relevant technologies and human resources to the next generation. But this has ignored the fact that international trends have shifted since the disaster.

The construction cost for nuclear power plants has grown exponentially with the increased focus on safety measures, while renewable energy sources such as solar power have become cheaper with the rapid expansion of their use. As such, the relative price competitiveness for nuclear power reactors has declined; it can no longer be called an "inexpensive energy source."

According to the International Energy Agency (IEA), global investments for new nuclear power plant construction in 2017 dropped to 30 percent of the previous year's figure. Global policy is moving away from nuclear power plants and instead tipping toward renewable energy sources.

The failure to reflect this trend led to the huge losses incurred by Toshiba Corp., which bought Westinghouse Electric Co. with backing from the trade ministry to pursue its troubled nuclear power projects in the United States.

In 2012, a national referendum in Lithuania voted down a project to build a Hitachi nuclear power plant, and then in 2016, Vietnam scrubbed a similar construction plan. The same year, Japan signed a nuclear cooperation agreement with India, eyeing exports of nuclear power plants despite concerns about the proliferation of nuclear materials to the nuclear weapon state outside of the Nuclear Non-proliferation Treaty. Still, the export plan has yet to materialize. It is clear that the export of nuclear power plants has been backed into a corner for quite some time already.

It is Japan that caused one of the world's worst nuclear accidents, and is now working on decommissioning the damaged reactors in a process that will take decades to complete. Many people in Japan hold deeply rooted feelings against the government's placement of nuclear power plant exports as a pillar of the nation's growth strategy.

In response, the government has simply justified the projects by saying they will contribute to developing countries with a growing power demand by offering a cheap source of power to support their economic growth. Rising construction costs, however, has rendered this explanation moot.

Japan still has many nuclear power plants to run, and the decommissioning of older plants will soon be in full-swing. The latest technology and skilled experts are vital for these projects to be completed successfully.

Continuing to focus on nuclear power export, however, will lead Japan nowhere. The government should take another look at global trends, and review the basis of its nuclear power policy to rid Japan of nuclear power as soon as possible.

Japan's nuke exports : Rising safety costs, dwindling profitability

January 4, 2019

Japanese gov't plan to export nuclear power technology floundering
https://mainichi.jp/english/articles/20190104/p2a/00m/0bu/030000c

TOKYO -- The Japanese government's strategy to export nuclear power technology has run aground amid rising safety costs and deteriorating prospects for project profitability. While the government has aimed to maintain the country's nuclear technology and expert resources through construction of atomic reactors abroad amid stalled nuclear plant development at home, its projects with Turkey and Britain have both hit snags.

- 【Related】Editorial: Japan must ditch nuclear plant exports for global trends in renewable energy
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"The Turkish government is in the midst of evaluating the project. I believe it will respond to us in some way or other," said Shunichi Miyanaga, president of Mitsubishi Heavy Industries Ltd., in mid-December about a plan to build a nuclear power plant in Sinop, northern Turkey. Miyanaga's comment suggested that the fate of the project had been left up to the Turkish government.

At the end of July last year, Mitsubishi Heavy told the Turkish government that the cost of the project would total somewhere around 5 trillion yen, more than doubling from the original estimate of roughly 2.1 trillion yen. As the plan envisages recovering the costs through profits from power generation at the nuclear facility, it would not become profitable unless Turkey purchases the generated electricity at a higher price than originally expected. If Turkey does not comply with the increased burden, Japan would withdraw from the plan.

The nuclear plant project was pitched by Prime Minister Shinzo Abe to then Turkish Prime Minister Recep Tayyip Erdogan in 2013. At the time, Abe vowed at a press conference in Ankara, "We will share our experiences and lessons from the (2011) disaster at the nuclear plant (run by the Tokyo Electric Power Co. in Fukushima) with the rest of the world, and will strive to contribute to enhancing the safety of nuclear power generation."

However, the catastrophe prompted the international community to turn a wary eye toward nuclear power, leaving the costs for safety measures at nuclear plants to swell. The steep fall in the Turkish lira over the past year by more than 30 percent also added to the project's deteriorating profitability.

Under these circumstances, Tokyo plans to propose to Ankara that it would provide comprehensive energy cooperation in such spheres as coal-fired thermal power generation and liquefied natural gas, in place of the atomic plant project. Because the nuclear power project is based on an agreement struck by both leaders, such a proposal by Tokyo could face a backlash from Ankara, but Japan's focus is already shifting to how to withdraw from the project without undermining bilateral diplomatic ties with Turkey.

Meanwhile, a nuclear plant construction project undertaken by Hitachi Ltd. on the Isle of Anglesey in central Britain has also run into rough waters, after the project's costs soared to approximately 3 trillion yen, about 1.5 times the initial estimate.
In May last year, Hitachi Chairman Hiroaki Nakanishi held talks with British Prime Minister Theresa May, where the latter agreed to expand her government's support for the project. However, British citizens have been wary of the scheme out of concern that it could lead to rising electricity bills should Japan's request to raise the sale price of electricity be accepted.

As the May administration is suffering from sagging approval ratings amid turmoil over Britain's exit from the European Union, it is becoming increasingly difficult for London to comply with an increased burden. At home, Japanese companies are also becoming more reluctant to invest in the project out of fears of poor profitability and accident risks. Given the circumstances, Tokyo is also likely to exit the project.

The Abe administration has made the export of nuclear power technology a pillar of its growth strategy, but to little avail thus far. While the government intends to pursue measures to counter China and Russia's aggressive drive to export nuclear plants by stepping up financial support for partner countries and through other measures, such a strategy may end up bringing more harm than good.

"The empirical values of China and Russia, where nuclear power plants are still being built, are considerably high (compared with other countries including Japan)," said Tomoko Murakami of the Institute of Energy Economics, Japan. In China, where 100 nuclear reactors are planned to be operational by 2030, state-owned companies are securing a spate of orders for nuclear power projects mainly in emerging countries, with the financial backing from the Chinese government. Russia also is said to undertake the whole process from leasing nuclear fuel to other countries to reprocessing their spent fuel, with the possible aim of boosting its diplomatic and security influence as well.

Officials in the Japanese nuclear power industry are finding a ray of hope in the Czech Republic's plan to build a nuclear power plant, which has also attracted attention from China, Russia, South Korea and a joint venture of Mitsubishi Heavy and France's Framatome. However, financial issues are again casting a shadow over the plan.
Tadashi Narabayashi, a specially appointed professor at the Tokyo Institute of Technology, warns that at this rate, "Japan would lose its own atomic power industry, and would have to import Chinese-made nuclear plants 20 years from now. It's a critical situation."

Meanwhile, a senior official of an economy-related government body said, "It is difficult for Japanese manufacturers, which can't even build nuclear plants in their own country, to win confidence (abroad)," suggesting that the government's strategy to export nuclear power technology in itself is unreasonable.
(Japanese original by Takayuki Hakamada and Ryo Yanagisawa, Business News Department)

Hitachi to suspend UK nuke project

January 11, 2019

Hitachi preparing to suspend Anglesey nuclear power project in U.K.
https://www.japantimes.co.jp/news/2019/01/11/business/corporate-business/hitachi-preparing-suspend-nuclear-power-project-u-k/#.XDkAt2lCeos

JIJI
Hitachi Ltd. is in the final stages of preparations to suspend a project to build a nuclear power plant in the U.K., it was learned Friday.

The major heavy machinery-maker will confirm the move at a board meeting that could be held as early as next week, sources with knowledge of the matter said.

Hitachi is settling on the suspension as it is unclear whether the company will be able to receive additional assistance from the U.K. government, the sources said. It has had difficulty finding investors for a subsidiary that will operate the plant amid concerns over profitability.
The firm is expected to book up to about ¥300 billion in related losses in the business year through March, the sources said.

The focus of the project is the construction of a nuclear power plant on the island of Anglesey in north Wales, which had been scheduled to go into operation in the early 2020s.

Due to the growing likelihood that the project's costs will far exceed the initial estimate, reaching ¥3 trillion, the company had proposed to London a review of the project including the level of financial assistance that would be available to the firm.

At a new conference on Thursday after a meeting with her Japanese counterpart, Shinzo Abe, U.K. Prime Minister Theresa May said that whether or not the project would go ahead was a commercial decision for Hitachi, leaving the future course of the project unclear.

The firm plans to suspend the project and reduce the related workforce, the sources said.

The company said in a statement that there has been no decision on the project, although it is closely examining a possible suspension and the potential financial impact from the perspective of economic rationality.

Hitachi to suspend all work on UK nuclear plant
https://asia.nikkei.com/Business/Business-Deals/Hitachi-to-suspend-all-work-on-UK-nuclear-plant

Funding deadlock looks set to sink Japan's last overseas nuclear project

TOKYO -- Hitachi plans to put a U.K. nuclear power project on hold as negotiations with the British government over funding hit an impasse, all but closing the book on Tokyo's vision for nuclear infrastructure exports.

The Japanese industrial conglomerate's board is expected to officially decide next week to suspend all work on the plant, including design and preparations for construction. Hitachi will freeze the roughly 300 billion yen ($2.77 billion) in assets held by its British nuclear business and write down their value, likely booking a loss of 200 billion yen to 300 billion yen for the fiscal year ending in March.

The move would bring to a halt Japan's last active overseas nuclear project after the news last month that a Japanese-led consortium including Mitsubishi Heavy Industries was scrapping a project in Turkey. With the aversion to nuclear power that took hold after the March 2011 Fukushima Daiichi disaster showing

little sign of abating, prospects look grim for a sector that the Japanese government had positioned as a pillar of its infrastructure export drive.

Hitachi had taken on the planned construction of two reactors on the Welsh island of Anglesey after acquiring U.K.-based Horizon Nuclear Power in 2012.

After Hitachi Chairman Hiroaki Nakanishi discussed the project with British Prime Minister Theresa May last spring, London agreed to arrange more than 2 trillion yen in financing for the project, about two-thirds of the total cost. Japanese and British public-private consortia and Hitachi would each cover a third of the remaining 900 billion yen.

But Hitachi had trouble finding corporate investors in Japan, with major utilities such as Tokyo Electric Power Co. Holdings and Chubu Electric Power proving reluctant to participate. The conglomerate asked London late last year for additional financing, but negotiations have made no headway, and mounting opposition to May's government within parliament over Brexit has raised questions about the future of U.K. nuclear policy.

<image: >

Hitachi set conditions on continuing its participation in the nuclear project in order to reduce its exposure to risk. It seeks to unload enough of its stake in wholly owned Horizon to take the company off its consolidated books, and it wants a guaranteed electricity price to ensure a steady stream of income once the plant goes online. But the odds of these requirements being met now look dim, which factored into the decision to halt the project.
The suspension will spare Hitachi from shelling out 3 billion yen to 4 billion yen a month on the plant.

The company is leaving the door open to a return. The project is "not being abandoned," a source close to Hitachi told Nikkei, suggesting the company would keep an eye on the situation and resume the project if possible.

While negotiations with London are apparently set to continue, reworking the project to the extent Hitachi requires will be no easy task. As things stand now, it appears likely that the company will ultimately be forced to bow out.

January 11, 2019

Hitachi to freeze UK nuclear power project, post $2 billion special loss – Nikkei

TOKYO (Reuters) - Hitachi Ltd (6501.T) has decided to freeze its 3 trillion yen nuclear project in Britain and to post **a special loss of about $2 billion** (1.6 billion pounds) for the year ending in March, the Nikkei business daily reported on Friday.
Hitachi is set to vote on the planned suspension at its board meeting next week, the Nikkei said without citing sources.
Hitachi's Horizon Nuclear Power unit has struggled to find investors for its plans to build a new power plant in northern Wales.
Hitachi said the asset value of the plant in Wales was 296 billion yen as of the end of September. The special loss from freezing the project is expected to be 200 billion to 300 billion yen, according to the Nikkei.
A Hitachi spokesman said nothing has been decided on the suspension.
Hitachi was hoping a group of Japanese investors and the British government would each take a one-third stake in the equity portion of the project. A company source has said the project would be financed one-third by equity, two-thirds by debt.
The Nikkei report comes after another Japanese industrial conglomerate, Toshiba Corp (6502.T**), scrapped its British NuGen project after its U.S. reactor unit Westinghouse went bankrupt and it failed to sell NuGen to South Korea's Korea Electric Power Corp.**
Shares of Hitachi rose by as much as 6 percent on the Tokyo stock exchange after the report.
Reporting by Makiko Yamazaki; editing by Richard Pullin and Christian Schmollinger

Interview with Koizumi

January 17, 2019

Koizumi says Japan must say 'no' to nuclear energy
http://www.asahi.com/ajw/articles/AJ201901170010.html

THE ASAHI SHIMBUN

When he was prime minister, Junichiro Koizumi championed the use of atomic power to generate electricity.

Then the 2011 earthquake and tsunami disaster struck, triggering a crisis at the Fukushima No. 1 nuclear power plant in Fukushima Prefecture.
Koizumi, in office from 2001 to 2006, and widely regarded as one of Japan's most popular postwar leaders, started reading up on the nuclear issue, and had a change of heart.

Koizumi, 76, published his first book by his own hand titled “Genpatsu Zero Yareba Dekiru” (We can abolish all nuclear plants if we try) in December. It is available from Ohta Publishing Co.

In it, he lambasts consumers for lacking a sense of crisis and simply believing a serious accident like the Fukushima disaster will never happen again in Japan during their lifetime.

In a recent interview with The Asahi Shimbun, Koizumi said it was “a lie” to claim that nuclear power is “safe, low-cost and clean,” although that is precisely what he espoused when he held the reins of power.
* * *
Excerpts from the interview follow.

Question: An opinion poll by The Asahi Shimbun in February 2018 showed that 61 percent of people oppose the restart of idle nuclear reactors, and yet, reactors are successively being brought back online. What is your view about this?

Koizumi: Many people still support the zero nuclear power generation policy. When I teamed up with Morihiro Hosokawa, (a former prime minister), who ran for the Tokyo governor's election (in 2014), to call for abolition of nuclear power facilities, voters on the streets showed a positive reaction.

But now many people do not realize how dangerous nuclear reactors are. They probably believe a nuclear accident will never occur again while they live because of all the attention that has been paid to safety since the Fukushima crisis.

However, in the 2012 report compiled by the government’s panel to investigate causes of the disaster, the panel’s chair said, “Things that are possible happen. Things that are thought not possible also happen."

In other words, there are no totally safe technologies.

Q: Many people seemingly believe that they have no choice but to accept nuclear power because it costs less than other types of electricity generation and electricity rates are cheaper. Do you agree?

A: The argument is doubtful. Nuclear power is relatively cheap just because the government covers part of the costs. Nuclear plants cannot be operated without assistance from the government. Private financial institutions would not extend loans to operators of nuclear facilities if the state did not provide guarantees.

Were it not for governmental support and taxpayers' money, nuclear power would be more expensive than other kinds of energy.

Renewable energy (such as solar and wind power) currently accounts for 15 percent of total power production in Japan. The percentage is much higher than before the Fukushima crisis. Even if costs slightly increase, citizens would accept the zero nuclear policy.

Q: Is it really possible to replace all the nuclear reactors with other sorts of power plants?

A: No reactors were operated for two years after the Fukushima disaster. But no power shortages were reported during the period. That means Japan can do without nuclear plants. It is a fact.

Q: During your tenure as prime minister (between 2001 and 2006), it emerged in 2002 that Tokyo Electric Power Co. had concealed problems at its nuclear facilities. Didn't that cause you to lose your trust in nuclear power even then?

A: No. Power supply is important and the risk of power failures could damage the economy. It was then said to be difficult to replace (nuclear plants that produced) 30 percent of the nation's electricity needs with other power sources.

As there were few facilities to generate power based on renewables at the time, I believed nuclear reactors were essential. I simply trusted the Ministry of Economy, Trade and Industry, which said "nuclear energy is safe, low-cost and clean."
But that was a big lie.

Although some people argued "nuclear plants are dangerous" even before the Fukushima crisis, I was deceived by the ministry and did not take their words seriously.
I did some soul-searching and decided I ought to spread the word that Japan can do without nuclear plants.

Q: You said "deceived." Are you working to rectify your past mistake?

A: Yes. I am touring across Japan as I am keen to share my thoughts with many people.

Q: The issue of nuclear plants and their safety has hardly featured in recent national election campaigns. What's your take on this?

A: The construction of a nuclear reactor is estimated at 1 trillion yen ($9.28 billion) now. Building reactors requires many materials, so many companies are involved in the nuclear power business.

Many tiny, small and midsize companies benefit from nuclear plants. Many of them insist that abolishing nuclear power would throw people out of work.

Some labor unions that support opposition parties are engaged in the nuclear power generation industry, though the (main opposition) Constitutional Democratic Party of Japan says it is in favor of the zero nuclear power policy.

Q: What do you think is important in realizing a nuclear-free society?

A: Prime Minister Shinzo Abe insists nuclear plants are essential, so many lawmakers remain silent about the issue. But there are lawmakers even in the (ruling) Liberal Democratic Party who support the zero nuclear power policy.

If Abe declares the state will abolish all nuclear plants, the situation will drastically change. Both ruling and opposition parties can cooperate over the issue.

Why hasn't the government set dream-inspiring goals to promote solar, wind and geothermal power generation?

Q: Could you explain the words in your book that "it is regrettable and irritating that I was deceived"?

A: When meeting with Abe, I always tell him, "Be careful not to be deceived by the economy ministry." But he just smiles a wry smile and does not argue back.

He should not miss the current political opportunity that he has the upper hand (to change the government's conventional nuclear energy policy).

Q: Do you talk with your son and Lower House lawmaker Shinjiro Koizumi about the issue of nuclear plants?

A: He knows my opinion all too well. He is still young, so he should do what he wants after gaining power. (This article is based on an interview by Asahi Shimbun Staff Writer Takashi Arichika.)

Hitachi pulls the plug of Wales nuke plant project

January 17, 2018

Hitachi scraps £16bn nuclear power station in Wales

https://www.theguardian.com/business/2019/jan/17/hitachi-set-to-scrap-16bn-nuclear-project-anglesey-wales

Japanese giant unable to agree deal with UK as fears grow for Anglesey atomic plant

Adam Vaughan

Hitachi has scrapped plans to build a nuclear power station in Wales, becoming the second firm in two months to abandon a major nuclear project and triggering “a full-blown crisis” for the UK energy’s strategy.

The £16bn Wylfa plant on Anglesey was meant to be the next in a line of new nuclear plants behind Hinkley Point C but the Japanese conglomerate failed to reach a deal with the UK government.

A Hitachi board meeting pulled the plug on mounting costs on Thursday, and the company said it would take a 300bn yen (£2.14bn) hit from axing Wylfa.
The move was a “significant blow” to the UK’s future energy supply plans, the Confederation of British Industry said.

Unions expressed dismay over the cancellation, which will involve around 300 job losses at Hitachi’s UK subsidiary, Horizon Nuclear Power, and about a thousand more in the supply chain. It will also mean an anticipated 9,000 construction jobs will not materialise.

A second Hitachi plant at Oldbury in Gloucestershire will be shelved too.
Duncan Hawthorne, CEO of Horizon Nuclear Power, said that the company had been unable to reach a deal in talks with London and Tokyo and was therefore suspending Wylfa and Oldbury.

“I am very sorry to say that despite the best efforts of everyone involved we’ve not been able to reach an agreement to the satisfaction of all concerned.”

The collapse of the power stations and the Moorside project that Toshiba scrapped in November means the government has a huge hole to fill in a decade’s time after old nuclear and coal plants have closed.

Together the three new nuclear plants would have supplied 15% of electricity demand.
Questions will be raised over whether ministers should redouble their efforts to make the numbers work for nuclear, or pivot to a new strategy that hugely expands the build-out of renewables.

Business secretary Greg Clark said the government had offered the company a “generous and significant” package of support. That included providing a debt facility for the project, taking a one third stake and a guaranteed price of power of up to £75 per megawatt hour for 35 years. The wholesale price is about £50 per MWh.

While far below the £92.50 awarded to EDF Energy for Hinkley Point C**, the Hitachi offer is still much higher than the** £57.50 for some windfarms in the early 2020s**, a price that is expected to fall even lower in government auctions later this year.**

Clark told MPs that renewables had been getting cheaper in the past five years while nuclear had become more expensive because of safety measures. “The challenge of financing new nuclear is one of falling costs and greater abundance of alternative technologies, so that it is being outcompeted,” he said.

However, Clark said he was still committed to new nuclear and would be publishing details of a new approach to financing in the summer.

The nuclear industry insisted it still had a key role to play. "The urgent need for further new nuclear capacity in the UK should not be underestimated, **with all but one of the UK's nuclear power plant due to come offline by 2030,"** said Tom Greatrex, chief executive of the Nuclear Industry Association.

Hinkley's developer, EDF Energy, said its own projects – which include plans for a site at Sizewell in Suffolk – were making good progress and showed "nuclear has a strong future in the UK."

Rebecca Long-Bailey, shadow business secretary, said: "Just two months ago, the government's lack of clarity over funding for new nuclear led Toshiba to withdraw from Moorside. That was a blow to the UK's energy security, its decarbonisation goals, and the economy of Cumbria.

"But with Hitachi's decision to withdraw from the Wylfa nuclear power plant, this triple blow has escalated into a full-blown crisis."

Labour said that Theresa May had questions to answer over whether she had raised the issue during meetings last week with the Japanese prime minister, Shinzo Abe. The Japanese side has said she did not.

Greenpeace said it believed Clarks's comments marked a shift in government realising that renewables rather than nuclear were the future.

"The government's thinking seems to have finally caught up with reality. If the UK's ageing energy policy is at last opened up to scrutiny, we must ensure that the main question is not how best to make the taxpayer cough up for new nuclear," said Dr Doug Parr, chief scientist for Greenpeace UK.

RenewableUK, the green energy trade body, said it had a "pipeline of shovel-ready" onshore windfarms that could help fill the gap left by failed nuclear plans. The government has blocked onshore wind power projects from competing for subsidies.

The Liberal Democrats said it was time for the UK to prioritise renewables, batteries and imports over nuclear.

Hitachi still owns the Wylfa site on Anglesey, and said it would continue to talk with the UK government about new nuclear projects.

Japan Govt. continues to back export of nuke technology

January 18, 2019

Japan to press on with nuclear export drive after Hitachi blow
https://mainichi.jp/english/articles/20190118/p2g/00m/0bu/081000c#cxrecs_s

TOKYO (Kyodo) -- The Japanese government said Friday it will continue to back the export of nuclear power technology as part of the country's growth strategy, a day after Hitachi Ltd. announced it has suspended a nuclear plant project in Britain.

- 【Related】Hitachi's UK nuke project halt leaves question of how to keep tech expertise
- 【Related】Hitachi halts British nuclear project due to investment shortfall
- 【Related】Hitachi mulls 300 bil. yen loss on halt in UK nuclear project
- 【Related】Japanese gov't plan to export nuclear power technology floundering

"There won't be any changes to our policy," Economy, Trade and Industry Minister Hiroshige Seko told a press conference, even though Hitachi's latest decision will leave Japan with no major overseas nuclear power plant project.

Chief Cabinet Secretary Yoshihide Suga told a separate press conference it is "essential" to secure human resources and enhance the technological and industrial base for nuclear operations, which would also help Japan deal with the aftermath of the 2011 Fukushima Daiichi nuclear power plant disaster and ensure the safe operation of other reactors.

Hitachi effectively withdrew from a 3 trillion yen ($27 billion) plan to build two reactors in Wales, with President and CEO Toshiaki Higashihara saying Thursday it had reached "limits" regarding further investment in the project as a private entity.

Toshiba Corp. decided in 2017 to exit nuclear power businesses outside Japan after incurring huge losses in the United States, while Mitsubishi Heavy Industries Ltd. is leaning toward withdrawing from a nuclear project in Turkey.

The Japanese government has been seeking to export nuclear technology amid difficulties in building reactors at home due to safety concerns following the Fukushima crisis. It had hoped overseas projects would offer opportunities for Japanese engineers to hone their skills.

Progress toward restarting existing reactors in Japan has also been slow. The country has introduced stricter safety rules which require equipment upgrades, resulting in higher costs.

Plenty enough to do for the nuke industry without building new plants

January 20, 2019

Plans to sell nuclear plants overseas derailed

https://www.japantimes.co.jp/opinion/2019/01/20/editorials/plans-sell-nuclear-plants-overseas-derailed/#.XERs6WlCeos

With the decision by Hitachi Ltd. to "freeze" its plan to build two nuclear power reactors in the United Kingdom, all of the overseas nuclear power plant projects pursued by Japanese firms — with the backing of the government seeking to promote export of nuclear power technology as a key pillar of its efforts to boost infrastructure sales in overseas markets — have now effectively been derailed. Hitachi cited its judgments on the "economic rationality" of the U.K. project as the reason for halting the plan — an allusion to the declining profitability of the nuclear power business due chiefly to the surging cost of safety investments in the wake of the 2011 meltdowns at Tokyo Electric Power Company Holding's Fukushima No. 1 nuclear power plant.

Prime Minister Shinzo Abe has long taken the initiative to promote the overseas sale of Japanese nuclear power plants through top-level diplomacy. However, the nuclear power plant business cannot be a part of the nation's growth strategy if its business feasibility is in doubt. The government and related industries need to face up to the situation surrounding the nuclear power business — which continues to face difficulties domestically as well — and reassess the way forward.

The Fukushima nuclear disaster, triggered by the March 2011 Great East Japan Earthquake and tsunami, has radically changed the global nuclear power market landscape. The cost of nuclear power, which had been promoted as a relatively inexpensive and "clean" source of energy that does not emit carbon dioxide, spiked as additional safety investments inflated plant expenses.

The cost of Hitachi's project to build the two reactors in Anglesey, Wales, which began in 2012, has ballooned from the initial estimate of ¥2 trillion to ¥3 trillion. Another project pursued by Mitsubishi Heavy Industries Ltd. to build four reactors in Turkey has also been hampered by the swelling cost — which reportedly shot up from an initially estimated ¥2.1 trillion to ¥5 trillion. Toshiba Corp. has pulled out from the overseas nuclear power business after the huge losses incurred by its subsidiary Westinghouse Electric Co. in its nuclear power plant projects in the United States.

Even with a spike in plant construction costs, the nuclear power business would make economic sense if the expected earnings surpass the investments. But Hitachi reportedly decided to halt the U.K. project after it became clear that even with public support from the British government it could not possibly realize profits. The economic competitiveness of nuclear power has also been blunted by the sharp expansion of renewable energy such as solar and wind power after the Fukushima nuclear accident and its plummeting costs — although Japan lags far behind other major economies in this respect.

Behind the government's drive to promote the sale of nuclear power plants overseas has been the domestic market's bleak business prospects. While the government and the power industry have pushed for restarting the nation's nuclear power plants idled in the wake of the Fukushima disaster, once they have cleared the tightened plant safety standards, only nine reactors at five plants have been put back online. The additional costs of safety investments required under the new Nuclear Regulation Authority standards to make the plants more resilient to natural disasters such as earthquakes and tsunami — estimated to range from ¥100 billion to ¥200 billion for each reactor — have prompted power companies to decide to decommission 23 aging reactors so far (including the six at Tepco's Fukushima No. 1 plant).

As popular opposition in Japan remains strong against reactivating the idled plants, there is no prospect that the construction of new plants will be approved in the foreseeable future. The drive to promote the export of nuclear power plants may have been intended to make up for the loss of demand in the domestic market. But earlier plans for Japanese makers to build plants in Lithuania and Vietnam were canceled, while a civil nuclear cooperation pact signed with India in 2016 — which was aimed at paving the way for Japanese nuclear plant exports to the country — has not resulted in any deal. Along with Hitachi's decision to halt the U.K. project, Mitsubishi Heavy Industries is reportedly set to abandon its plan in Turkey.

Even without construction of new plants, there will be demand for maintaining Japan's existing nuclear power plants, and for decommissioning its aging plants. What to do with the spent nuclear fuel and the high-level radioactive wastes from the plants will also be among the challenges that confront Japan's nuclear power business. There will be plenty of work for the industry, and it will be crucial to develop and maintain the technology and manpower to deal with the tasks.

New type of nuclear fuel?

December 26, 2018

Utilities ponder use of new type of nuclear fuel
https://www3.nhk.or.jp/nhkworld/en/news/20181227_01/

Electrical utilities across Japan are considering the adoption of a type of nuclear fuel that generates power for a longer time than varieties in current use.

Companies with nuclear plants that are back online keep spent fuel in storage pools. And those pools are now filling up.

The spent fuel is supposed to be taken to a reprocessing facility in the village of Rokkasho in Aomori Prefecture.

Completion of that facility is considerably behind schedule.

Against this backdrop, six utilities that use boiling water reactors have begun considering the possibility of introducing a new type of nuclear fuel that is both efficient and lasts longer.

That type of fuel is widely used in nuclear plants in the US and elsewhere.

Utilities that operate other types of reactors are also thinking of making the switch.

But long-term use of nuclear fuel has disadvantages as well, such as degradation of the cladding covering the fuel. Utility officials say they are carefully studying the matter.

What future for Japanese nukes?

February 5, 2019

Which way next for Japan's nuclear power industry?

https://www3.nhk.or.jp/nhkworld/nhknewsline/backstories/nuclearpowerindustry/

By Yuichiro Okawa

After the 2011 meltdown at Tokyo Electric Company's Fukushima Daiichi nuclear power plant, the Japanese government established exports of nuclear power technology as one of the key pillars of its growth strategy.

But that strategy appears to be at an impasse. A series of projects to build nuclear power plants abroad has stalled. For instance, Hitachi has decided to freeze a project in the UK. Japan may now be forced to review its policy of promoting nuclear exports.

Hitachi announced its decision to suspend a project to build a nuclear power plant on the island of Anglesey in Wales on January 17th. Company officials cite ballooning costs, including those related to safety measures, as a factor.

Hitachi's negotiations with the British government, mainly over its request for financial support for the project, were prolonged. Hitachi officials say their decision to freeze the project was based on doubts about its profitability. As a result, the company expects to book a loss of about 300 billion yen, or roughly 2.7 billion dollars.

Hitachi President and CEO Toshiaki Higashihara said the firm made the decision to ensure that risks will not be carried over into the future.

Infrastructure exports are virtually zero.

While nuclear power is designated an important energy source in the government's policy, the construction of new plants has become difficult in Japan because of Fukushima. Therefore, the

government has shifted its focus to overseas demand. It aims to help expand the operations of Japanese firms in the field.

Nuclear power projects have been planned not only in the UK, but also in Lithuania, Turkey and Vietnam as part of efforts to reduce greenhouse gas emissions. That led Japanese companies to prepare to do business in those countries.

Trade and Industry Minister Hiroshige Seko said: "There are many countries willing to use nuclear power. Since Japan has experienced the nuclear accident in Fukushima, we can contribute globally through technical know-how related to safety at nuclear power plants."

However, the companies have all decided to call off their plans for the UK, Lithuania and Vietnam. As for Turkey, the cost of a planned project has doubled, which makes it difficult for Japanese companies to take part. On top of that, Toshiba has pulled out of the nuclear power business in the US after incurring massive losses through a former nuclear power subsidiary there.

As a consequence, there's basically no Japanese company undertaking nuclear power projects abroad.

A changing environment

The environment surrounding the nuclear power sector has been transformed. After the accident at Fukushima Daiichi, safety requirements have been tightened, causing construction costs to increase. The amount per nuclear reactor used to be a few billion dollars, but that's risen to roughly 9-billion dollars. Critics point out that the private sector alone can be no longer handle safety on its own.

On the other hand, renewable energy sources, such as solar and wind power, have been winning favor worldwide as costs drop. Offshore wind power generation in the UK costs around the same as nuclear power. That led Hitachi to realize nuclear power was losing its economic advantage there and played a part in the decision to freeze the Anglesey project.

Chinese and Russian success

In contrast to Japan's tricky situation, Chinese and Russian state-run companies are increasing their influence. The construction of nuclear power plants is booming in China to meet soaring domestic demand for electricity. This boom, in turn, drives the development of home-grown technologies, which helps Chinese firms make inroads overseas.
Russia's State Nuclear Energy Corporation Rosatom is currently involved in projects to build 36 nuclear reactors abroad -- thought to be the world's largest portfolio of overseas nuclear development. The corporation not only handles construction, but also disposes of spent nuclear fuel and related operations.

Tomoko Murakami, an expert on global trends in the nuclear power business at IEE Japan, says: "China has just begun to rise. However, Russia has already succeeded in terms of acquiring new project orders worldwide."

Japan's nuclear industry at a crossroads

Several companies in Japan are looking at realigning their businesses. It has been revealed that negotiations for a possible tie-up are ongoing between several firms: Tokyo Electric Power Company, Chubu Electric Power Company, Hitachi and Toshiba.

Japan's nuclear-related companies face difficulties in keeping their technologies up to date at the same time as seeking to streamline operations further.

The number of people working in Japan's nuclear business and its affiliated industries has decreased by over 20 percent since the accident at Fukushima Daiichi.

Taking everything into consideration, it is clearly time for Japan to think about the future of its basic energy policy.

"Green" zones in Fukushima and nuclear future in Japan

March 12, 2019

EDITORIAL: 8 years after disaster, Japan must commit to a nuke-free future
http://www.asahi.com/ajw/articles/AJ201903120048.html

When I visited the crippled Fukushima No. 1 nuclear power plant in early February, I found that 96 percent of the plant grounds are now designated as “green zones.”
You can enter a green zone in normal work clothes without wearing special gear for protection against radiation.
In these areas, radiation levels have declined significantly due to measures including removing debris, cutting down plants and covering the soil with mortar.
Areas between the No. 2 and No. 3 reactor buildings are also green zones, and I could enter the areas in everyday clothes, wearing just an ordinary disposable mask. It was a dramatic change from several years ago, when I was restricted to seeing the facilities from the inside of a vehicle even though I was wearing a full-body radiation suit.
There are, however, still many gloomy vestiges of the nuclear devastation that occurred at this plant in March 2011.
The concrete walls of the No. 3 reactor building were blown off by hydrogen explosions and numerous iron reinforcing rods, violently bent and sticking out of the remnants of the walls, are visible. The outer walls of buildings remain colored a vivid green because of residues of an anti-scattering agent sprayed around immediately after the accident began to unfold to prevent radioactive materials from spreading.
Massive amounts of melted nuclear fuel debris remain in the No. 1 to No. 3 reactors.
Tokyo Electric Power Co., the operator of the plant, recently succeeded in using a remotely controlled probe to make the first physical contact with debris inside the containment vessel of the No. 2 reactor. But it is still unclear whether all the debris will be eventually removed.
The plant is generating a rapidly increasing amount of radiation-contaminated water as the reactors are being flooded to cool the cores and underground water keeps pouring in. Even after being treated with a

filtering system, the polluted water still contains tritium, a radioactive form of hydrogen, and has to be stored in on-site tanks.
The number of the storage tanks filled with contaminated water and placed within the premises has kept growing and is now approaching 1,000.
Obviously, a long, rocky road lies ahead for the work to decommission the reactors.

REACTOR RESTARTS CONTINUE

Serious nuclear accidents cause enormous damage and necessitate lengthy, costly and formidable cleanup work.
Japan, a nation that has learned these facts the hard way, should seek to build a society that is not dependent on nuclear power generation.
In an editorial in July 2011, The Asahi Shimbun argued that Japan should pursue the goal of transforming itself into a "zero nuclear power generation society."
The process of achieving the goal would involve decommissioning reactors gradually, starting with high-risk and aging units, while keeping the operation of only the ones that are necessary to meet demand for the time being. Through this process, Japan should eventually eliminate nuclear power generation in the not-so-distant future.
Following the Fukushima disaster, it has been decided that a total of 21 reactors, mostly units that have been in service for decades, will be decommissioned. But this does not mean that Japan is moving toward a nuclear-free future.
Prime Minister Shinzo Abe's administration has continued to maintain that nuclear power is an "important core power source" even though it has pledged to lower Japan's dependence on atomic power "as much as possible."
Under the administration's energy supply target, nuclear power generation should account for 20 to 22 percent of Japan's total power output in 2030. During the current Diet session, Abe has contended that seeking to end nuclear power generation is "not a responsible energy policy."
He has reiterated his administration's policy of allowing the restarts of reactors that have been confirmed by the Nuclear Regulation Authority to meet the new, stricter nuclear safety standards that were introduced after the Fukushima accident.
The Abe administration also refuses to abandon the government's policy of establishing a nuclear fuel recycling program, which has clearly become untenable.
Most Western industrialized nations have given up on their nuclear fuel recycling programs as they have proven economically unviable. But the Abe administration has not ditched the plan to start operating the plant to extract plutonium from spent nuclear fuel for recycling that is being constructed in Rokkasho, Aomori Prefecture, at an estimated cost of 2.9 trillion yen ($26.02 billion).
Shinichiro Tanaka, a specially appointed visiting associate professor at the Chiba University of Commerce, has scrutinized the government's draft budget for the new fiscal year and found that nuclear power-related expenditures account for 40 percent of the planned total energy policy spending by all ministries and agencies.
This clearly indicates what a large portion of government fiscal resources is being poured into nuclear power.

GLOBAL ENERGY SHIFT

In January, the Renewable Energy Institute released a report saying nuclear power generation is losing its competitiveness globally.

While the costs of nuclear energy have risen due to enhanced safety requirements following the Fukushima accident, the report says, those of renewable energy sources such as solar and wind power have fallen, thanks to technological innovations.
Some countries, including Germany and South Korea, have decided to phase out nuclear power generation. In other major countries, including the United States and Britain, the share of nuclear power in the overall power supply has dropped because of the rise of renewable energy.
Even France, a leading nuclear power producer, plans to significantly lower its dependence on atomic energy. In China and India, where the government has been eager to promote nuclear power, renewable energy production is growing faster than nuclear power generation.
Nuclear power once accounted for 17 percent of the world's total electricity production, but it is now responsible for only around 10 percent of the global power output. In sharp contrast, the share of renewable energy has risen to nearly a quarter of the total. The International Energy Agency predicts that renewable energy will contribute 40 percent of the world's energy supply in 2040.
A big global energy shift from nuclear power to renewable energy is taking place.

RESPONSIBLE DECISIONS NEEDED

The Abe administration's efforts to promote exports of nuclear power technology, a key component of its growth strategy, have run into the sands in Britain and Turkey.
It is a big irony that a nation that has suffered a catastrophic nuclear accident is making frustrating efforts to sell its nuclear technology to other countries while repercussions from the accident are driving the world toward a new energy future.
This nation's government still continues devoting huge amounts of resources to maintaining nuclear power generation, which is clearly in decline worldwide, while putting renewable energy, which will assume growing importance in the coming years, on the back burner. Sticking to this policy would cause Japan to be left out of the emerging mega-energy trend.
It is by no means easy to pull the plug on all nuclear plants in Japan. That makes it all the more important for the government to adopt this policy goal and start taking steps to decommission reactors as soon as possible while making greater efforts to expand the use of renewable power.
This is also vital for Japan's efforts to help stem global warming.
The sooner the policy shift is made the better. Ending nuclear power generation would also stop the growth in the amount of spent nuclear fuel.
Scrapping the nuclear fuel recycling program would save the government the enormous amount of additional funds needed to operate and upgrade the Rokkasho reprocessing plant.
Pursuing a goal of zero nuclear power is not an irresponsible policy. The Abe administration has taken an irresponsible stance toward the issue by allowing the opposition-drafted bill to phase out nuclear power generation to gather dust on the Diet shelf for as long as one year and permitting off-line reactors to be restarted one by one without serious debate on the steps.
It is the responsibility of political leaders to make the decision to phase out nuclear power generation and lay out a clear vision for the nuclear-free energy future of this nation.
--The Asahi Shimbun, March 12

Progress?

22.03.2019_No58 / News in Brief

Japan Survey Shows Increase In Support For Nuclear Plant Restarts https://www.nucnet.org/all-the-news/2019/03/22/japan-survey-shows-increase-in-support-for-nuclear-plant-restarts

Plant Operation
22 Mar (NucNet): Support for restarting nuclear power plants in Japan has increased to 27 % in 2018, up about eight points compared to the previous year, according to a survey of 1,200 people carried out by the Japan Atomic Energy Relations Organisation (Jaero) at the end of 2018.
The Japan Atomic Industrial Forum (Jaif) said Jaero has been conducting the same public opinion survey annually since 2006.

The survey has shown the percentage of those opposed to restarting nuclear plants fell by six points, from 25% in 2017 to 19%.in 2018.

On the other hand, Jaif said that solar, wind and hydro were listed by respondents as the top three preferred energy sources for Japan, a result which had been the same even before the Fukushima-Daiichi accident in March 2011.

According to Jaif, the preference for nuclear power rose to 17% in 2018 from 12% the previous year.

All of Japan's 48 reactors were taken offline as a result of the Fukushima-Daiichi accident for safety assessments and upgrading measures. Nine units have since renewed commercial operation.

Start Again

Is the wind turning ?

March 19, 2012

Heads of 4 municipalities favor restarting N-reactors after govt OK

http://www.yomiuri.co.jp/dy/national/T120318002934.htm

The Yomiuri Shimbun
The heads of four municipalities hosting nuclear power plants are in favor of allowing reactors currently idle for safety checkups or other reasons to be restarted if the central government approves their reactivation, a survey by The Yomiuri Shimbun has revealed.

A Yomiuri questionnaire was sent to a total of 34 prefectural and municipal heads in areas where nuclear power facilities are located. Responses were received by Thursday.

Seventeen of the respondents were city, town or village mayors in areas with nuclear complexes. They did not include municipality heads in Fukushima Prefecture.

One question in the survey was, "What do you think about the advisability of restarting the nuclear reactors that are located here, if the central government decides in favor of resuming their operation?"

The four who said they would "respect" the central government's judgment were the mayors of three villages--Tomari in Hokkaido, Higashidori in Aomori Prefecture and Kariwa in Niigata Prefecture--and the mayor of the town of Genkai, Saga Prefecture.

The government will decide whether to restart the No. 3 and No. 4 reactors at Kansai Electric Power Co.'s Oi nuclear plant in Fukui Prefecture through consultations among the prime minister and three Cabinet members in charge of nuclear power generation affairs, after obtaining the understanding of local entities involved.

The government is expected to apply this approach to the reactivation of reactors at other nuclear power plants as well.
Mayor Hiroo Shinada of Kariwa said in his response to the survey, "The government should act responsibly in line with its judgment" regarding reactivation.

None of the 17 municipality heads supported the idea of restarting the reactors right now, while seven said they would support reactor reactivation with some conditions attached.

Nine said they were undecided about the resumption issue, while Mayor Tatsuya Murakami of Tokai, Ibaraki Prefecture, said he opposed putting currently idled plants back into operation.

Ohi stress tests - A step to restart nuke plants

March 19, 2012
Evaluation on Ohi stress test results imminent

http://www3.nhk.or.jp/daily/english/20120319_25.html

The Nuclear Safety Commission says it may release its evaluation of the stress-test results on 2 nuclear reactors at a nuclear power plant in central Japan by the end of the week.

Commission Chairman Haruki Madarame told reporters on Monday that the commission's first-ever decision on stress-test results could be out before the week's end.

The government's Nuclear and Industrial Safety Agency earlier approved the results of the first-stage stress tests on the No. 3 and No. 4 reactors at the Ohi plant in Fukui Prefecture, conducted by its operator, the Kansai Electric Power Company.

The commission's panel, which is verifying the agency's evaluation of the test results, is compiling a report after listening to experts.

Verifying the results is a required procedure for restarting any nuclear reactor that has been shut down for a regular inspection.

Madarame said that in other countries, stress tests are conducted on reactors regardless of whether they are to be reactivated or not.

He emphasized that the first-stage stress test alone will not ensure a plant's safety, saying comprehensive safety checks must be conducted.

On the basis of the commission's report, the government will make its final decision on whether to approve restarting the reactors.

What about Ikata?

March 19, 2012

Ikata nuclear plant likely to pass safety test
http://www3.nhk.or.jp/daily/english/20120319_29.html

Japan's Nuclear and Industrial Safety Agency is to endorse the results of an initial safety stress test on an idled reactor at a nuclear power plant in Ehime Prefecture, western Japan.

The government agency is set to report to the Nuclear Safety Commission that the so-called stress test on the No. 3 reactor at Ikata nuclear plant of Shikoku Electric Power Company was carried out appropriately.

Stress testing nuclear reactors is a new method of assuring their safety. The government mandated the tests to obtain the consent of local residents to resume the operation of a suspended reactor after a regular checkup.

The Nuclear and Industrial Agency has so far received from power companies the results of the first-stage stress tests on 16 reactors, and is assessing the results.

On Monday, the agency met with nuclear experts to examine the results of the test on the No. 3 reactor at the Ikata plant.

In the meeting, the agency said the necessary measures have been taken at the Ikata to prevent a disaster like the one at Fukushima Daiichi.

Some participants said discussions are not complete and called for more talks on the many factors that could result in a serious nuclear accident.

But the agency concluded the discussions, saying it has looked into all aspects as required at this point.

It said it would soon submit its final assessment that the stress test was carried out appropriately.

The stress testing at the Ikata plant is the nation's second, the first being on 2 reactors at Kansai Electric Power Company's Ohi plant in Fukui Prefecture.

The safety commission is undertaking a final examination of the results of the stress tests at the Ohi plant. The government will decide whether to give the green light to restarting the 2 Ohi reactors on the basis of the commission's judgment.

March 20, 2012

Nuclear agency to approve Ikata reactor's initial stress test soon

http://mdn.mainichi.jp/mdnnews/news/20120320p2g00m0dm017000c.html

TOKYO (Kyodo) -- Japan's Nuclear and Industrial Safety Agency decided Monday to sign off on the results of an initial stress test on an idled nuclear reactor at the Ikata power plant in the near future, a move that would make it the third reactor to have cleared a key step for resuming operation.

The agency said in a revised draft report that it has confirmed through the test that the plant operator Shikoku Electric Power Co. has taken sufficient measures to prevent the reactor from getting into a situation similar to the accident at the Fukushima Daiichi power plant, even if it is hit by an earthquake and tsunami like the one that occurred in Japan's northeast a year ago.

Once the agency finalizes the report, the Nuclear Safety Commission, the five-member state body tasked with supervising the government's nuclear safety regulations, will check the adequacy of the agency's evaluation on the stress test on the No. 3 unit of the Ikata reactor in Ehime Prefecture, western Japan.

Prime Minister Yoshihiko Noda and three ministers concerned are then to judge whether to authorize the restart of the reactor.

The government mandated the two-stage stress test following the accident at Tokyo Electric Power Co.'s Fukushima Daiichi plant. Clearing the first stage of the computer simulation-based test is a precondition for reopening reactors that have been idled for scheduled checkups.

Only two of Japan's 54 reactors are online as many of them, including the No. 3 unit of the Ikata plant, remain idled for the routine checkup stipulated for Japanese reactors every 13 months.

The remaining two reactors -- the No. 6 reactor at Tokyo Electric Power Co.'s Kashiwazaki-Kariwa plant in Niigata Prefecture and the No. 3 reactor at Hokkaido Electric Power Co.'s Tomari plant in Hokkaido -- will also be suspended by early May for routine checkups.

Shikoku Electric originally reported that the No. 3 reactor at the Ikata plant is capable of withstanding an earthquake 1.86 times stronger than the most powerful quake required to be taken into account under the safety criterion. But the utility later lowered the figure to 1.5, as some facilities' quake resistance was found to have been weaker than previously thought.

The two reactors that have already won the agency's approval on their stress test results are the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Oi plant in Fukui Prefecture.

Not clear who will decide

March 25, 2012

Confusion over 'local entities' / Definition unclear of who must approve reactors' reactivation

http://www.yomiuri.co.jp/dy/national/T120324003038.htm

The Yomiuri Shimbun

It is still uncertain whether local entities' consent can be obtained for reactivation of the No. 3 and 4 reactors at the Oi nuclear power plant in Oi, Fukui Prefecture, even after the Nuclear Safety Commission endorsed first-stage stress test results on the reactors.

Meanwhile, the delay in establishment of a new nuclear regulatory agency, which will be responsible for the integrated supervision of the safety of nuclear power, is hindering the restart of idle reactors at other nuclear power plants.

The commission on Friday endorsed the test results for the reactors at the Oi plant, which is operated by Kansai Electric Power Co.

After Prime Minister Yoshihiko Noda and three other Cabinet ministers concerned confirm the reactors are safe to operate, Economy, Trade and Industry Minister Yukio Edano will visit Fukui Prefecture in early April at the earliest to seek consent from "local entities" for reactivation of the reactors.

Edano's visit to the prefecture is likely to take place on a weekend in early April, after the Economy, Trade and Industry Ministry's Nuclear and Industrial Safety Agency evaluates on Wednesday the possible impact of an active seismic fault near the Oi plant, according to government officials.

Edano aims to present 30-point guidelines, which NISA has already compiled, to the Fukui prefectural government as tentative safety standards.

However, the definitions of "local entities" and "consent" still remain ambiguous.

Edano has only said, "We'll judge [the issue] from a comprehensive viewpoint."

The government plans to expand the range of its heightened disaster management measures in the event of a nuclear accident from the current radius of eight to 10 kilometers from a nuclear plant to a 30-kilometer radius.

If all local governments in the 30-kilometer zone are "local entities" from which consent needs to be obtained, the number of local governments involved will drastically increase, and the hurdle for reactivation will be much higher.

Some parts of Shiga Prefecture fall in the 30-kilometer radius around the Oi plant. Thus, the prefectural government said it will demand detailed explanations from the central government about the reactors' reactivation.

Opinions within the Democratic Party of Japan are divided.

On Thursday, the DPJ's project team on measures to bring the crisis at the Fukushima No. 1 nuclear power plant under control compiled a report saying it is too early to resume operations of nuclear reactors.

However, another DPJ project team is likely to soon issue a report that will support reactivation.
Under such circumstances, some observers say it will be difficult to eliminate the distrust of affected local governments and residents.
As the central government plans to compile before the Golden Week holiday period a plan regarding the supply and demand of electricity this summer, there is limited time to obtain local entities' consent.

If consent cannot be obtained by the end of April, the government will have to compile an energy-saving plan based on the premise that the Oi plant's reactors will not be reactivated, and seek cooperation from industrial circles and the general public.

In that case, some companies will have to change their production plans and personnel arrangements.

If the Oi plant reactors cannot be reactivated, the electricity supply in KEPCO's service area will be 3.86 million kilowatts, or 13.9 percent, below the expected maximum demand.

The No. 3 and 4 reactors of the Oi plant have a total output capacity of 2.36 million kilowatts. If they are reactivated, the shortage will be considerably smaller.
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April 1 launch canceled

The most unstable factor in the reactivation of nuclear plants' reactors is uncertainty over when the nuclear regulatory agency will be established.

The Noda administration excluded bills to create the agency from Diet deliberations within the current fiscal year, effectively giving up on the launch of the agency on April 1.

Mayor Kazuharu Kawase of Tsuruga, Fukui Prefecture, which hosts Japan Atomic Power Co.'s Tsuruga nuclear plant and other nuclear facilities, said Thursday, "If the regulatory agency is not launched, we can't enter talks on whether to allow reactivation."

As Kawase's remark suggests, the situation will likely affect reactivation of not only the Oi plant but also reactors at other nuclear plants, including the No. 3 reactor of Shikoku Electric Power Co.'s Ikata nuclear power plant.

The new agency is the main pillar of reform of the country's nuclear power generation, which aims to separate the entities that promote and regulate nuclear energy, based on lessons from the Fukushima No. 1 nuclear plant crisis.
The agency was originally scheduled to be established on April 1 by integrating NISA and the Cabinet Office's Nuclear Safety Commission.

Due to the delay in establishing the new agency, NISA and the five-member commission will continue to examine results of stress tests on nuclear power plants conducted by plant operators.

But the three-year terms of three commission members will expire April 16, and all have said they wish to step down.
Chairman Haruki Madarame also expressed his intention to leave his post at the end of this month.

Although members' terms can be extended, one observer asked, "Can members who don't want to stay conduct safety checks diligently?"

Three plans to revise NISA guidelines, including a disaster management guideline requiring revision of local disaster management plans, will effectively be left untouched until the new agency is established.

The central government needs to take quick action before concerned local governments openly express their complaints.

Last Japanese reactor to be halted on May 5

March 26, 2012

Tomari reactor to be halted on May 5

http://www.yomiuri.co.jp/dy/national/T120325002878.htm

The Yomiuri Shimbun
Hokkaido Electric Power Co. plans to halt operations of the No. 3 reactor at its Tomari nuclear power plant on May 5 for regular inspections, according to sources.

Regular inspections are also scheduled to start at the No. 6 reactor at Tokyo Electric Power Co.'s Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture on Monday.

If Kansai Electric Power Co. does not get approval to restart the No. 3 and 4 reactors at its Oi nuclear power plant in Fukui Prefecture, which have been shut down for regular inspections, all of the nation's 54 reactors will be offline when the Tomari No. 3 reactor is halted. There is strong opposition to restarting the reactors.

According to the sources, Hokkaido Electric is preparing to file an application for the regular inspections with the Economy, Trade and Industry Ministry's Nuclear and Industrial Safety Agency. The application probably will be filed Monday.
The utility initially planned to shut down the No. 3 reactor on April 27.

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Reactor's operations uncertain

Meanwhile, Chubu Electric Power Co. plans to remove a reference on when to start operating a new reactor at its Hamaoka nuclear power plant in Omaezaki, Shizuoka Prefecture, from its power supply plan for fiscal 2012, according to sources.
The company had said the planned No. 6 reactor would start operations in fiscal 2021. However, the timing is up in the air because construction has not yet started, the sources said.

However, Chubu Electric will not scrap its plan to build the new reactor, they said. It will provide details on the new reactor's operation timetable when the nation's nuclear policy becomes clearer, they added.

Utilities usually notify the government of their expected power demand and supply capacity for the next 10 years.

One economic viewpoint of reactor shutdown

March 27, 2012

Hardships loom with TEPCO reactor shutdown

http://www.yomiuri.co.jp/dy/national/T120326004507.htm

Tadaaki Inoue and Tomofumi Degawa / Yomiuri Shimbun Staff Writers

With Tokyo Electric Power Co.'s last nuclear reactor suspended, companies and households face dual hardships--possible prolonged power shortages and a rise in electricity charges to cover increased fuel costs at thermal power plants--unless nuclear reactors are reactivated after routine safety checks.

TEPCO has explained that it will be able to supply about 57 million kilowatts of electricity this summer, which is the same level as last year, even without running nuclear reactors.Beneath the surface, however, the company is walking a tightrope.

On the supply side, the number of compact power generators TEPCO has installed at thermal power plants after the Great East Japan Earthquake has increased to about 300. The company also expects thermal power plants hit by the March 11, 2011, disaster to be restored.

However, thermal power plants are meant to be used only for a short period of time when power demand reaches its peak. Therefore, keeping them in operation for as long as nuclear reactors tends to cause problems. There were at least four instances after the Great East Japan Earthquake when thermal power plants stopped working due to excessive operating times, among other reasons.

On the demand side, limitations in households' and companies' electricity-saving efforts are becoming evident. The maximum power demand this winter was 49.66 million kilowatts, larger than the 49.22 million kilowatts of last summer. It was the first time in 43 years that winter power demand surpassed that of summer. If this summer's power demand reaches 59.99 million kilowatts, which was recorded in the scorching summer of 2010, there will likely be a power supply shortage.

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More power, more deficit

For TEPCO, which now relies on thermal power plants that entail high fuel costs, an increase in power supply would result in a higher deficit. TEPCO's fuel costs from April to December 2011 totaled 1.57 trillion yen, 1.4 times that of the same period in the previous year. The amount of money TEPCO paid to purchase electricity from other power companies increased 10 percent to 573.1 billion yen during the period.

In fiscal 2012, during which TEPCO will not be able to restart idled nuclear reactors, its fuel cost for thermal power plants and the cost of purchasing electricity from other power companies are expected to rise to as much as 3 trillion yen in total. TEPCO will go under unless public funds are injected into the company and additional loans are extended by banks.

TEPCO plans to raise electricity charges for large-lot users by an average of 17 percent in April and for households by about 10 percent as early as July. However, the planned price hike has drawn criticism from many people who say TEPCO should first carry out company restructuring wherever possible.

TEPCO will be put to the test by how much it voluntarily improves its high-cost setup and the extent to which it tries to gain understanding from its consumers.

The industrial sector has already been seriously affected by power shortages and rate hikes.

In addition to its Tokyo factory, Hoya Corp. built a factory in Shandong Province in China last year to manufacture optical glass for camera lenses due to power shortage concerns. Other companies have also been shifting their production overseas. Many midsize and small companies have no prospect of passing increased electricity rates onto the prices of their products, complaining that the suspension of nuclear power plants will jeopardize their operations.

According to an estimate by Koya Miyamae, an analyst at SMBC Nikko Securities Inc., if TEPCO increases household electricity rates by 10 percent, consumers in the Kanto region will need to pay an additional 300 billion yen a year for electricity. About 2,000 listed companies, excluding financial companies, will suffer an estimated 1.5 percent decrease in ordinary profits for the accounting term ending in March 2013.

Reactor's shutdown 'to hurt local economy'

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120326004542.htm

NIIGATA--Niigata Gov. Hirohiko Izumida on Monday again expressed fears about the safety of the No. 6 reactor at the Kashiwazaki-Kariwa nuclear power plant, which some local people want restarted as soon as possible to keep the local economy alive.

Speaking at a press conference following the shutdown of the reactor at around midnight Sunday, Izumida called on Tokyo Electric Power Co. to manage the nuclear power plant carefully.

"It's not safe merely because it's been shut down. TEPCO should manage it as a 'living nuclear power plant,'" he said.
Referring to the crippled Fukushima No. 1 nuclear power plant, Izumida said: "There are many unclear aspects about what happened to [that plant]. We can't move forward without clearing them up."

Kashiwazaki Mayor Hiroshi Aida also was opposed to the early restarting of the reactor, saying, "It's hard to believe that safety can be confirmed through tentative measures and a stress test." However, Aida also said, "It [shutting down the reactor] will certainly affect local industry and employment."

Kariwa Mayor Hiroo Shinada was also worried about the effect the reactor's shutdown would have on the local economy, especially employment and energy supplies.

However, he said: "We'll respect the regulatory authority's decision. If it says it's all right to restart the reactor, we'll do so."

About 6,900 people from 800 firms, including subcontractors, work at the Kashiwazaki-Kariwa nuclear power plant.
Of about 47,500 workers in Kashiwazaki and Kariwa, about 4,000 people, or 8 percent, have jobs related to the power plant.
Masao Nishikawa, chairman of the Kashiwazaki Chamber of Commerce and Industry, has called for the reactor to be restarted as soon as possible.

TEPCO halts the last one

March 27, 2012
All 17 of TEPCO's N-reactors now halted

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120326005002.htm

All 17 of Tokyo Electric Power Co.'s nuclear reactors are now suspended after TEPCO halted its last operating reactor around midnight Sunday at Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture.

TEPCO suspended operations of the 1.35 million-kilowatt No. 6 reactor at the power plant at around midnight Sunday for a regular checkup. Of the 54 commercial nuclear reactors in the nation, the No. 3 reactor of Hokkaido Electric Power Co.'s Tomari nuclear power plant is the only one still operating.

"We expect that we can ensure a steady supply of electricity for the time being, but we would like to request people's cooperation in saving electricity whenever possible," TEPCO President Toshio Nishizawa said Sunday.

It is the first time in about nine years that TEPCO has shut down all its reactors.

The last time all TEPCO's reactors were shut down was from April to May in 2003, after a scandal over falsified safety-inspection reports.

TEPCO's 17 nuclear reactors have a combined output capacity of 17.3 million kilowatts, which accounted for one-fourth of its total electrical power supply of 65 million kilowatts as of the end of March last year.

TEPCO is ready to take measures to secure a stable supply of electricity ahead of summer, when demand for air conditioning normally surges.

The utility plans to secure 57 million kilowatts of energy without nuclear power plants by installing gas turbines for thermal power generation as emergency measures. If this summer's maximum demand for power is the same as last year, a shortage of electrical power can be avoided. In TEPCO's service area, demand for power peaked at 49.22 million kilowatts last summer.

The government also imposed a restriction on power usage in TEPCO's service areas last year, requiring heavy users of electricity to reduce their power consumption by 15 percent from the peak of the summer in 2010. Economy, Trade and Industry Minister Yukio Edano has said the government does not plan to impose the same restrictions this year, and will also refrain from conducting rotating blackouts this summer.

However, electricity demand could surge due to a heat wave, or operation of thermal power plants--which are not designed to run continuously for a long period of time--could be halted due to troubles.

TEPCO's fuel expense has risen sharply, resulting from increased thermal power generation as a replacement for nuclear power.

The utility has said it will raise electricity charges for large-lot users such as buildings and factories by an average of 17 percent starting in April, and by about 10 percent for general households starting in July.

According to its plan, TEPCO plans to limit electricity rate hikes to three years based on the assumption that it can restart reactors at the Kashiwazaki-Kariwa nuclear power plant in fiscal 2013.

However, if nuclear reactors continue to be suspended, the price increase will likely continue

To restart operations, nuclear power plants need to pass stress tests.

TEPCO has already submitted to the government the first-phase assessment of stress tests on the No. 1 and No. 7 reactors at its Kashiwazaki-Kariwa plant.

Meanwhile, the local government is taking a cautious approach to restarting nuclear operations.

"As long as the root cause of the crisis at the Fukushima No. 1 nuclear power plant remains unclear, we can't judge what is safe," Niigata Gov. Hirohiko Izumida said.

From the late 1980s through the 1990s, TEPCO falsified reports relating to cracks detected at the Fukushima No. 1, No. 2 and Kashiwazaki-Kariwa nuclear power plants. After the false records were found in August 2002, TEPCO shut down all its reactors temporarily in 2003 to inspect its nuclear power plants.

March 26, 2012

Countdown to shutdown of all nuclear plants

http://www3.nhk.or.jp/daily/english/20120326_05.html

All Japan's nuclear reactors face a possible shutdown if none are allowed to resume operations before the last working reactor in northern Japan, is turned off in May.

At the time of the Fukushima nuclear accident last March, 37 out of Japan's 54 nuclear reactors were operating.

The Nuclear and Industrial Safety Agency has now received the results of stress tests of 16 reactors checked since last October. The tests are designed to see how well the reactors can withstand earthquakes and tsunami.

Japan's Nuclear Safety Commission on Friday endorsed the test results of 2 reactors at the Ohi plant on the Japan Sea coast.

Prime Minister Yoshihiko Noda and 3 Cabinet members in charge of nuclear issues will decide soon whether the government can obtain local agreement and restart the 2 reactors.

The Nuclear and Industrial Safety Agency also finished assessing another reactor in Ehime Prefecture, western Japan.

The Nuclear Safety Commission says a second stage of stress tests are needed that takes into account whether reactors are prepared for severe accidents such as a nuclear meltdown.

Local municipalities such as Fukui Prefecture are demanding the government show a temporary safety guideline that reflects lessons from the accident of the Fukushima plant.

The government was planning to set up a new nuclear safety agency in April to unify supervision of nuclear power generation. But, the negotiation between the ruling and the opposition parties is deadlocked.

The report from the government's investigative panel probing the Fukushima accident is expected to be released in July. Some experts say the inspection of the accident is not enough at the present stage.

The main focus of the issue is how the government will judge the safety of a nuclear plant and how it can convince the local governments.

OI nos.3 and 4 safe...

March 29, 2012

NISA endorses Oi reactors' safety / Edano to visit Fukui Prefecture as early as April to seek approval of restart

http://www.yomiuri.co.jp/dy/national/T120328005895.htm

The Yomiuri Shimbun

The nuclear safety agency on Wednesday endorsed Kansai Electric Power Co.'s assessment that the idled Nos. 3 and 4 reactors at its Oi nuclear power plant would be able to withstand a powerful multi-fault earthquake, officials said.

By concluding KEPCO's earthquake-resistance safety projection was "appropriate," the Economy, Trade and Industry Ministry's Nuclear and Industrial Safety Agency has completed its technical evaluation concerning the safety of the two reactors at the plant in Oi, Fukui Prefecture, according to the officials.

The reactors have been idle since being taken offline for regular safety checkups.

Prime Minister Yoshihiko Noda and three ministers in charge of nuclear policies will make a final confirmation of the reactors' safety. Following this, Economy, Trade and Industry Minister Yukio Edano will visit Fukui Prefecture as early as next month to brief local governments on the central government's stance and ask their opinions on resuming the reactors. The central government will then make a final decision on reactivation, the officials said.

KEPCO conducted stress tests on the two reactors as part of preconditions for resuming their operations. Its primary stress test results showed they could withstand a quake 1.8 times the strength of a quake predicted to hit the area.

While assessing the results, however, NISA instructed nuclear power plant operators to consider scenarios in which active fault lines at least five kilometers from each other move simultaneously.

If estimated seismic waves were upwardly revised, the results of previous stress tests would have to be reviewed.

In the case of the Oi nuclear power plant, the focus has been placed on a scenario in which three nearby active faults shift together, according to the officials.

NISA on Wednesday concluded such a phenomenon is unlikely "because each fault is located far from the others." It also approved KEPCO's projection that seismic waves triggered by the three active faults' synchronization would not exceed 1.8 times the conventional projection, the officials said.

However, the agency concluded that two or more active faults could move simultaneously at six other nuclear power plants, and instructed their operators to recalculate seismic wave assumptions.

The six facilities are Tokyo Electric Power Co.'s Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture; Hokuriku Electric Power Co.'s Shika nuclear power plant in Ishikawa Prefecture; the Japan Atomic Power Co.'s Tsuruga nuclear power plant, Japan Atomic Energy Agency's Monju prototype fast-breeder reactor and KEPCO's Mihama nuclear power plant, which are in Fukui Prefecture; and Chugoku Electric Power Co.'s Shimane nuclear power plant in Shimane Prefecture.

Regarding the Japan Atomic Power's Tokai No. 2 nuclear power plant and JAEA's Tokai Reprocessing Plant--both in Ibaraki Prefecture--NISA concluded seismic waves associated with the movements on nearby active faults would not exceed those of a presumed subduction quake in the Pacific, according to the officials.

The agency also said it would instruct the operators of other nuclear power plants to examine whether they could withstand a magnitude-9 subduction quake. These facilities include Chubu Electric Power Co.'s Hamaoka nuclear power plant in Shizuoka Prefecture; Tohoku Electric Power Co.'s Higashidori nuclear power plant in Aomori Prefecture; and Tohoku Electric's Onagawa nuclear power plant in Miyagi Prefecture, the officials said.
(Mar. 29, 2012)

Pleased to hear it

April 2, 2012

Noda: Safety is top priority to restart reactors
http://www3.nhk.or.jp/daily/english/20120402_19.html

Prime Minister Yoshihiko Noda says he will place top priority on nuclear safety in deciding the restart of 2 idled reactors in western Japan.

The 2 reactors at the Ohi nuclear power plant in Fukui Prefecture are currently halted for regular safety inspections.

Noda discussed the issue at an Upper House committee meeting on Monday.

He said the decision to restart the reactors will be made after taking into account opinion of local residents. He added that he and his Cabinet ministers will judge the matter in a comprehensive way.

Industry minister Yukio Edano said he is not convinced of the assessment by experts of the reactors recent stress tests.

Noda and nuclear safety

April 3, 2012

Noda orders drafting nuclear safety standards

http://www3.nhk.or.jp/daily/english/20120403_31.html

Prime Minister Yoshihiko Noda has instructed a minister to draw up new standards for nuclear safety as a precondition for resuming the operation of 2 reactors at a nuclear power plant along the Japan Sea coast.

On Tuesday, Noda and 3 ministers concerned discussed the Nuclear Safety Commission's favorable assessment of the first round of stress tests on the reactors at the Ohi nuclear power plant in Fukui Prefecture.

The ministers were briefed by the Nuclear and Industrial Safety Agency on the findings of its investigation into the nuclear crisis at the Fukushima Daiichi plant.

Some of the ministers said the safety standards proposed after the Fukushima Daiichi accident for preventing disasters are not clearly defined.

In response, Noda instructed Economy, Trade and Industry Minister Yukio Edano to come up with new standards for nuclear safety as a precondition for the resumption of the operation of the idled reactors.

Noda and the 3 ministers are to meet again later this week to discuss the necessary safety measures.

Safety first

Central gov't under pressure to ensure safety of Oi nuclear reactors

"(mainichi Japan) April 04, 2012"

http://mainichi.jp/english/english/newsselect/news/20120404p2a00m0na013000c.html

The Fukui Prefectural Government has been urging the central government to ensure the safety of two idled nuclear reactors at the Oi Nuclear Power Plant in the prefecture before reactivating them, and local

government chiefs in the neighboring prefectures of Kyoto, Shiga and Osaka are trying to get involved in decision-making on whether to restart the operations at the atomic power facilities. Hence, the central government has come under increasing pressure from local governments not to make a hasty decision to reactivate the two nuclear reactors idled for regular inspections.

Fukui Gov. Issei Nishikawa has repeatedly said, "The central government must show a provisional safety standard based on the findings from the Fukushima accident. That's the major precondition." He said in February, "The central government must first show the public its responsible opinions on the meaning of nuclear power and the need for the reactivation of nuclear reactors and make efforts to secure understanding."

On the fact that the central government has delayed its decision to call on the Fukui Prefectural Government to give the green light for the reactivation of the Oi reactors, a veteran prefectural assemblyman, a proponent of the reactivation of the reactors, said, "We were thinking that the reactors would be reactivated in late April, but our original schedule did not work out the way we had hoped. The impact on the local communities is immeasurable."

On the other hand, a prefectural assemblyman who opposes the reactivation of the reactors said, "The delay is attributable largely to opposition voiced in Shiga, Kyoto and Osaka prefectures (to the reactivation). But while findings from the Fukushima accident have not been confirmed, the government has hastily moved ahead with procedures to reactivate (the reactors) without presenting a provisional safety standard. So, it is a natural development."

On whether to reactivate nuclear reactors in Fukui Prefecture, local governments near the prefecture have also been demanding the right to take part in the decision-making process.

The "energy strategy council," jointly formed by the Osaka municipal and prefectural governments, decided on April 1 to urge the central government and Kansai Electric Power Co. to set eight conditions for restarting the idled reactors. One of the conditions is to secure the consent of local people and governments within a radius of 100 kilometers from the nuclear power station. Osaka Mayor Toru Hashimoto said on April 3, "We must widen the scope further to include more local municipalities (that need to be involved in the decision-making). Hashimoto then added, "The central government must either secure the understanding of local governments and residents in a wide region or seek public judgment through an election in a responsible way."

Shiga Gov. Yukiko Kada and Kyoto Gov. Keiji Yamada have said they would demand the right to get involved in deciding whether to reactivate the reactors. The two governors have been coordinating their plans to visit the No. 3 and No. 4 reactors at the Oi nuclear power station together. Gov. Yamada said, "We want to work together with Fukui Prefecture, which has accumulated knowledge (on nuclear reactors and nuclear issues). He wants to set up a forum in which officials from the Kyoto, Shiga and Fukui prefectural governments can exchange views.

In light of the fact that Prime Minister Yoshihiko Noda and three Cabinet ministers concerned held their first meeting to officially discuss the reactivation of the Oi nuclear reactors, Gov. Kada issued a statement on the evening of April 3, saying, "The investigations into the cause of the nuclear accident in Fukushima, the formulation of safety measures and the mechanism to ensure the safety of nuclear reactors are insufficient. Top priority should be placed on these issues. We want the central government to fully explain to us as 'disaster-stricken' local governments and residents that could sustain damage (from a nuclear accident)."

Not so simple

April 5, 2012
Local govts unhappy about nuclear plant restart policy

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120404005093.htm

Local governments in and near Fukui Prefecture, which hosts the Oi nuclear power plant, are critical of the central government's inconsistency over procedures to restart operations of the plant's Nos. 3 and 4 reactors, located in the town of Oi in the prefecture.

On Tuesday, Prime Minister Yoshihiko Noda instructed relevant Cabinet ministers to draw up new safety criteria for restarting idled reactors.

Oi Mayor Shinobu Tokioka maintained a cautious stance, just saying, "I'm not in a position to comment."

But Oi Town Assembly Chairman Kinya Shintani criticized the central government for its inconsistency.

"The government changes its views in the morning and in the evening, and different people say different things. I want them to unify their views," Shintani said.

As prerequisites for deciding on restarting the reactors, Fukui Gov. Issei Nishikawa has called on the central government to set tentative safety criteria based on lessons from the crisis at the Fukushima No. 1 nuclear power plant in Fukushima Prefecture and demand that Cabinet members make efforts to convince the public of the necessity to restart the reactors.

"Even if Fukui Prefecture approves the restart, the central government may not allow the reactors' restart, citing opposition from surrounding local governments," Toshiyuki Tanaka, chairman of the Fukui prefectural assembly, said.

Tanaka expressed his strong frustration, saying, "As long as the central government deals with this matter in such a way, we cannot make any decision on that."

Economy, Trade and Industry Minister Yukio Edano said at a House of Councillors Budget Committee meeting Monday that the government would seek understanding from the governors of Shiga and Kyoto prefectures. Northern areas of the two prefectures are close to the Oi plant. Kyoto Gov. Keiji Yamada welcomed Edano's comment the same day.
But Yamada said Tuesday he could no longer understand the government's response.

Shiga Gov. Yukiko Kada also said in a statement issued Tuesday: "I'd like to ask the central government about what it meant by local governments' 'understanding.' We won't be convinced unless the government provides us satisfactory explanations, without leaning too much toward restarting the reactors, by carefully examining the expected power supply-demand balance."

The Shiga prefectural assembly approved a letter of opinion in March demanding that the central government not approve restarting the Oi reactors until the cause of the accident at the Fukushima No. 1 nuclear plant is clarified and nuclear power plants' safety is ensured.

Kiyoji Nishikawa, mayor of Takashima, Shiga Prefecture, called on the central government to seek consent from neighboring local governments before restarting the operations of the Oi plant.

As a key to its disaster-management plans, the central government has decided to designate the area within a 30-kilometer radius of each nuclear power plant as an urgent protective action planning zone. The northwestern part of Takashima is within that zone for the Oi plant.

"[Takashima] also should be considered one of the local governments concerned. The central government should obtain consent from all neighboring local governments," Nishikawa said.

'Obtain wider consent'

Toru Hashimoto, the mayor of Osaka, which is the largest shareholder of Oi plant operator Kansai Electric Power Co., also said there is a need to obtain consent from local governments across a wider area before restarting the plant.
"[The government] is bound to the conventional framework of obtaining consent from prefectures hosting nuclear power plants. So it is failing to keep up with situations that have changed since the accident at the [Fukushima] nuclear power plant," he said Tuesday. "If the central government is going to obtain the consent of concerned local governments, it should definitely expand the areas to be covered."

Safety in 30 points ?

Govt to draft new criteria to restart reactors

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120404005785.htm

Aiming to restart idled reactors at the Oi nuclear power plant in Fukui Prefecture, Prime Minister Yoshihiko Noda has instructed ministers related to nuclear power safety to quickly draw up a new set of safety criteria based on lessons learned from the crisis at the Fukushima No. 1 nuclear power plant.

Economy, Trade and Industry Minister Yukio Edano was among those who attended the meeting on Tuesday, the first such meeting to be held.

The meeting was held to discuss the possible resumption of operations at the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s power plant in Oi.

The government will present the new safety criteria at the next meeting of related ministers scheduled for later this week, and will start consolidating opinions with the aim of making requests to relevant local governments, including the Fukui prefectural government, on resuming operations at reactors.

During the first meeting, Noda told the ministers: "Some have pointed out that the current criteria for judging whether to resume operations at nuclear reactors is difficult to grasp. I want you to draw up tentative safety criteria based on a causal analysis of the accident at the Fukushima No. 1 nuclear power plant."

The meeting was also attended by Chief Cabinet Secretary Osamu Fujimura, Goshi Hosono, state minister in charge of nuclear power policy, and Yoshito Sengoku, acting chairman of the Democratic Party of Japan's Policy Research Committee.

As a condition for agreeing to give his approval for restarting the reactors, Fukui Gov. Issei Nishikawa requested the central government to create new safety criteria based on knowledge and lessons learned from the nuclear accident in Fukushima Prefecture.

The Economy, Trade and Industry Ministry's Nuclear and Industrial Safety Agency has drawn up a 30-item list of safety measures, which includes provisions for multiple emergency power sources and reinforcing a device to lower internal reactor pressure during a crisis.

The government is expected to present the new safety criteria in easy-to-understand ways. However, it is unlikely the new criteria will make restarting reactors any more difficult, according to informed sources.

If the government decides the new criteria are appropriate and the reactors at the Oi power plant meet these criteria, Edano will visit Fukui to seek the prefectural government's approval to restart the reactors.

"It will not take much time before the government holds explanatory sessions with local governments and residents to improve their understanding about potentially restarting the reactors," a government source said, hinting the government will make its requests to local governments at an early date.

However, following the first meeting, Edano said: "It will take a certain amount of time [for the government] to win people's understanding. As a rough-and-ready approach is not desirable, we haven't had any concrete prospects [for a government conclusion on restarting the reactors]."

The government will forecast the electricity supply and demand for this summer sometime around Golden Week, which starts in late April.
If operations at the Oi reactors are not decided within the month, there is a high likelihood that businesses and households in the Kansai region will be asked to undertake strict electricity-saving measures. Whether a political decision on resuming reactor operations is made quickly is the real issue at this point.

30-point safety measures for nuclear plants
http://www3.nhk.or.jp/daily/english/20120405_24.html

The government is drafting new safety standards for nuclear plants, based on steps drawn up by Japan's nuclear regulator following the Fukushima disaster.

The 30 steps are designed to address factors the Nuclear and Industrial Safety Agency has singled out for causing the fuel meltdowns and huge radioactive leaks at the Fukushima Daiichi nuclear plant last year.

The agency says the plant lost power sources needed to activate safety devices, and the operator installed key power sources in one place, which broke down due to a single cause. In addition, the tsunami disabled all functions to inject cooling water into reactors.

It says the operator was also slow to release radioactive air to prevent hydrogen explosions, and gauges and communication devices to grasp the situation inside the reactors were unusable.

The 30 steps call for plant operators to secure multiple emergency power sources, protect facilities from tsunami and install electrical equipment in different locations.

Other requirements include storing long-lasting emergency batteries and setting up headquarters that are quake-resistant and shielded from radiation.

The agency says 13 out of the 30 steps are emergency measures and some have already been implemented. The rest are mid- and long-term measures that require new equipment and facilities.

The agency explains that the 30 points are not the safety standards that communities are requesting before restarting reactors. Rather, it says, they are part of the process for drafting the standards.

Restart Oi nuclear plant?

April 6, 2012

Govt to check Oi procedures / Results of 30-point safety plan will affect possible resumption date

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120405004775.htm

The government will use a 13-point set of emergency criteria to evaluate the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Oi nuclear power plant in Oi, Fukui Prefecture, as the first part of a two-stage inspection under new safety criteria for nuclear reactors, according to government sources.

To restart the reactors as soon as possible, the government will conduct the two-stage inspections based on safety criteria consisting of 30 points, compiled by the Economy, Trade and Industry Ministry's Nuclear and Industrial Safety Agency at the instruction of Prime Minister Yoshihiko Noda.

The first stage covers 13 points and is designed to prevent a serious crisis like the one at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant.

After approval of the safety criteria by the Cabinet ministers concerned, Economy, Trade and Industry Minister Yukio Edano will visit Fukui Prefecture to ask for the consent of the local government to reactivate the reactors as early as Sunday.
The government presented the 30-point safety criteria at a meeting of the ministers concerned Thursday.
The new guidelines were designed to further improve nuclear power plants' ability to withstand large earthquakes and tsunami.
Fukui Gov. Issei Nishikawa had demanded the government devise new safety standards as a prerequisite for consent on restarting the Oi reactors.
The 30-point safety criteria are divided into five categories:
-- External power supply.

-- Electrical equipment in buildings housing reactors.
-- Cooling functions of reactors.
-- Measures to prevent hydrogen explosions.
-- Accident responses.

The 13 points included in the first stage of the inspection are regarded as emergency measures, most of which were implemented in the wake of the Fukushima accident.

The government believes facilities that pass the first stage are able to prevent accidents, including meltdowns, resulting from a tsunami-triggered loss of all electrical power.

Key pillars of the first-stage accident-prevention measures include:
-- Deployment of power-supply vehicles to cover a loss of emergency power.
-- Measures to prevent buildings from flooding.
-- Deployment of fire pump vehicles to prepare for a loss of reactor cooling functions.
-- Measures to prevent hydrogen explosions.
-- Measures to facilitate the discharge of steam from a reactor's containment vessel, to lower internal pressure and prevent a hydrogen explosion, even during blackouts.

Apart from the emergency measures, the 30-point safety criteria include increasing external power supply networks, installing ventilation devices equipped with filters to catch radioactive substances and securing telecommunication lines in the event of an accident.

After the 13 emergency measures have been fully implemented, the government plans to improve reactors based on the remaining points while keeping them in operation.

The government intends to ensure the enhanced safety of nuclear power plants by requiring they meet the 30-point safety criteria in addition to regular inspections and stress tests, to dispel a sense of distrust among affected local governments, according to officials. The same procedures would be followed for the reactivation of other reactors in the country.

The government is expected to seek the Fukui prefectural government's consent in a meeting with the ministers concerned with nuclear safety. The final decision will take the opinions of local entities concerned into account.
In June last year, then Economy, Trade and Industry Minister Banri Kaieda asked Kyushu Electric Power Co. to resume operations at its Genkai nuclear power plant's Nos. 2 and 3 reactors in Genkai, Saga Prefecture. However, then Prime Minister Naoto Kan overturned the decision.

In light of this, the government will first clarify its stance and present relevant material to persuade the Fukui prefectural government and other local entities to restart their reactors.

The concerned entities' responses are expected to have a significant impact on the government's electricity supply-and-demand plan for this summer, to be compiled before the Golden Week holidays.

Is gov't trying to restart reactors without public consent ?

April 6, 2012

Govt. approves new nuclear plant safety standards
http://www3.nhk.or.jp/daily/english/20120406_27.html

Japan's government has adopted new safety standards for nuclear power plants as a step toward restarting 2 reactors supplying power to western Japan.

Prime Minister Yoshihiko Noda and 3 ministers approved the standards on Friday in their third meeting on the Ohi plant in Fukui Prefecture.

The standards call for utilities to take measures to retain some power sources to avoid a total blackout in the event of a powerful earthquake or tsunami. They also address steps to prevent the situation from worsening.

Plant operators are also asked to compile action plans to boost safety levels.

Economy minister Yukio Edano asked the government nuclear safety agency to make sure the Ohi plant, run by the Kansai Electric Power Company, meets the standards.

Edano also instructed the utility to draw up a timeline to implement the standards. The 4 ministers are to meet again after the utility turns over its replies to the requests.

Noda plans to send Edano to Fukui to seek understanding from local communities once the government confirms the plant's safety and determines that restarting the reactors can gain public support.

Despite growing public opposition to nuclear power, the government is trying to restart the reactors due to concern about power shortages this summer. The reactors are among 53 in Japan that have gone offline for safety checks.

The government says it hopes the standards will help convince host communities and the public of the safety of nuclear plants.

Can not-restarting nuke reactors be an option?

Edano wants concrete steps to boost nuclear safety
http://www3.nhk.or.jp/daily/english/20120406_16.html

Japanese industry minister Yukio Edano says he will order power companies to submit their nuclear maintenance timetables in order to further enhance safety at nuclear power plants.

Edano faced reporters on Friday, one day after the Cabinet basically agreed on new nuclear safety standards in connection with the possible restart of 2 reactors currently offline for inspections.

Edano said the most important lesson learned from the nuclear accident at Fukushima Daiichi was that power companies had failed to regularly enhance safety measures by incorporating new ideas.

He said the government will ask the power companies for their nuclear maintenance timetables to implement further safety measures incorporating the lessons learned from the Fukushima accident.

Edano said the Cabinet ministers will examine the timetables closely before making decisions on whether to approve any reactor restarts.

He also said there is no need to restart the reactors if the country has sufficient power, or if energy-saving measures can sufficiently reduce power consumption.

All but one of Japan's 54 nuclear reactors are now offline.

"Safety" standards

April 7, 2012

Ministers largely approve new nuclear safety standard

"(mainichi Japan) April 06, 2012"
http://mainichi.jp/english/english/newsselect/news/20120406p2g00m0dm066000c.html

TOKYO (Kyodo) -- Prime Minister Yoshihiko Noda and three ministers on Thursday largely approved a new safety standard for resuming idled nuclear reactors, industry minister Yukio Edano said after their meeting.

The four examined the new standard at their second meeting to consider whether to reactivate two reactors at the Oi nuclear power plant in Fukui Prefecture, western Japan. They will hold a third meeting Friday to finalize details of the standard, Edano said.

Edano will then instruct the Oi plant operator, Kansai Electric Power Co., as well as the government's Nuclear and Industrial Safety Agency to check whether the two idled reactors meet the new standard.

Provided the government decides to reactivate the Oi reactors, Edano will travel to Fukui Prefecture to explain the government's decision, Edano said.

Government sources said Edano may travel to Fukui as soon as Sunday to seek the approval of Fukui Gov. Issei Nishikawa for reactivating the two nuclear reactors.

To cope with remaining concerns about nuclear safety despite nuclear authorities' technical analyses through recent reactor stress tests, Noda earlier this week ordered that a new safety standard for resuming operation of idled reactors be set up.

A statement released after Thursday's ministers' meeting said nuclear power plants have been operated adequately and safety checks on reactors idled for periodic checks have been conducted in accordance with current laws.

But referring to the delay in establishing a new nuclear safety agency and enacting related new laws, the statement said the four ministers urge nuclear power operators when restarting reactors to "ensure safety exceeding the level required by regulations under the current law."

The new safety standard consists of three guidelines to reactivate idled reactors.

The first requirement is that reactors must have taken safety measures to prevent the loss of all power in the wake of earthquake and tsunami.

The second is that measures must have been taken to prevent the sort of situation seen at the crisis-hit Fukushima Daiichi nuclear power plant even if reactors are hit by similar size earthquake and tsunami.

The third guideline includes the implementation of 30-point safety measures based on the analysis of the Fukushima crisis.

The Fukui prefectural government has called for the central government to present a provisional safety standard before reactivating the Oi reactors.

Since last year's nuclear accident at Tokyo Electric Power Co.'s Fukushima Daiichi complex, triggered by a massive earthquake and tsunami, no Japanese reactors have resumed operation after being shut down for mandatory periodic checkups.

Among the dozens of reactors idled for routine checks, the Oi reactors are the first that the government is considering allowing to resume operating, given the recent endorsement of results from the first stage of stress tests on them by the nuclear safety agency and the Nuclear Safety Commission.

Nuclear disaster minister Goshi Hosono and Chief Cabinet Secretary Osamu Fujimura also attended the meeting with Noda and Edano

Needed urgently : public reaction

April 8, 2012

Govt to monitor reactor safety measures

Masayuki Takata and Keiichi Shimizu / Yomiuri Shimbun Staff Writers

http://www.yomiuri.co.jp/dy/national/T120407002810.htm

As the government has decided on new nuclear reactor safety standards, power companies will now be required to implement further safety improvement measures.

Meanwhile, local governments are trying to gauge how committed the central government is to quickly securing a stable electricity supply.

The central government will monitor whether power companies have implemented safety measures to prevent a crisis similar to the one that occurred at the Fukushima No. 1 nuclear power plant after the March 11, 2011, disaster. Companies must also commit to implementing further steps as soon as possible, according to the new safety standards.

With an eye on reactivating the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Oi nuclear power plant in Fukui Prefecture, the government approved the safety standards at a meeting Friday attended by Prime Minister Yoshihiko Noda and three other Cabinet ministers in charge of nuclear policy.
The safety confirmation standards consist of two stages.
The first stage is divided into two sections:
-- Emergency measures to prevent a worse situation even if a reactor loses all power. This section consists of 16 checkpoints in four categories.
-- Government confirmation of stress test results for the reactor regarding whether it can maintain cooling functions to prevent a meltdown even if it is hit by a disaster as powerful as the Great East Japan Earthquake and the ensuing tsunami.
The emergency measures were decided by the central government, following the crisis at the Fukushima No. 1 nuclear plant.
The second stage relates to operators' commitment to medium- and long-term safety enhancements.

Economy, Trade and Industry Minister Yukio Edano emphasized the significance of the safety criteria during a press conference Friday night at the Prime Minister's Office following the four-minister meeting.

"We don't want another nuclear crisis like the one at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear plant--that's the starting point of the standards," he said.

The safety standards were established based on 30 points devised in March by the Economy, Trade and Industry Ministry's Nuclear and Industrial Safety Agency.

The 30 items, however, covered emergency measures the government instructed operators to implement immediately after the Fukushima crisis, as well as initial assessments of stress tests, which focused on whether nuclear reactors can withstand quakes or tsunami larger than predicted.

Some experts, therefore, consider the safety criteria as "hastily compiled measures that don't include anything new."

Chief Cabinet Secretary Osamu Fujimura countered such criticism.

"That's a misunderstanding," he said. "They have been made based on the accumulation of our knowledge and findings since the nuclear crisis started."

In deciding whether to resume operations of suspended reactors, the safety standards require the prime minister and three others in charge of nuclear policy to verify the measures nuclear plant operators have taken.

In the case of Oi's Nos. 3 and 4 reactors, operator KEPCO has set up emergency generators on high ground and installed alternate seawater pump facilities.

In addition to the verification of completed safety measures, the new standards require plant operators to submit timetables on concrete steps they will take to implement measures among the list of 30 items and remedy problems discovered through stress tests.

Future safety measures included in the safety criteria have been modeled after measures already implemented overseas to prevent nuclear crises, citing the 1979 Three Mile Island incident and others.

NISA will judge the measures taken by utility firms, while the four ministers will later confirm the agency's judgment, according to the standards.

KEPCO has already announced a schedule for building necessary facilities aside from reactor buildings at the Oi nuclear plant--for example, a quake-resistant building to house an emergency headquarters **to be built by fiscal 2016.**

On the other hand, the utility **did not indicate when it will carry out other long-term measures,** such as setting up filtered ventilation equipment for reactors, to suppress radioactive material from being discharged into the atmosphere in a severe incident.

Nonetheless, a KEPCO official said the utility will submit a timetable for the two Oi reactors as early as this week.

"We've been examining [when these steps can be taken]," he said. "It won't take long for us to sort out the issues."

The new safety standards have been devised at the urging of Fukui Gov. Issei Nishikawa, who asked that the government not only require nuclear power plant operators to conduct stress tests, but also compile provisional criteria based on the Fukushima crisis.

The standards are expected to be studied for legal enforcement following the planned launch of a nuclear regulatory agency, according to government officials.

Even if suspended reactors receive permission for reactivation based on the safety standards, the government will need to reassure nearby residents with careful explanations so that they can accept the criteria, experts pointed out.

It must do this because there will be many steps left to be implemented even after suspended reactors are reactivated, they said.
In other words, they added, people will question whether the government can properly assess plant safety measures, which used to be the utilities' responsibility.
"We [four ministers] would like to explain to the public what experts have decided in an easy-to-understand way," Edano said.
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Summer shortage looms

With the Noda administration's decision on new guidelines to confirm the safety of nuclear power reactors, the process of restarting the reactors at the Oi nuclear plant in Fukui Prefecture has taken a step forward.

The administration regards a stable power supply this summer as the highest priority. For this reason, it has been aiming to restart the reactors by May 5, when the No. 3 reactor at Hokkaido Electric Power Co.'s Tomari nuclear power plant--the last reactor operating in Japan--will be suspended for regular inspections.

If none of the nation's reactors are online, "the hurdle to restarting the reactors [at the Oi plant] will become higher," a government source said.

Edano had been particularly optimistic about the resumption of the reactors' operations.

"If we can obtain the understanding from localities [hosting nuclear plants], we'll restart [operations] depending on the power demand-supply situation," he said.

However, Edano's recent comments suggest that his stance has changed. At a House of Councillors Budget Committee session Monday, he said, "At this point, I'm against the resumption [of the idle reactors at the Oi plant]."
Edano said consent would be needed from governors of neighboring Shiga and Kyoto prefectures. The apparently contradictory remarks have sparked controversy.

He then said at a press conference after a regular Cabinet meeting Friday, "If sufficient power supply is guaranteed, it won't be necessary to resume operations [of idled reactors]."

Parties concerned believe Edano was indicating the possibility that some nuclear power reactors would not resume operations.

Asked why Edano's remarks were so divergent, a Cabinet minister said, "We intended to have Mr. Edano **keep power utilities in check, since they may lag in implementing reforms and cutting costs if they believe the reactors will be restarted anyway."**

If the Oi reactors are confirmed safe to operate at a meeting of ministers related to nuclear safety, to be resumed as early as Monday, Edano is expected to visit Fukui Prefecture to secure the consent of the local government.
However, Edano's contrary remarks have brought "side effects," stoking suspicions among concerned parties in Fukui Prefecture toward the central government's position.

Hakuei Ishizuka, the head of the public safety and environment department at the Fukui prefectural government, on Friday refrained from talking about the government's new safety confirmation standards.

"We can't comment because the central government is still in the middle of the decision making process," he said.
However, Oi Mayor Shinobu Tokioka criticized the central government over the process.

"It should explain the significance and need for nuclear plants before creating standards," he said. "They're doing things backward."

Fujimura said at a press conference Friday, "From a legal perspective, there is no need to obtain consent [of the local governments]."

Although Fujimura emphasized that the central government takes full responsibility for settling the reactivation issue, prospects for restarting reactors remain unclear.

Choose the right mayor

Omaezaki mayoral race starts, focus on resumption of Hamaoka plant

April 08, 2012(Mainichi Japan)
http://mainichi.jp/english/english/newsselect/news/20120408p2g00m0dm056000c.html

HAMAMATSU (Kyodo) -- The mayoral race in Omaezaki, Shizuoka Prefecture, commenced Sunday with three candidates focusing on whether to restart the Hamaoka nuclear power station, which has been suspended at the request of the government in the wake of the March 2011 earthquake and tsunami.

The three candidates are incumbent Shigeo Ishihara, 64, who is seeking a third term, travel agent Haruhisa Muramatsu, 60, who is backed by the Japanese Communist Party, and former city councilor Katsuhisa Mizuno, 58.

In their campaign speeches, Ishihara said he would decide whether to restart the power plant through discussions with city residents and by taking into account lessons learned from the nuclear crisis at the Fukushima Daiichi complex, while Muramatsu said the Hamaoka plant should be decommissioned.

The voting and count will take place next Sunday.

Mizuno pledged he would not accept resumption of the plant during his term, saying, "Everybody hopes the plant will not be resumed."

The Hamaoka power station in the city, operated by Chubu Electric Power Co., has been suspended since last year after an unprecedented request from the government following the March 2011 disaster, based on a prediction that a magnitude 8-class quake could hit the region in the first half of this century.

Not to worry then

Kansai Electric to present timetable Monday for Oi reactors' safety

April 08, 2012(Mainichi Japan)
http://mainichi.jp/english/english/newsselect/news/20120408p2g00m0dm077000c.html

OSAKA (Kyodo) -- Kansai Electric Power Co. President Makoto Yagi is considering presenting a medium- to long-term timetable for the implementation of safety measures for two idled reactors at its Oi nuclear power plant to industry minister Yukio Edano on Monday morning, sources familiar with the move said Sunday.

Edano, Prime Minister Yoshihiko Noda and two other ministers will assess the timetable, submission of which is a prerequisite for resuming the Nos. 3 and 4 reactors at the Oi nuclear complex in Fukui Prefecture, to determine if the safety of the reactors will be ensured.

They will also examine projections for electricity supply and demand this summer in the Kansai region centering on Osaka that the utility serves, before determining whether they should seek local cooperation for the reactivation of the two reactors.

In the timetable, Kansai Electric will clarify time limits for achieving 30 safety measures required by the government's Nuclear and Industrial Safety Agency in the wake of the nuclear crisis at Tokyo Electric Power Co.'s Fukushima Daiichi complex.

Since last year's Fukushima nuclear disaster, the government has required nuclear power plants to undergo two-stage stress tests and made it necessary for reactors idled for scheduled checks to pass first-stage tests before resuming operation.

Only one of Japan's 54 commercial reactors is currently in operation and it is scheduled to suspend operation on May 5 for routine checks, leaving Japan without an operating reactor if no others resume operation by then.

Among the dozens of reactors idled for routine checks, the Oi reactors are the first that the government is considering allowing to resume operation, given the recent endorsement of first-stage stress test results on them by the Nuclear and Industrial Safety Agency and the Nuclear Safety Commission.

Power shortage or not ?

April 9, 2012
Kansai may face 20% power shortage this summer

http://www3.nhk.or.jp/daily/english/20120409_38.html

The Japanese government says Kansai could face a power shortage of 20 percent this summer if the weather stays hot and idled nuclear reactors that serves the region are not restarted.

The government's new estimate on summer power shortages covers areas served by Kansai Electric Power Company.

The estimate says a shortage of up to 19.6 percent is possible if 2 off-line nuclear reactors at the Ohi plant in Fukui Prefecture remain shut and temperatures reach the sweltering levels of summer 2010.

A shortage of up to 17.2 percent is expected if summer temperatures stay within the average range of the past 5 years.

The estimate says the shortage will drop to 7.6 percent if factories operate on weekends instead of some weekdays to spread out power demands, power-saving measures are carried out by households, and temperatures stay at last summer's levels.

It says in each scenario, the rate of shortage may increase by about 2 percentage points if there is trouble at any of the thermal power plants, or if demand peaks in July.

Power shortages in areas served by Kansai Electric would be one of the conditions for the resumption of the utility's currently suspended nuclear reactors.

The government will decide on Monday whether or not to restart these reactors, after considering the estimate, along with a new set of safety standards the utility has submitted.

Getting there

April 9, 2012

Operator of Ohi nuclear plant submits safety plan
http://www3.nhk.or.jp/daily/english/20120409_23.html

The operator of 2 nuclear reactors on the Japan Sea coast has submitted a safety action plan to the industry minister as a step toward restarting the reactors.

Kansai Electric Power Company President Makoto Yagi handed the plan to Industry Minister Yukio Edano on Monday.

The government had asked the utility to come up with a timeline for implementing the government's new safety standards as a precondition for restarting the reactors. The 2 reactors at the company's Ohi power plant are currently offline for safety checks.

After meeting with Edano, Yagi said the company's accident-prevention measures are aimed at preventing incidents such as the disaster at Tokyo Electric Power Company's Fukushima Daiichi Plant. He said he hopes to get government approval soon to restart the reactors.

The plan includes the installation in 2015 of vents equipped with filters to scrub radioactive materials from steam. The vents are used to release pressure from the containment vessels in the event of a nuclear emergency.

The power company also plans to build an earthquake-resistant office building in 2015, one year ahead of schedule. The utility says the office will serve as a response center for dealing with nuclear accidents.

Prime Minister Yoshihiko Noda will convene his Cabinet on Monday to discuss whether the timeline can be used to help convince those living near the plant that it is safe to restart the reactors.

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Moving "too hastily and in a sloppy manner"

April 9, 2012

New standards for reactivating nuke reactors are too hasty and sloppy

http://mainichi.jp/english/english/perspectives/news/20120409p2a00m0na018000c.html

The government should be criticized for having moved too hastily and in a sloppy manner when it set new standards for deciding whether to reactivate nuclear reactors, even though the criteria are crucial in ensuring the safety of the public.

Prime Minister Yoshihiko Noda and three Cabinet ministers concerned approved the standards on April 6 with an eye to approving resumption of operations at the No. 3 and 4 reactors at the Oi Nuclear Power Plant in Fukui Prefecture, which are currently suspended for regular inspections.

The standards apply to not only the Oi reactors but also to all nuclear plants across Japan. Nevertheless, the government spent only three days on working out the standards -- from the prime minister's instruction to do so until the adoption.

The government claims that the new standards are based on knowledge and lessons learned from the crisis at the tsunami-hit Fukushima No. 1 Nuclear Power Plant and were adopted earlier than initially intended, but it is hardly convincing. **The government has not yet got to the bottom of the accident, and the standards appear to contain nothing new.**

The first of the three pillars of the standards only calls for safety measures that can be implemented soon, such as the installation of power-supply vehicles, which had been simply gleaned from 30-point measures that the Nuclear and Industrial Safety Agency (NISA) compiled in late March.

The second pillar requires the government to confirm that nuclear fuel will never be damaged in case of earthquakes and tsunami similar to those that hit the Fukushima plant. However, the government maintains that it can confirm whether nuclear power stations meet this standard through a primary safety assessment.

The third pillar calls for the construction of quake-absorbing structures on the premises of nuclear plants and other mid- and long-term safety measures. However, the government will reportedly deem that nuclear plants meet this condition if their operators submit their plans to implement these measures.

In other words, the new standards were worked out by only putting together emergency safety measures and the results of safety assessments that power suppliers have already implemented, giving the utility firms an excuse for putting off time-consuming safety measures. **It even appears that the government intentionally worked out looser standards so that utilities can meet them in order to hasten the reactivation of Oi nuclear plant's idled reactors.**

Since the government has adopted a policy of cutting down its reliance on nuclear power with risks involving such plants fully in mind, it should not have worked out standards on the assumption that no reactor will fail safety assessments. Rather, the government should compare flaws involving various nuclear plants and improve the standards so that it can refuse to permit reactivation of high-risk plants.

Further questionable is that the standards are based on the principle that the government must confirm that nuclear fuel will never be damaged if hit by earthquakes and tsunami as massive as those that hit the Fukushima plant. **However, an important lesson learned from the Fukushima nuclear crisis is that nuclear plant operators must be prepared for massive disasters that are beyond the scope of assumptions**. Considering that a serious accident leading to reactor core meltdowns could occur, the government should assess the performance of nuclear plants' vents equipped with filters and the risks resulting from the lack of quake-absorbing structures as well as other factors in an appropriate manner.

Economy, Trade and Industry Minister Yukio Edano says there is no need for reactivation of nuclear reactors stopped for regular inspections if the overall supply of electric power is sufficient.

The government will further lose the public's confidence if it sticks to its stance to implement the safety standards worked out hastily in order to reactivate idled nuclear reactors without providing a sufficient explanation of its forecast of electricity supply and demand.

Seems like the decision has been made

April 10, 2012

KEPCO gives govt road map on Oi reactors

The Yomiuri Shimbun

Kansai Electric Power Co. President Makoto Yagi on Monday submitted to Economy, Trade and Industry Minister Yukio Edano a road map of safety measures for the reactivation of the idled Nos. 3 and 4 reactors at the Oi nuclear power plant in Fukui Prefecture.

This includes measures to set up filtered ventilation equipment for reactors in fiscal 2015 to suppress the release of radioactive substances.

The road map was formulated based on medium- and long-term nuclear reactor safety standards that KEPCO was instructed to implement by the government Friday.

Prime Minister Yoshihiko Noda was expected to hold the fourth meeting of related ministers Monday evening, with an eye on reactivating the reactors and making the final confirmation of the nuclear power plant's safety.

The road map was made to implement 30 nuclear reactor safety standards created in March by the ministry's Nuclear and Industrial Safety Agency, which are based on the lessons learned from the crisis at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant.

These standards include emergency measures to prevent serious accidents, even at a time when all power supply is lost, which have already been implemented at the two reactors. The road map clarifies the timing for the implementation of medium- to long-term measures to further improve the reactors' reliability.

They include further elevating breakwaters in fiscal 2013, and bringing forward by a year to fiscal 2015 the planned installation of a seismically isolated building from which the operation of reactors will be controlled during an emergency.

The enhancement of cooling and power-supply facilities were also included in the road map.

KEPCO is expected to spend at least 200 billion yen on safety enhancement measures at its power plants, including the one at Oi.

Edano called on Yagi to make further efforts to enhance nuclear safety by saying, "It is important for power companies to break away from the myth of [nuclear power plant's] infallible safety and to set a higher safety bar."

Yagi told Edano the firm is dedicated to taking every measure to improve the safety and reliability of its plants.

Noda was expected to make a final decision on the reactors' safety as early as Monday evening at the ministerial meeting after studying both the road map and verification results of emergency measures by the safety agency.

Should he judge the reactors are safe enough, a decision will be made on whether they will ask the local government to approve the reactivation.

If the reactors are not activated, the areas covered by KEPCO are expected to face a power shortage of up to 19.3 percent in summer, which makes it likely the reactivation will be endorsed.
(Apr. 10, 2012)

Osaka's conditions (prior to restarting reactors)

April 10, 2012

Osaka compiles new conditions for resumption of Oi nuclear plant
Asahi, April 10, 2012 - http://ajw.asahi.com/article/behind_news/politics/AJ201204100035

The central government is again marching steadily toward restarting reactors at the Oi nuclear power plant, but **local governments in the area have raised the stakes for consenting to such a move**.

Prime Minister Yoshihiko Noda and three of his Cabinet ministers on April 9 agreed that the road map for additional safety measures, submitted earlier in the day by Oi plant operator Kansai Electric Power Co., was generally appropriate.
"It is clear that the plant operator is taking a stance of ceaselessly implementing the measures needed to ensure the safety of the plant," said Yukio Edano, the industry minister who oversees the nuclear energy sector.

However, Edano indicated that a decision on resuming operations would not be made until the next meeting of the relevant Cabinet ministers, likely later this week.

In the meantime, the energy strategy council of the Osaka prefectural and municipal governments is putting together a set of eight conditions that it considers necessary before operations can resume at the Oi plant in Fukui Prefecture.

The Osaka municipal government is the largest shareholder of Kansai Electric, so its position will likely influence the central government's decisions regarding the Oi plant.

The council is calling on the central government to not only establish a new nuclear regulatory agency and comprehensively revise its safety standards, but it is also asking that a new safety agreement be signed between Kansai Electric and all local governments within a 100-kilometer radius of the Oi plant.

Currently, such safety agreements are signed only between the nuclear plant operator and the local governments that actually host the plant.

However, the accident last year at the Fukushima No. 1 nuclear power plant showed that leaked radiation can quickly spread to a much wider area than simply the municipalities where the nuclear plant is located. In addition, the governors of Kyoto and Shiga prefectures, which border Fukui Prefecture, have raised objections to an early resumption of operations at the Oi plant.

A 100-kilometer radius around the Oi plant would cover not only Kyoto and Shiga prefectures, but part of Osaka Prefecture as well.

The central government has so far been determined to approve a resumption of operations at the Oi nuclear plant to prevent an electricity shortage in the high-demand summer season.

The central government compiled new provisional safety standards for resuming operations just two days after Noda retracted his opposition to such standards. Kansai Electric also submitted its safety road map only three days after it was asked to do so.

According to the road map, Kansai Electric plans to install venting equipment with filters to prevent the spewing of radioactive materials in the event of an accident. That installation is scheduled for completion in fiscal 2015.

But almost all of the measures included in the road map have been proposed by the utility in the past. About the only new measure included was to install permanent emergency power generation equipment.

The road map contained no details on equipment numbers and their locations.

At an April 9 meeting, officials of the Agency for Natural Resources and Energy presented estimates of the effects of keeping idle all nuclear plants operated by Kansai Electric.

The officials estimated a 19.6-percent electricity shortage if temperatures reached levels of the hot summer of 2010. They also predicted an additional 800 billion yen ($9.8 billion) in fuel costs for Kansai Electric to operate its thermal plants in place of the nuclear reactors.

Not decided yet ?

April 11, 2012

Safety of Oi reactors 'confirmed' / Final decision to be made later this week

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120410005406.htm

Economy, Trade and Industry Minister Yukio Edano said the safety of the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Oi nuclear power plant in Fukui Prefecture has been basically confirmed by four ministers concerned, as the reactors meet the government's new reactor safety guidelines.

"They met the safety standards we decided on, and the safety of the reactors is generally confirmed," Edano told a press conference held after a meeting of the four ministers on Monday.

However, Prime Minister Yoshihiko Noda, Edano and two other ministers did not make a final decision Monday on whether the reactors should be restarted. They are expected to decide at their next meeting, to be held later this week.

Edano likely will visit Fukui Prefecture on the weekend to request the prefectural government approve the reactivation of the reactors.

At last Friday's meeting of the relevant ministers, the government revealed new safety guidelines for restarting idled nuclear power reactors. At the Monday meeting, they screened a road map of safety measures toward the reactivation of the Oi reactors that KEPCO submitted to Edano on the same day.

Edano said at the news conference, "We'll continue to discuss safety confirmation and the necessity [of reactivating the reactors] in consideration of power supply and demand [at the next meeting]."

The ministers will comprehensively review the safety measures for the reactors and "check whether there were oversights," Edano added.

The government's new guidelines consist of two stages:

-- Confirmation of preventive measures to avoid a worst-case scenario in which a reactor loses all power sources due to an earthquake or tsunami, as well as confirmation of emergency measures to maintain cooling functions to prevent a meltdown during a severe accident.
-- Require power utilities to submit medium- and long-term measures to improve nuclear reactor safety.

KEPCO's safety improvement timetable applies the 30 points of the nuclear reactor safety standards created by the Nuclear and Industrial Safety Agency to 85 fields.

According to KEPCO, the power company has already completed emergency safety improvement measures in 52 of the 85 fields.

The firm has started implementing medium- and long-term measures in most of the remaining 33 fields, government sources said.

Through the road map, KEPCO has revealed its intention to swiftly implement the safety measures by moving up the schedule for conducting the medium- and long-term steps, the sources said.

Specifically, KEPCO brought forward by a year to fiscal 2015 the schedule for establishing a special "earthquake-resistant administration building."

Such a seismically isolated building played an important role as the command headquarters for the crisis at the Fukushima No. 1 nuclear power plant of Tokyo Electric Power Co.

KEPCO also set a target of fiscal 2015 for setting up filtered ventilation equipment for the reactors, which is designed to prevent the dispersal of radioactive substances when air or steam is released into the atmosphere to reduce the pressure within the reactor.
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KEPCO to request power saving

KEPCO said Tuesday it will ask its customers to save electricity again this summer, irrespective of whether it resumes operation of the Nos. 3 and 4 reactors at the Oi nuclear power plant.

"Even if the reactors at the Oi plant are reactivated, we'll request customers to conserve," KEPCO Vice President Shigeki Iwane told reporters after a meeting of the joint energy strategy council of Osaka Prefecture and Osaka city.

According to government estimates, areas covered by KEPCO are likely to experience a power shortage of 19.6 percent this summer if the two reactors at the Oi plant do not resume operations, under possible power demand of 30.95 million kilowatts--the demand in the extremely hot summer of 2010.

Even if power demand is held down to last summer's level of 27.84 million kilowatts--when KEPCO requested its customers to cut power use by least 15 percent--it will face a shortage of 7.6 percent.

Regarding estimates that a serious power shortage is expected within the KEPCO coverage areas if the Oi reactors are not reactivated, Chief Cabinet Secretary Osamu Fujimura said at a press conference on Tuesday that planned power conservation should be implemented based on detailed predictions of power demand.

Unexpected respite

April13, 2012
Govt puts off decision on Oi N-reactors

Jiji Press
http://www.yomiuri.co.jp/dy/national/T120412006339.htm

Prime Minister Yoshihiko Noda and three other Cabinet members put off their decision on Thursday as to whether to approve the safety of two suspended nuclear reactors at the Oi power station in central Japan.

At their fifth meeting on the issue, the four had been expected to give their approval of safety measures drawn up by Kansai Electric Power Co. for the Nos. 3 and 4 reactors at the power plant, which the company operates in Fukui Prefecture.

But industry minister Yukio Edano said after the talks that the participants were unable to reach a conclusion.

Edano added that he hopes to hold a meeting of the four ministers again on Friday if possible.

The remaining two meeting participants were Chief Cabinet Secretary Osamu Fujimura and nuclear disaster management minister Goshi Hosono.

If the four ministers approve the safety measures for the two reactors, they would adopt a plan to send Edano to Fukui Prefecture in an attempt to overcome local opposition to the restart of the two facilities.

They are expected to meet again once Edano returns to Tokyo and finalize their decision on the restart if they believe the plan has local understanding.

At a meeting held Monday, the four ministers broadly agreed that Kansai Electric's safety measures for the two reactors are adequate to warrant a resumption of operations.

Kansai Electric has been instructed to take steps to reduce power supply shortages that are expected in the summer. The power utility's service areas are mostly in western Japan.

Yuhei Sato speaks out against govt's rush to restart reactors

April 13, 2012
Fukushima Gov. blasts gov't over push to restart nuclear reactors

http://mainichi.jp/english/english/newsselect/news/20120413p2a00m0na014000c.html

FUKUSHIMA -- Fukushima Gov. Yuhei Sato, whose prefecture hosts the crippled Fukushima No. 1 nuclear plant, has spoken out against central government moves to restart reactors across the country idled for periodic maintenance.

"The investigation into the Fukushima No. 1 plant disaster isn't yet complete, but (the government) is already discussing restarting reactors. That is a problem," Sato told reporters at a regular news conference. "It makes me question whether the government really understands how severe nuclear disasters are.

"As the nuclear disaster progresses, we hear of new incidents every day," he added, referring to the frequent reports of spreading radioactive contamination and radioactive water leaks since the meltdowns at the No. 1 plant.

Sato also touched on the proposed new nuclear power regulatory agency, which was supposed to start work at the beginning of April but has not yet been launched, saying, "There's also a problem when the promotion of nuclear power is happening alongside the regulation of nuclear power, while the government has yet to present a long-term energy policy."

End of "suspense"?

April 14, 2013

Govt expected to approve Oi restart

Jiji Press
http://www.yomiuri.co.jp/dy/national/T120413005898.htm

Prime Minister Yoshihiko Noda and three other Cabinet ministers were expected to approve the restart of two suspended reactors at the Oi nuclear power plant at a meeting Friday evening.

At the meeting, the four were to discuss safety measures drawn up by Kansai Electric Power Co. for the Nos. 3 and 4 reactors at the power plant in Fukui Prefecture.

Another key issue on the agenda was the electricity supply and demand situation for KEPCO's service area.

The session marks the sixth meeting between Noda and the three ministers since April 3 in preparation for the restart of the two reactors, which have been idled for regular maintenance. The three are industry minister Yukio Edano, Chief Cabinet Secretary Osamu Fujimura and nuclear disaster management minister Goshi Hosono.

No suspended nuclear reactors have been allowed to resume operations since the onset of the crisis at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant in March 2011. The only active reactor in the country is scheduled to be idled for routine maintenance in May.

So far, the four have agreed that Kansai Electric's safety measures for the two reactors meet new safety standards adopted by the government on April 6.

The government sees a need to reactivate the reactors as the firm's electricity supply capacity may fall up to 19.6 percent short of demand if temperatures this summer match that of a record-breaking heat wave in 2010.

End of suspense (2) ?

April13, 2012

Govt acknowledges need to resume Ohi nuclear plant
http://www3.nhk.or.jp/daily/english/20120413_53.html

The Japanese government has decided that 2 reactors at the Ohi nuclear plant in western Japan need to be restarted to ensure that the region will not have a power shortage this summer.

The 2 reactors in Fukui Prefecture are currently offline for regular safety checks.

The final decision was made on Friday at a meeting of Prime Minister Yoshihiko Noda, Chief Cabinet Secretary Osamu Fujimura, Nuclear Crisis Minister Goshi Hosono and industry minister Yukio Edano.

The ministers discussed whether the Ohi plant meets the government's new safety standards for nuclear plants.

They also discussed the estimated power demand this summer in the service areas of the plant's operator, Kansai Electric Power Company.

The ministers agreed that the safety action plan submitted by Kansai Electric conforms to the safety standards, and acknowledged the need to restart the 2 reactors.

But the government will need to obtain the consent of the local community before the plant's operations can be resumed.

The government has estimated a power shortage of about 18 percent if the 2 reactors at the Ohi plant remain shut down and temperatures reach the sweltering levels of the summer of 2010.

The industry minister said that after discussing the estimated power shortage and an increase in utility charges, they agreed that the 2 reactors are safe enough to be restarted and there is a need for their resumption.

"Why rush to conclusions?"

April 13, 2012

Japan must heed lessons from World War II in handling nuclear power

http://mainichi.jp/english/english/perspectives/news/20120413p2a00m0na002000c.html

Observing the developments surrounding the push to restart nuclear reactors idled for regular inspections, I was reminded of the words of a renowned political scientist, the late Masao Maruyama.

A year after World War II came to an end, Maruyama pointed out in his essay, "Chokokkashugi no ronri to shinri" (The theory and psychology of supernationalism), that Japan showed no evidence of any awareness that it had taken part in such a horrific war. He asked, "What does it mean that we were shockingly swept along by an unknown force into the midst of a war that the entire nation dedicated itself to?"

I think what Maruyama's analysis of postwar Japan applies also to Japan's situation regarding nuclear power. Despite having wreaked such a horrific disaster under a safety myth that buttressed the construction of nuclear reactors, it has yet to be clarified where the responsibility for the crisis lies. **Additionally, the government is moving toward the resumed operations of halted reactors as if it were the obvious path just a year after the disaster's outbreak, which evokes the manner in which the nation allowed itself to be swept into World War II.**

At an April 9 meeting of relevant ministers, the Yoshihiko Noda administration determined that the No. 3 and 4 reactors at Oi Nuclear Power Plant operated by Kansai Electric Power Co. "for the most part, met" provisional conditions established for resumed operations. The administration is expected to confirm this temporary assessment soon. The government's push toward resumed nuclear power generation, despite widespread warnings of more massive earthquakes, does not strike me so much as hasty, but rather reminds me of the structure of the United States' industrial military complex. It should be up to the public to decide whether or not we follow a path of coexistence with nuclear power, through such methods as national elections and referendums.

On March 23, at a symposium hosted by the Ministry of Foreign Affairs, journalists from eight countries came together in Tokyo to discuss the role of the media in the Great East Japan Earthquake. I participated as the moderator of the discussions, and while some of the remarks were painful to hear, I appreciated the honest input of journalists from around the world, especially since in Japan there is a sense that the disasters are now in the past.

Immediately after the quake, as we watched tsunami swallow whole communities and reactor buildings at the Fukushima nuclear plant explode, we all soberly reflected on the future of our country. It could have been characterized as an opportunity for Japan to start fresh, and some may have viewed it as Japan's second "postwar" moment.

Has the government, however, examined the nation's past in fully thinking about its future? Prime Minister Noda's approach to the Nuclear Security Summit held last month in Seoul -- which included the Fukushima nuclear disaster in its agenda -- clearly did not leave the impression that Japan was starting anew. In addition, Japan's countermeasures against nuclear terrorism and possible attacks on its nuclear reactors were shown to be sorely lacking.

As evidenced in how Japan has handled North Korea's launch of what it claimed was a "satellite," the Japanese government's crisis management is extremely haphazard. As such, it's hard to believe that Japan's crisis management policy with regards to nuclear power is watertight. At the aforementioned journalists' symposium, Hisashi Suzuki, chief editorial writer at Fukushima-Minpo, expressed deep concern over spent nuclear fuel at the stricken Fukushima plant, since another massive quake could further damage the plant's reactor buildings and bring about a far worse catastrophe. **The crisis, albeit quietly, is ongoing.**

A striking scene from the symposium involved CNN's Tokyo correspondent Kyung Lah and Hiroshi Ogasawara, chief editorial writer at Iwate Nippo, a daily paper in Iwate Prefecture. Lah said that she had been impressed to see disaster survivors form neat lines in front of convenience stores, and share one bowl of noodles among multiple people at an evacuation center. Ogasawara, meanwhile, said that residents in disaster-struck communities had always helped each other out, and that lining up at convenience stores was a normal thing to do. Because of this, he said, it was surprising to hear that people were struck by such behavior.

The remarks made by the two journalists sound like two sides of the same coin: that the Japanese are a forbearing people. Patience may be a virtue, but it could give ineffective politicians the impression that they are doing their job right. One British media outlet warns that excessive patience and endurance could have an adverse effect when it comes to reconstruction. The same could probably be said about the issue of nuclear power.

Needless to say, the media bears a heavy responsibility. Priscilla Jebaraj, a reporter at The Hindu, raised the question of neutrality in media coverage of nuclear power. She explained that in reporting on India's anti-nuclear movement, a major Indian newspaper that supports nuclear power has vilified members of the anti-nuclear camp. In response, some audience members stated that the Japanese mass media's investigations into nuclear power have been insufficient.

It is, of course, important to accept criticism. However, I think that it is not so much that the media's investigations have been insufficient, but that Japan -- including the government, utilities, and media -- does not have the capacity to accurately ascertain what has taken place in Fukushima, or the safety of nuclear reactors. Nuclear power is a critical energy security consideration for an island nation like Japan. Moreover, some people are likely to want to secure the latent ability to produce nuclear weapons. There's also the concern over a possible imbalance between energy supply and demand this coming summer. With so many factors at stake, it is not surprising for people to be divided over the matter.

All of this, however, must have as its prerequisite the safety of the country. The notion that the resumed operation of nuclear reactors is a must in our making a fresh start is nothing but arrogance. It is the job of the media to blow the whistle on a country being swept away into something bigger and darker than what's happened so far. I**t goes without saying that this is a lesson that we should have learned from**

World War II. We must take our time in deciding whether Japan really needs nuclear power. Why rush to conclusions? (By Hiroshi Fuse, Expert Senior Writer)

Doubts about safety

April 14, 2013

Doubts linger over safety, necessity of nuclear reactors as gov't eyes quick restart

http://mainichi.jp/english/english/newsselect/news/20120414p2a00m0na017000c.html

Prime Minister Yoshihiko Noda and other top government officials decided on April 13 that it is "appropriate" to restart the No. 3 and 4 reactors at Kansai Electric Power Co.'s Oi Nuclear Power Plant in Fukui Prefecture. Yet doubts still linger over the factors their decision was based on, namely the "safety" of the reactors and the "need" for nuclear power in terms of power supply and demand.

The government, which is hurrying to restart the reactors, has decided to send Minister of Economy, Trade and Industry Yukio Edano to Fukui Prefecture to call for cooperation, but it remains to be seen whether the government can present a convincing case to parties including local bodies in surrounding areas that have become increasingly critical of its "hasty decision."

For the Noda administration, the prospect of having no nuclear reactors in operation has created a sense of desperation. This is reflected in the fast progression to its decision on April 13 to restart the reactors at the Oi plant from an initial meeting on April 3.

Now, just one of Japan's 54 nuclear reactors is in operation -- the No. 3 reactor at the Tomari Nuclear Power Plant in Hokkaido. This reactor is due to be shut down for regular inspections on May 5, which would leave Japan without a single reactor in operation. According to one official at the Ministry of Economy, Trade and Industry (METI), this would raise the hurdle for restarting nuclear reactors even higher.

Meanwhile, some officials have raised fears about the hollowing out of Japan's manufacturing industry. So far power shortages have been made up through thermal power generation, but it is feared that if concerns about increased electricity charges resulting from surging fuel prices become entrenched, then Japanese businesses -- primarily those in the manufacturing sector -- could move overseas. At the same time, Iran has hinted that it could close the Strait of Hormuz -- strategically important in the transportation of oil -- sparking concerns of rising worldwide oil prices.

It is feared that if the government continues to put off decisions about restarting nuclear reactors, then it could affect the selection of a chairman at Tokyo Electric Power Co. (TEPCO), the operator of the crippled Fukushima No. 1 nuclear plant. Officials close to the prime minister have commented that unless the government clearly states that reactors which can be restarted will be restarted, then nobody will come forward to fill the role of chairman at TEPCO.

But even if the government manages to restart the Oi plant's reactors, it plans to decide on the safety and necessity of other nuclear power generation facilities individually. In a news conference on April 13, Edano commented, "Each time, we will make a decision based on safety and necessity," stressing that restarting the Oi reactors would not automatically open the gates for reactors at other plants to be restarted. Niigata Prefecture, host to TEPCO's Kashiwazaki-Kariwa Nuclear Power Plant, for example, faces a gubernatorial election this autumn, and one government official commented that it is no time to restart the nuclear reactors there.

On April 14, the government was to send Edano to meet with Fukui Gov. Issei Nishikawa and Oi Mayor Shinobu Tokioka, and seek assistance in restarting the Oi plant's No. 3 and 4 reactors. But it is eying a different approach with other local bodies in surrounding areas, instead planning to dispatch members of METI's Nuclear and Industrial Safety Agency.

Kyoto Gov. Keiji Yamada and Shiga Gov. Yukiko Kada, who have expressed reservations about restarting the reactors in Fukui Prefecture, which neighbors their prefectures, have voiced disapproval over this treatment. Toru Hashimoto, the mayor of Osaka -- a shareholder in Kansai Electric -- has also boosted his opposition to restarting nuclear reactors, and if the government goes ahead and starts reactors with only the consent of local bodies in the areas where those reactors are located, then it is likely to face stronger public criticism.

It is not only the safety but the necessity of reactors that the government has focused on in its move toward restarting the Oi nuclear reactors. But since Kansai Electric Power Co. was able to avert power shortages last summer and winter by asking people to conserve electricity, the view among consumers is that if effective supply and demand measures are adopted, then there will be no shortage of power. (By Naoki Oita, Political News Department)

Govt keen to get local authorities' support

April 14, 2013

Edano seeks support for Fukui gov. to restart Oi nuke plant

http://mainichi.jp/english/english/newsselect/news/20120414p2g00m0dm067000c.html

FUKUI (Kyodo) -- Industry minister Yukio Edano on Saturday tried to drum up support for Fukui Gov. Issei Nishikawa to reactivate two idled reactors at Kansai Electric Power Co.'s Oi nuclear power plant in the prefecture.

Edano traveled to the prefecture on the coast of the Sea of Japan after he, Prime Minister Yoshihiko Noda and two other ministers confirmed Friday the safety and necessity of the Nos. 3 and 4 reactors at the Oi plant. He is also scheduled to meet later Saturday with Shinobu Tokioka, mayor of Oi town in Fukui, to explain the government's view.

Nishikawa has said the prefectural government will decide on whether to approve the reactivation of the reactors by taking into consideration experts' views, while Tokioka welcomed the central government's safety endorsement of the plant.

The Fukui governor is scheduled to hold a press conference after meeting with the economy, trade and industry minister.

After taking into account local opinions, Noda, Edano, Chief Cabinet Secretary Osamu Fujimura and nuclear disaster minister Goshi Hosono are due to make a final decision before July on whether to authorize the restart of the Nos. 3 and 4 reactors at the Oi plant.

Since the nuclear crisis at Tokyo Electric Power Co.'s Fukushima Daiichi power plant triggered by the March 2011 earthquake and tsunami, no Japanese reactors have resumed operation after being shut down for mandatory periodic checks, and the two Oi reactors are the first to be considered for possible resumption by the central government.

With a number of reactors shut down for periodic checks, only the No. 3 reactor at Hokkaido Electric Power Co.'s Tomari plant in Hokkaido is currently in operation among Japan's 54 commercial reactors. If no others resume operation by May 5, Japan will have no operating reactors.

Kyoto Gov. Keiji Yamada and Shiga Gov. Yukiko Kada have aired concerns about possible adverse effects on their prefectures if an accident occurs at the plant.

Parts of Kyoto and Shiga prefectures fall within a 30-kilometer radius of the plant, and Lake Biwa in Shiga provides water for many people in western Japan.

Last reactor to be shut down on May 6, says Edano

April 17, 2012
Edano: All reactors to be idle / Comment indicates Oi reactors' restart unlikely in near future

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120416004238.htm

All the nation's nuclear reactors will be shut down "momentarily from May 6 onward," Economy, Trade and Industry Minister Yukio Edano has said, once Hokkaido Electric Power Co. halts operations at the No. 3 reactor of its Tomari nuclear power plant on May 5 for regular inspections.

Edano's statement was the first time a government official has said all the nation's nuclear reactors will be shut down. The No. 3 reactor at Tomari is the only one now in operation.

Edano made the comment during a lecture at a hotel in Tokushima on Sunday, reflecting the government's view it will be difficult to restart the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Oi nuclear power plant in Fukui Prefecture before the Tomari No. 3 reactor is halted.

The Oi reactors also have been shut down for inspections.

Edano on Saturday sought the Fukui prefectural and Oi municipal governments' approval to restart the Oi reactors, but his remarks Sunday reflected the government's view that reactivation will likely take some time.

During a meeting of related Cabinet ministers Friday, the government confirmed the safety of the Oi reactors and concluded they need to be restarted given possible electric demand this summer in the service area covered by KEPCO.

On Sunday, Edano said, "I believe it's understood that many people will experience significant difficulties if no reactors are in operation this summer."

The government is expected to continue seeking approval to restart the Oi reactors, so as to ensure a sufficient energy supply in summer.

Regarding the nation's energy policy, Edano stressed the government will end its dependence on nuclear power generation as early as possible.

"We have to work to permanently break away from our dependence on nuclear power generation as soon as possible," Edano said.

Yoshito Sengoku, acting chairman of the Democratic Party of Japan's Policy Research Committee, accompanied Edano to the Tokushima lecture.

"We have to think of how and when we can realize denuclearization. We cannot live in pitch darkness until it is realized," Sengoku said.

Of the 54 commercial nuclear reactors in the nation, the Tomari No. 3 reactor is the only one still operating mainly because reactors that were halted for regular checkups have not been restarted since the outbreak of the crisis at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear plant.

Toru Hashimoto against resuming operations

April 16, 2012

Osaka mayor criticizes govt. on reactor restart
http://www3.nhk.or.jp/daily/english/20120416_21.html

Osaka Mayor Toru Hashimoto has pledged that his party will seek a public mandate on the central government's nuclear power policy.

Hashimoto criticized the government on Monday for giving the green light to restarting the Ohi nuclear power plant, which supplies electricity to Japan's second-largest city of Osaka and its surrounding areas.

He said the government had declared the plant safe without consulting the Nuclear Safety Commission. He added that if the plant resumes operation under the current procedures, Japan's system of government will face a state of crisis.

Hashimoto said he is against the government's handling of the matter and that his One Osaka Party will put up resistance.

The One Osaka Party is now a regional political group, and is preparing to field candidates in national-level elections.

Three in favour

3 members of nuclear panel OK gov't standards for judging safety of Oi reactors

http://mainichi.jp/english/english/newsselect/news/20120416p2a00m0na013000c.html

Three of the 12 members of Fukui Prefecture's nuclear safety expert committee have given the thumbs-up to government safety judgment guidelines accompanying the planned restart of the No. 3 and 4 reactors at the Oi Nuclear Power Plant in the prefecture, it has been learned.

Committee head Hideyuki Nakagawa, a professor emeritus at the University of Fukui, told the Mainichi that if the government's safety judgment standards and plant operator Kansai Electric Power Co.'s roadmap for safety measures were implemented, then the reactors "would be safe." Two other committee experts on nuclear power and earthquakes interviewed by the Mainichi also gave a positive valuation of the government's guidelines.

Fukui Gov. Issei Nishikawa is expected to respect the expert committee's evaluation when making a decision on restarting the reactors. The committee had previously expressed reservations when a 30-point list of safety countermeasures was presented by the Ministry of Economy, Trade and Industry's Nuclear and Industrial Safety Agency (NISA), but the latest development raises the possibility that the committee will back up the government's recent decision favoring a restart of the reactors.

The committee comprises experts in fields including nuclear power, seismology, geology and radiology. It independently evaluates issues such as the safety of nuclear power plants in the prefecture from a technical perspective, and provides suggestions to the prefectural government. In the past, when the Monju fast-breeder reactor in Tsuruga, Fukui Prefecture, was restarted following a sodium leak that forced it to shut down, Nishikawa conveyed his consent to the government after receiving a final report from the expert committee.

Seven other members of the committee interviewed by the Mainichi said they had not yet received an explanation of the latest measures from the government and Kansai Electric Power Co., while one member was unwell and was unable to be interviewed, and another member could not be reached for comment.

The government's standard for deciding whether to restart the two reactors at the Oi plant are based on NISA's 30-point list of safety countermeasures. In February, the expert committee held a discussion on these 30 items after receiving an explanation from NISA. At the time members sought further confirmation of safety issues, with Nakagawa commenting, "It's important for all things to be explained clearly, including numerical items," and Toshiyuki Meshii, a University of Fukui graduate professor, saying it was necessary to state how the latest knowledge and minority opinions would be scientifically incorporated and engineered into regulations. However, there was no direct criticism of the 30 points themselves.

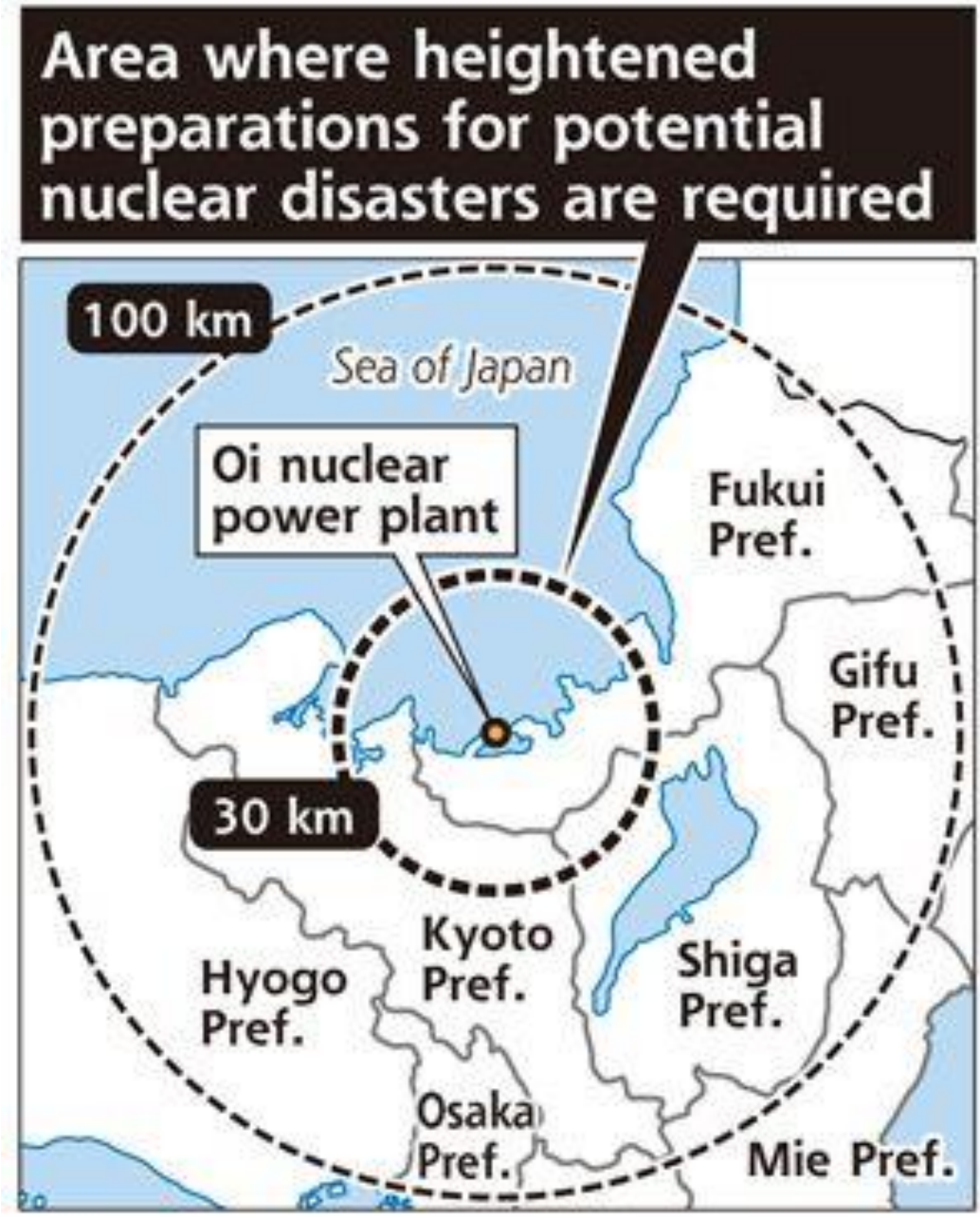
On April 16, the committee was set to hold its first meeting following the government's request to Fukui Prefecture to restart the reactors. It will conduct a number of field studies to evaluate the appropriateness of the government's judgment standards and whether the reactors at the Oi plant meet those standards.

Listen to us too

April 16, 2012

Surrounding govts want say in Oi restarts

Yoshiyuki Shimada and Hiroyuki Kume / Yomiuri Shimbun Staff Writers
http://www.yomiuri.co.jp/dy/national/T120415002741.htm



FUKUI--The focus in the issue of reactivating the two suspended reactors at the Oi nuclear power plant in Fukui Prefecture has now turned to the will of local governments around the plant, but the question remains of how many local governments should have a say.

Fukui Gov. Issei Nishikawa has said he will not make a hasty conclusion on whether to approve the restart of the Nos. 3 and 4 reactors of the plant, which is operated by Kansai Electric Power Co. Nishikawa added he has no specific timetable for when he will reply to the central government's request to approve the reactivation of the reactors.

Local government heads in neighboring prefectures, such as Osaka Mayor Toru Hashimoto and the governors of Kyoto and Shiga prefectures, remain opposed to the restart.

The central government has not clarified how much it will be guided by the opinions of local governments, making the path to a restart--critical to avoiding power shortages in the Kansai region this summer--increasingly unclear.

At a meeting with Economy, Trade and Industry Minister Yukio Edano held Saturday at the Fukui prefectural office, Nishikawa expressed his frustration with local governments around Fukui.

"For more than 40 years, Fukui Prefecture has earnestly dealt with various risks imposed by nuclear power plants--we have made continuous efforts to improve their safety. However, it seems regions that consume the electricity [produced by the plants] do not fully understand our hardships," Nishikawa said.

Nishikawa did not give specific names, but he was apparently talking about opposition from the heads of local jurisdictions with large populations, such as Hashimoto, to the restart of the nuclear reactors.

"The final decision should be made by the prefecture where the reactors are located," Nishikawa said at a press conference after the meeting with Edano.

Despite its cautious approach, Fukui Prefecture has also indicated a positive attitude toward restarting the Oi plant's nuclear reactors from the beginning. The prefecture is home to 14 nuclear reactors, the most in the nation, and expects to receive about 60 billion yen over five years in nuclear fuel tax from Kansai Electric and two other power companies.

With the precondition of ensuring the safety of the nuclear reactors, Nishikawa has said he "does not oppose the restart of the nuclear reactors."

According to sources, the Fukui prefectural assembly favors restarting the reactors.

"The prefectural assembly must not hinder the central government's decision to restart the nuclear reactors," a prefectural assembly member said.

A member of the Oi town assembly said: "The local economy will be hurt if the suspension of the nuclear power plant is prolonged. I have no reason to oppose resumption."

However, local governments adjacent to Fukui Prefecture are wary and want the central government to expand its interpretation of the "local consent" necessary to restart the nuclear reactors to include their voices as equal as those in Fukui Prefecture.

"I ask the central government to treat all areas that will be subject to potential nuclear accidents as 'local areas,' rather than deciding based on administrative boundaries," said Yuji Fujii, mayor of Nagahama, Shiga Prefecture. The city borders Fukui Prefecture on the north.

Kiyoshi Yamada, a senior Kyoto prefectural government official in charge of crisis management, said parts of the prefecture are included in the urgent protective action planning zones, areas within a 30-kilometer radius of nuclear power plants required to make heightened preparations for potential nuclear disasters.

It is meaningless for the governments to discuss the meaning of "local consent" without considering such factors, Yamada said.

Hashimoto has demanded KEPCO conclude agreements with prefectures within 100 kilometers of the Oi power plant, equivalent in content to those concluded with prefectures that host nuclear power plants.

At Saturday's meeting, Nishikawa told Edano the government should directly persuade the "power-consuming areas" to go along with the restart of Oi plant's nuclear reactors. The remarks were apparently made to urge the government not to give great weight to the pressure from Hashimoto and other opponents and waver from its stance on restarting the nuclear reactors.

Edano said he would "sincerely respond" to the opinions of Kyoto and Shiga prefectures. However, he did not clarify whether he would give the opinions of local governments surrounding Fukui Prefecture equal weight to those of Fukui.
Observers have called the concept of "local consent" ambiguous. The criteria for deciding which local governments have a say in the restart of the Oi power plant's nuclear reactors could be the focal point in deciding the plant's future.

New proposals on nukes future

April 17, 2012

Kyoto, Shiga compile draft proposals to gov't on nuclear policy

http://mainichi.jp/english/english/newsselect/news/20120417p2g00m0dm034000c.html

OTSU (Kyodo) -- The governors of Kyoto and Shiga prefectures have compiled a draft proposal to the central government on its nuclear policy, following discussions about the reactivation of two idled

reactors at Kansai Electric Power Co.'s Oi nuclear power plant in neighboring Fukui Prefecture, according to a draft made available Monday.

In the draft proposal, Kyoto Gov. Keiji Yamada and Shiga Gov. Yukiko Kada call on the government to set up a third-party committee to assess the supply-demand situation of electricity and establish a nuclear power regulatory body following the nuclear crisis at the Fukushima Daiichi power plant.

The governors, who plan to submit the proposal to the government soon, also ask the government to produce **a plan for ultimately abolishing usage of nuclear energy and beefing up the system to process spent fuel rods.**

The governors air concerns about a plan of the government to reactivate the idled reactors at the Oi plant, saying, "Explanation to people about safety and necessity is insufficient at present."

Parts of Kyoto and Shiga prefectures fall within a 30-kilometer radius of the plant on the Sea of Japan coast, and Lake Biwa in Shiga provides water for many people in western Japan.
April 17, 2012(Mainichi Japan)
On the same article:
Governors make proposals on reactor restarts
http://www3.nhk.or.jp/daily/english/20120417_19.html

Two governors in western Japan are asking the central government to implement 7 steps before restarting the first batch of reactors since the Fukushima nuclear disaster.

The governors of Shiga and Kyoto jointly announced the steps on Tuesday. Their prefectures neighbor Fukui, home to the Ohi nuclear plant. The central government wants 2 of the plant's reactors to be reactivated soon to avoid a power shortage this summer.

The 7-point proposal calls on the government to seek independent advice from nuclear experts before making a decision to restart the reactors.

It says a third-party panel should verify the region's power supply-and-demand estimates for the summer.

The governors also want the government to prove why the reactors must be restarted so urgently, before an official inquiry into the Fukushima disaster is complete.

They are also seeking a concrete timetable for reducing the nation's dependence on nuclear power.

Shiga Governor Yukiko Kada told reporters the 7-point plan is aimed at getting the government to clarify its policy on reactor-restarts, and to make sure that localities can be involved in the process.

Kyoto Governor Keiji Yamada said the 2 prefectures want the government to understand precisely what issues are concerning them most.

Who to believe ?

April 17, 2012
Hamaoka nuclear plant 'safe' against big tsunami, operator tells gov't

http://mainichi.jp/english/english/newsselect/news/20120417p2g00m0dm030000c.html

NAGOYA (Kyodo) -- Chubu Electric Power Co. reported to the government Monday that its Hamaoka nuclear power plant would be safe even if it were hit by a 21-meter-high tsunami after a massive earthquake.

The operator compiled its report on the assumption that the plant could be flooded by such high waves hitting the Pacific coast in Shizuoka Prefecture, central Japan, while it is still offline and the reactors are kept cool.

But in the report it submitted to the Nuclear and Industrial Safety Agency of the Ministry of Economy, Trade and Industry, the utility did not mention whether the plant could survive such a huge tsunami if it is in operation.

The agency had ordered the utility to file the report by Monday based on a new projection by the Cabinet Office's expert panel anticipating a tsunami of up to 21 meters near the Hamaoka plant in the event that a huge quake occurred in the "Nankai Trough" in the seabed off central and western Japan.

Chubu Electric said in the report it would be able to resume water supply to the plant's cooling system for reactors and spent fuel pools even if the cooling functions are lost in the wake of a huge tsunami, by using equipment including mobile pumps located at a higher place in the plant.

It would take at least six days before the water in a reactor's core fell below the fuel level even if the cooling system broke down, the report said.

The Hamaoka plant in the city of Omaezaki has been suspended since last May after the government asked the operator to halt it following the Fukushima Daiichi plant's crisis triggered by the March 2011

earthquake and tsunami, based on a prediction that a magnitude-8 quake could hit the region sometime in the first half of this century.

Strong words from Sengoku

DPJ's Sengoku describes halt of all nuclear plants 'mass suicide'

http://mainichi.jp/english/english/newsselect/news/20120417p2g00m0dm033000c.html

NAGOYA (Kyodo) -- Yoshito Sengoku, acting chief policymaker of the ruling Democratic Party of Japan, on Monday described the halting of all nuclear power plants in Japan as its "mass suicide."

"If we don't think about what the economy and livelihood would be like in the event of (the nuclear plants') halt, that would be, in a sense, something like the mass suicide of Japan," Sengoku said in a speech. He is one of the core members of the ruling party deliberating over whether to approve reactivating nuclear plants.

Sengoku's comment is believed to reflect his stance as a promoter of the resumption of nuclear plants. But his comparing the impact on the economy and on peoples' livelihoods of halting all nuclear plants to suicide caused controversy in political circles.

"I don't know the context," Chief Cabinet Secretary Osamu Fujimura told a news conference when asked to comment on Sengoku's analogy. "But judging from the words alone, it is not very good."

Do words make such a difference?

April 17, 2012

Edano apologizes for remarks on active reactors

http://mainichi.jp/english/english/newsselect/news/20120417p2g00m0dm076000c.html

TOKYO (Kyodo) -- Japanese industry minister Yukio Edano on Tuesday apologized for his recent remarks that Japan will be without operating reactors only "momentarily" from May 6, when its last currently active reactor goes offline for maintenance.

"I should have said (the number of operating reactors in Japan) will be zero at least for a while," Edano said at a press conference, referring to remarks he made in a speech in Tokushima Prefecture on Sunday.

He said his view remains unchanged that it will be difficult to restart two offline reactors at the Oi nuclear power plant in Fukui Prefecture before May 5 and that Japan will have a period with no operating reactors.

"I apologize for the concerns and effects that my remarks caused to various people," Edano said.

Prime Minister Yoshihiko Noda, Edano, and two other ministers confirmed Friday the safety and necessity of resuming the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Oi complex.

Meanwhile, the governors of Kyoto and Shiga prefectures, adjacent to Fukui Prefecture, remain reluctant to see the reactors reactivated and Fukui Gov. Issei Nishikawa asked Edano on Saturday during their meeting in Fukui Prefecture to carefully consider the views of other regional governments.

At the press conference on Tuesday, Edano denied that the government is in a rush to resume operation of the Oi reactors and said that it would be "very important to win understanding" for the reactivation from Shiga and Kyoto prefectures as a way to win support for the restart from Fukui Prefecture.

Since the nuclear crisis at Tokyo Electric Power Co.'s Fukushima Daiichi power plant triggered by the March 2011 earthquake and tsunami, no Japanese reactors have resumed operation after being shut down for mandatory periodic checks, and the two Oi reactors are the first to be considered for possible reactivation by the central government.

With a number of reactors shut down for periodic checks, only the No. 3 reactor at Hokkaido Electric Power Co.'s Tomari plant in Hokkaido is currently operating among Japan's 54 commercial reactors. That reactor too is slated for shutdown on May 5 for a periodic checkup, meaning Japan will have no operating reactors at that point if none are reactivated.
Noda, Edano, and two other ministers are to make a final decision on whether to resume operation of the two Oi reactors after assessing the reactions of local authorities near the Oi plant and public opinion.

Suspense

April 19, 2012

Govt to give Oi restart explanation next week

The Yomiuri Shimbun

The government will brief local residents next Thursday about the restart of the suspended Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Oi nuclear power plant in Oi, Fukui Prefecture, the town government has said.

The town, which hosts the nuclear power plant, has been asked by the government for its cooperation in restarting the two suspended reactors.

Oi Mayor Shinobu Tokioka said he would decide whether to approve the reactivation of the Oi reactors in light of the central government's safety measures, which will be explained in the briefing, and the opinions of the town assembly.

"I'd like a senior vice minister [from the Economy, Trade and Industry Ministry] or those in higher posts to come and clarify the extent to which the government can ensure the safety of the nuclear reactors at this point," Tokioka said at a press conference Tuesday.

A risk of rolling blackouts this summer

April 18, 2012

Edano hints at possible rolling blackouts again this summer

http://mainichi.jp/english/english/newsselect/news/20120418p2g00m0dm030000c.html

TOKYO (Kyodo) -- Industry minister Yukio Edano hinted for the first time Tuesday that rolling blackouts may be implemented again this summer if it is deemed necessary amid the potential halt of all nuclear reactors in Japan.

"If there is concern (over electricity supply and demand this summer), even if only slightly, we could devise a plan to implement rolling blackouts not only for areas covered by Kansai Electric Power Co.," he said at a press conference, referring to the utility which is facing an especially tight electricity supply situation.

Rolling blackouts were implemented after the start of the nuclear crisis at Tokyo Electric Power Co.'s Fukushima Daiichi power plant in March 2011 due to power supply shortages in the utility's service area, disrupting daily life.

With a number of reactors shut down for periodic checks, only the No. 3 reactor at Hokkaido Electric Power Co.'s Tomari plant in Hokkaido is currently operating among Japan's 54 commercial reactors. That reactor too is slated for shutdown on May 5.

Edano also apologized for his comments Sunday that Japan would be without operating reactors only "momentarily" from May 6 as the remarks were taken to suggest that some offline reactors could be restarted soon, although it has yet to be decided amid local concern about ensuring nuclear safety.

"I should have said (the number of operating reactors in Japan) will be zero at least for a while," Edano said. "I apologize for the concern and effects that my remarks caused to various people."

He added that his view remains unchanged that it will be difficult to restart two offline reactors at Kansai Electric's Oi nuclear power plant before May 5 and that Japan will face a period with no operating reactors.

Meanwhile, the governors of Kyoto and Shiga prefectures, near the Oi nuclear complex, urged the central government to set up a third-party committee to examine if electricity will really be in short supply without nuclear power, and Chief Cabinet Secretary Osamu Fujimura said the government will do so.

The committee, to be chaired by Katsuyuki Ishida, senior vice minister at the Cabinet Office, is expected to hold its first meeting as early as next week.

Kyoto Gov. Keiji Yamada and Shiga Gov. Yukiko Kada, who have been reluctant about restarting the Oi reactors, also urged the central government in seven requests released in Kyoto to establish a time schedule for the creation of a society that does not rely on nuclear power.

In a report on their requests, the two governors said Kyoto and Shiga prefectures, parts of which lie within a 30 kilometer radius of the Oi plant, could be as adversely affected as the municipality that hosts the plant if an accident occurs.

"It is hard to say that there is national understanding on the reactivation (of the Oi reactors)," the report said. The governors also called for the early establishment of a new nuclear regulatory agency.

Since the Fukushima nuclear crisis triggered by the March 2011 earthquake and tsunami, no Japanese reactors have resumed operation after being shut down for mandatory periodic checks, and the two Oi reactors are the first being considered for possible reactivation by the central government.

Prime Minister Yoshihiko Noda, Edano and two other ministers are to make a final decision on whether to resume operation of the two Oi reactors after assessing the reactions of local authorities and public opinion.

Ohi neighbours against a restart

April 19, 2012

Survey shows mixed reaction to restarting reactor
http://www3.nhk.or.jp/daily/english/20120419_30.html

An NHK survey indicates that over half of the residents in Ohi town in Fukui Prefecture support the government's plan to restart 2 idle nuclear reactors there, while one-third in neighboring areas support it.

The telephone survey last weekend asked local residents as well as people living in 4 neighboring municipalities about the plan to restart the Ohi plant reactors operated by Kansai Electric Power Company.

In Ohi town, 54 percent of people support the government's plan, while 37 percent oppose the plan.

Support among people living in neighboring towns and cities was much lower, with 32 percent of them saying they support the government plan. 60 percent in the neighboring areas oppose the restart.

Asked whether they worry about the possibility of the restarted reactors causing a severe accident resulting in a release of radiation into the environment, 71 percent of locals said yes, and so did 84 percent of their neighbors.

The survey also asked whether the government has done a good job explaining to local people and the public in general about the safety of restarting the reactors.

Only 29 percent of local residents and 19 percent of their neighbors said yes.

Safety panel says it's OK

April 20, 2012

Fukui govt committee deems Oi N-plant safe

http://www.yomiuri.co.jp/dy/national/T120419005380.htm

OI, Fukui (Jiji Press)--The head of the Fukui prefectural government's nuclear safety committee suggested that Kansai Electric Power Co.'s Oi nuclear power plant has adequate safety measures against earthquakes and tsunami.

After inspecting the Nos. 3 and 4 reactors of the plant, Hideyuki Nakagawa, the panel head, told reporters Wednesday that he broadly confirmed that a possible severe accident at the plant could be handled safely.

He suggested KEPCO has taken steps that would allow it to continue cooling the reactors if the plant is hit by a strong quake and subsequent tsunami.

Nakagawa and five other members of the prefectural panel inspected the two reactors after Economy, Trade and Industry Minister Yukio Edano asked Fukui Gov. Issei Nishikawa and other local officials for cooperation in restarting the reactors to help avoid power shortages in the utility's service area this summer.

Prime Minister Yoshihiko Noda, Edano and two other Cabinet ministers last week agreed that it is appropriate to resume operations of the two reactors.

Following the central government approval, the committee is inspecting the reactors from a technical point of view based on the government's new reactor safety standards.

The prefectural committee is expected to summarize its views in about a week. The panel will then compile a full report of its assessment of the safety measures taken at the reactors.

On Wednesday, panel members inspected the locations of emergency generators that would be used in the event all electricity sources are lost and a reactor cooling system that can run without electricity.

The inspection lasted 4-1/2 hours, two hours longer than initially scheduled.

Although Kansai Electric plans to construct a quake-resistant building, which would serve as a base in the event of a crisis, in fiscal 2015, the plant's central control room can be used as an alternative base until the completion of the new building, Nakagawa said.

No real surprise

April 20, 2012

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No idled nuclear reactors have restarted operations since the crisis at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant began last March.

Edano - Restart nuclear reactors to avoid "confusion in society"

April 23 ,2012-04-23

Edano's take on restarting nuclear power plants in Japan

http://mainichi.jp/english/english/perspectives/news/20120423p2a00m0na012000c.html

Has Minister of Economy, Trade and Industry Yukio Edano been wavering over the restarting of nuclear reactors in Japan? Last weekend I met and interviewed him, and the comment that left the greatest impression on me was: "I don't want to become a Robespierre."

Maximilien Robespierre (1758-1794), was a leader in the French Revolution, and his name is symbolic of the Reign of Terror. Robespierre was a lawyer faithful to ideals. Once he grasped power, however, he introduced radical reforms and executed political foes, and in the end he himself was executed.

Edano considers the choice not to restart any of the nuclear reactors in Japan that have been shut down for inspections to be a kind of radical reform. He thinks that if he speedily progresses in this direction, confusion could spread and he could end up further away from the ideal of being free from reliance on nuclear power. In the interview below, Edano's gradualist approach is evident.

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Question: Have you been amending your statements as a result of third parties' moves?

Edano: "No, that's not the case. I'm fundamentally in favor of abandoning nuclear power generation, but if all nuclear power plants remain out of operation, it will force unreasonable power restrictions and

electricity charge price increases, small- and medium-sized companies will collapse, and employment will become unstable in a chain of events that will cause confusion in society. And if that happens, then the momentum that has built up toward breaking away from nuclear power will die out, reliance (on nuclear plants) will return in force, and we'll be helpless to do anything about it. For me, that's the scariest scenario."

Q: I think there should be a mid-term vision for reform. What are your thoughts on this?

Edano: "In terms of political theory, I think that's right, but if we release something that's half-baked, then we'll be caught out and pay the price. It's not the kind of thing that can be easily released.

"One major factor is the regulation on decommissioning nuclear reactors after 40 years (legislation that sets the life of a nuclear reactor at 40 years, which has already been submitted to the Diet as a bill). If the bill is passed and we gain a grip on governmental and ministerial ordinances, then we'll be able to do quite a lot."

(If the restarting of reactors is allowed but construction of new reactors is not allowed, then the rate of reliance on nuclear power will fall to 15 percent by 2030 -- half the level marked before the March 2011 disasters that triggered a nuclear crisis at the Fukushima No. 1 Nuclear Power Plant. After this nuclear reactors will continue to decline in number, leaving none in operation in 2050.)

Q: Has there been any clash in opinions between you and (Democratic Party of Japan Policy Research Council Acting Chairman Yoshito) Sengoku?

Edano: "We share the opinion that if we suddenly stopped using nuclear power plants, then circumstances would become quite difficult. I think this would eventually result in a return to dependence on nuclear power plants, and I think Mr. Sengoku probably feels the same way."

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Sengoku has the role of handling the administration's energy policies, and observations that he is leading the process are widespread, but at a Democratic Party of Japan gathering of members of the House of Representatives in Tokushima on April 15, Sengoku had the following to say:

"The media likes the scenario of a conspiracy, with somebody pulling the strings behind the scenes. I don't really care (if such things are written about me), but if the formation of mid- to long-term policies become distorted as a result of that, then it becomes serious. ... It's a case of us adopting realistic methods

to find solutions to the homework that the Liberal Democratic Party procrastinated on, one issue at a time, as we move toward an ideal situation."

Unlike Robespierre, both Edano and Sengoku embrace realism, and say they are willing to **allow nuclear reactors to be restarted to prevent confusion in the economy.** Indeed, not restarting reactors may result in economic confusion. But it may turn out that we can get by without restarting them. Since there are no trustworthy predictions, public opinion becomes divided. I want to understand the government's decisions, but with so little to go by, I'm not really able to.

Looking at the situation simply from a safety perspective, the decision to restart the No. 3 and 4 reactors at Kansai Electric Power Co.'s Oi Nuclear Power Plant in Fukui Prefecture is questionable. I have no confidence that the lessons learned from the Fukushima nuclear crisis have been adopted.

I want people to refrain from calling those who wish to break away from nuclear power and who question the restarting of reactors as "extremists." I want them to be sensitive about the deterioration of realism. And these are the things I seek from the leaders of a moderate faction. (By Takao Yamada, Expert Senior Writer)

Tomari, Tsugara, Monju, Shimane plants, beware

4 nuclear plants asked to review quake safety
http://www3.nhk.or.jp/daily/english/20120424_04.html

Japan's nuclear safety agency is set to ask the operators of 4 nuclear power plants to re-examine the effects of seismic activities that it says became more active after the March 2011 earthquake in northern Japan.

The Nuclear and Industrial Safety Agency will request the reassessment of quake resistance for the Tomari plant in Hokkaido, Tsuruga and Monju plants in Fukui Prefecture and the Shimane plant in Shimane.

It says the risk has increased of active faults more than 5 kilometers away from each other shifting simultaneously and causing a greater earthquake than predicted.

Hokkaido Electric Power Company says even if the 2 active faults on the sea and the land move at the same time, the assumed temblor in part of the Tomari facility will be a little larger than that previously calculated. It says quake resistance can be secured as important buildings are little affected by the quake.

But experts at the agency pointed out at a meeting that the tremor will be further intensified if the 2 active faults shift simultaneously.

They asked the company to reassess quake resistance based on the new assumption.

The company says it will respond appropriately in line with the experts' views, but it insisted that there will be no problem with the ability of key equipment to safeguard the nuclear plant.

Results of the reassessment could force a revision of quake resistance standards at the plants.

They could also affect the outcome of the stress tests required for restarting the idled plants.

The power companies say they will submit reports on their reassessments.

"We have doubts regarding the transparency of information"

April 24, 2012

Govs still cautious on reactors / Official asks Shiga, Kyoto leaders for understanding on Oi reactors

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120423004448.htm

OTSU--A senior vice industry minister visited Shiga Gov. Yukiko Kada on Monday, seeking cooperation on the reactivation of two suspended reactors at the Oi nuclear power plant in neighboring Fukui Prefecture.

Seishu Makino, senior vice minister of the Economy, Trade and Industry Ministry, visited the governor at the prefectural government office in Otsu to explain why the government gave the green light to resuming operations at the Nos. 3 and 4 reactors at the facility operated by Kansai Electric Power Co.

"We'd like to ask for your understanding on the reactivation, as it is crucial considering electricity demand estimates for the coming summer," Makino said.

Kada, who criticized the government's safety confirmation for the two reactors along with Kyoto Gov. Keiji Yamada, maintained her cautious stance on the issue, saying, "Should a nuclear accident occur, damage would spread throughout the Kinki region [including Shiga Prefecture]."

Makino also visited Yamada later that day to provide similar explanations.

The senior vice minister was accompanied by Takaya Imai, director general for natural resources and energy policy at the ministry's Natural Resources and Energy Agency, and Hiroyuki Fukano, director general at the Nuclear and Industrial Safety Agency.

Makino referred to estimates that KEPCO's capacity will be as much as 18.4 percent short during peak demand periods if the two reactors remain offline.

In a discussion of the results from initial stress tests, the senior vice minister emphasized, "External experts have confirmed the safety of each location in efforts to maintain transparency."

Makino then sought Shiga Prefecture's understanding for the restart, saying, "The government has made a political decision considering the necessity [of restarting the reactors] and their confirmed safety."

"Fukui Prefecture has asked the government to take responsibility for obtaining support from the power-consuming areas," Makino added.

Kada said she was not satisfied with the government's reactivation process.
"We can understand the local economy will be negatively affected [if the reactors remain offline]," she said. "**But we have doubts regarding the transparency of information** [for making the government's decision, such as the electricity supply estimates]."

Following the talks, Makino said he believed he "made progress even though we have yet to obtain full support."
Kada, on the other hand, expressed a different view. "[Makino's briefings] were too abstract for us to move toward supporting [the restart]."

Quake safety?

Tuesday, April 24, 2012

http://www.japantimes.co.jp/text/nn20120424b5.html
Tomari, Tsuruga nuke plants at risk of stronger than expected quakes
Kyodo
The Tomari nuclear plant in Hokkaido and the Tsuruga plant in Fukui Prefecture are at risk of being surprised by earthquakes that exceed their quake-resistance specifications, a report by three utilities said Monday.

The finding, based on the plants' current quake-resistance standards, was included in analyses they drafted at the request of the Nuclear and Industrial Safety Agency, which is still struggling with the Fukushima disaster.

The three utilities were asked to examine the possibility of interlocked movements taking place on active faults around their plants. The Tomari plant is run by Hokkaido Electric Power Co. and Tsuruga plant by Japan Electric Power Co.

Potential quakes near Tokyo Electric Power Co.'s massive Kashiwazaki-Kariwa plant in Niigata Prefecture, Hokuriku Electric Power Co.'s Shiga plant in Ishikawa Prefecture, and Kansai Electric Power Co.'s Mihama and Oi plants in Fukui Prefecture, were estimated as below the scale of the largest jolts that were anticipated when they were designed.

It is unclear if that includes any adjustments prompted by the magnitude 6.8 quake that triggered a fire and radiation leak at Kashiwazaki-Kariwa, the world's largest nuclear power facility, in July 2007 **after it was learned that none of Japan's nuclear plants had been designed to withstand the horizontal ground movement displayed by that quake.**
The three utilities concluded that the quake resistance of their nuclear power plants does not need to take interlocked movements on faults into account.

The magnitude-9.0 quake in March 2011 prompted the agency to drop its past rule that quake-resistance standards do not need to take into account the possibility of linked movements on faults separated by 5 km or more, and to order utilities to look into the possibility.

Tsugara, again

April 26, 2012

Fault under nuclear plant feared active / Doubt cast on reactivation of Tsuruga plant

http://www.yomiuri.co.jp/dy/national/T120425006492.htm

The Yomiuri Shimbun

A panel of the Nuclear and Industrial Safety Agency (NISA) has suggested that faults beneath the Tsuruga nuclear power plant in Tsuruga, Fukui Prefecture, may be active--potentially putting the plant in violation of the government's criterion that prohibits building nuclear reactors above active faults.

NISA, which is examining earthquake-resistance capabilities of nuclear power plants, released Tuesday the results of the hearing panel's inspection of the plant of the Japan Atomic Power Co. (JAPC)

The burden is now on JAPC to prove the faults are not active. The hurdle for reactivating the reactors at the Tsuruga plant has thus become extremely high.

What the NISA panel sees as problematic are faults in zones of crushed rock left fragile by past earthquakes.
There are about 160 such crushed-rock zones on the plant's premises, including spots just below its Nos. 1 and 2 reactors.
Though JAPC knew of the crushed-rock zones when it applied for permission to construct the plant in 1965, the company's geological research apparently led it to believe the zones showed no significant signs of seismic activity.
However, the Great East Japan Earthquake changed the stress patterns applied to the layers of rock beneath Japan, and it may now be easier for earthquakes to be triggered by different mechanisms from past ones. Therefore, reexamination of past research on faults has become necessary.

The latest research found a possibility that the crushed-rock zones beneath the nuclear plant may move together with a nearby active fault, known as the Urasoko fault.

JAPC has conducted research on the possibility since February.

On Tuesday, four experts inspected four locations, including places where parts of the crushed-rock zones are visible on the surface of the ground, and confirmed clear signs of the existence of faults.

Shinji Toda, associate professor of Kyoto University's Disaster Prevention Research Institute, who conducted the inspection, said, "It's highly likely that they have moved, being pulled by the Urasoko fault, within the past several hundred thousand years."

The other three experts concurred.

Based on the new research, NISA asked JAPC to conduct additional drilling research and more detailed analysis of components of the geological layers near the Urasoko fault.

JAPC has already submitted first-stage results of stress tests on the Tsuruga plant's No. 2 reactor as a precondition to reactivating the reactor.

But before evaluating the stress test results, a prerequisite to restarting the reactor, JAPC now must prove with detailed geological research that faults under the reactor buildings are not active and will not move together with the Urasoko fault.

Thus it has become extremely uncertain whether the plant's reactors will be able to be reactivated.

Experts have also voiced doubts about interlocking active faults beneath Monju, a fast breeder reactor of the Japan Atomic Energy Agency in Tsuruga; Hokkaido Electric Power Co.'s Tomari nuclear power plant; Tokyo Electric Power Co.'s Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture; and Chugoku Electric Power Co.'s Shimane nuclear power plant in Matsue.

Detailed research on those nuclear plants is also under way.

The Tsuruga plant is the nation's oldest commercial nuclear power plant. Its No. 1 reactor, with an output capacity of 357,000 kilowatts, began operation in 1970. The No. 2 reactor, with an output capacity of 1.16 million kilowatts, started operation in 1987.

Both reactors have been idled since their most recent regular inspections. There are plans to build two more reactors at the plant, but the government's pre-construction safety checks have been suspended because of the crisis at the Fukushima No. 1 nuclear power plant.

Active faults are those with a record of repeated activity that also exhibit the potential to move in the future.

The Cabinet Office's Nuclear Safety Commission revised in 2006 its safety guideline on nuclear power plants' abilities to withstand earthquakes.

The revised guideline stipulates that faults believed to have moved since the Late Pleistocene age--120,000 to 130,000 years ago--are called active faults.

Govt briefing (Ohi)

April 27, 2012
Govt. briefs on restart to people near Ohi plant
http://www3.nhk.or.jp/daily/english/20120427_03.html

People living near the Ohi nuclear plant in central Japan are wrestling with whether to sign off on a plan to restart two of the facility's four reactors. The plant could be the first unit to resume operation in the year since an earthquake and tsunami triggered an accident at the Fukushima Daiichi plant.

Local residents brought various concerns to a public meeting to hear a government briefing Thursday on why it wants to restart the reactors.

Some 550 people attended the gathering that was open only to local residents. Activists opposed to the resumption of the reactors held a rally outside the venue.

Senior Vice-Minister for Industry, Mitsuyoshi Yanagisawa explained that experts have confirmed that technology is in place to keep the Ohi reactors cool even in the event of an earthquake and tsunami like the one that hit Fukushima.

A resident said Japan will not recover without the resumption of the Ohi plant and added that he is in favor of restarting the reactors if the government will seriously think about protecting people's lives.

Some participants expressed concerns that there is no quake-resistant office building at Ohi that would serve as a crisis center if an accident occurs. Others questioned whether restarting the reactors is even necessary.

A recent NHK poll suggests 54 percent of Ohi residents are in favor, or slightly in favor, of restarting the reactors for economic reasons. But 71 percent of survey respondents voiced concerns about the risk of an accident if the units go back on-line.

The mayor of Ohi says the town council will decide whether to approve restarting the reactors now that they have heard what residents have to say.

Of the country's 50 reactors only one is currently operating, but it will go off-line in about ten days. If the Ohi reactors are restarted they'll be the first to resume operations since March 11, 2011.

Residents to be briefed on Ohi plant restart plan

http://www3.nhk.or.jp/daily/english/20120426_03.html

Residents of a town hosting the Ohi nuclear power plant in Fukui Prefecture will gather a meeting on Thursday to hear about the Japanese government's plan to restart the plant's 2 reactors.

Ohi town officials say they will decide whether to approve restarting the reactors after hearing what the residents have to say.

The meeting is in response to a request by Ohi Town, following calls by industry minister Yukio Edano earlier this month for understanding on the need to restart the reactors.

Senior Vice Minister Mitsuyoshi Yanagisawa will explain how the 2 reactors have met the government's safety standards for resuming operations, and why they need to be restarted.

The meeting will be open only to local residents. More than 700 people are expected to attend.

All 50 of Japan's nuclear reactors will be offline when the last reactor still online in the northernmost prefecture of Hokkaido is shut down for regular inspections early next month.

If the government goes ahead and restarts the Ohi reactors, they will be the first to resume operations since the disaster at the Fukushima Daiichi nuclear power plant.

Time to look at standards

New tsunami standards to be set for nuclear safety
http://www3.nhk.or.jp/daily/english/20120427_41.html

Japan's nuclear regulator says it will draw up new safety guidelines for designing nuclear power plants against tsunami. The Nuclear and Industrial Safety Agency held a meeting of experts on Friday to discuss the safety measures.

A tsunami twice as high as expected struck the Fukushima Daiichi plant during the March 2011 disaster, flooding emergency electricity generators and leading to core meltdowns. Experts say the plant was ill-prepared for tsunami floods or water pressure, which forced open doors at the facility.

Officials explained at Friday's meeting that the new guidelines estimate the maximum scale of tsunami for each plant by calculating the pressure of surging waves and flood areas at the facilities.

Each plant will be checked to see if reactors and other pieces of important equipment are designed strong enough to withstand any tsunami.

The agency also says it will check that safety measures are in place to prevent a severe radioactive accident, even if a larger-than-expected tsunami strikes and causes a meltdown.

It will also study tsunami cycles of maximum size.

An expert in earthquake engineering, Professor Tsuyoshi Takada at the University of Tokyo, says such points should be included in secondary stress tests to check the safety of nuclear plants.

At present, primary assessment of stress tests for restarting nuclear plants cover only the height of tsunami, not water pressure or flooding.

Check again... before the next tsunami

April 27, 2012

TEPCO to recalculate potential tsunami height near Niigata nuke plant

http://mainichi.jp/english/english/newsselect/news/20120427p2a00m0na015000c.html

Tokyo Electric Power Co. (TEPCO) announced April 26 that it will recalculate the height of a potential tsunami that may strike its Kashiwazaki-Kariwa Nuclear Power Plant in Niigata Prefecture.

The move was pushed forward after four prefectures located along the Sea of Japan released their own estimates, which state that the scale of a potential earthquake in the area where the nuclear plant is located is in fact up to around 2.8 times stronger than what TEPCO has estimated.

Based on current TEPCO estimations, a magnitude 7.85 quake may occur at a fault extending some 131 kilometers near Niigata Prefecture's Sado Island, which could trigger a 3.3-meter-high tsunami. Based on these estimations, the company is currently proceeding with the construction of an embankment that would resist waves of up to some 15 meters in height.

However, based on a report issued by the Tottori Prefectural Government, there is a risk that a fault running for 220 kilometers located within the same area may trigger an 8.15 magnitude earthquake. Separate reports released by the Shimane and Ishikawa prefectural governments point to a risk of magnitude 8.01 and magnitude 7.99 earthquakes in the area, respectively.

Judging the reports to be of "valuable information that must be reflected in safety assessments," TEPCO submitted a report on those estimates to the Ministry of Economy, Trade and Industry's Nuclear and Industrial Safety Agency.
Results of the recalculation may affect future safety assessments, including stress tests, at the plant.

Summer demand

April 23, 2012

3 of 9 utilities may fail to meet demand / Power curbs seen likely this summer

http://www.yomiuri.co.jp/dy/national/T120424005735.htm

The Yomiuri Shimbun

Supply-and-demand outlook for nine utilities in summer

	Demand (unit: million kilowatts)	Surplus or shortfall
Hokkaido Electric Power Co.	5	-3.1%
Tohoku Electric Power Co.	14.34	2.9%
Tokyo Electric Power Co.	55.2	4.5%
Chubu Electric Power Co.	26.48	5.2%
Kansai Electric Power Co.	30.3	-16.3%
Hokuriku Electric Power Co.	5.58	3.6%
Chugoku Electric Power Co.	11.82	4.5%
Shikoku Electric Power Co.	5.85	0.3%
Kyushu Electric Power Co.	16.34	-3.7%
Total	170.91	-0.4%

**Demand calculated on assumption economy expands compared with last year and electricity-saving measures are carried out in hot weather mirroring 2010's summer.*

Three of the country's nine electric power companies may be unable to meet expected demand this summer, the government says.

Kansai Electric Power Co.'s (KEPCO) supply may fall 16.3 percent short of maximum demand, according to power supply-and-demand projections compiled by the nine utilities and released by the government Monday.
Supply also is expected to fall short of demand in areas covered by Kyushu Electric Power Co. and Hokkaido Electric Power Co.

The government said Shikoku Electric Power Co., Tohoku Electric Power Co. and three other utilities with low power-generation capacity may ask large-lot users to curb power consumption.

However, the power supply in areas covered by Tokyo Electric Power Co. is expected to meet demand this summer, in contrast to last year when restrictions were imposed on large-lot users, and households and small and midsize firms were asked to reduce consumption.

On Monday, the government started examining power supply-and-demand estimates presented by the nine utilities at the first meeting of a study committee chaired by Katsuyuki Ishida, senior vice minister at the Cabinet Office.
The estimates were made on the assumptions that no nuclear power reactors will be reactivated and the weather will be as hot as the summer in 2010.

According to the projections, the nine power companies are expected to face a combined power shortage of 0.4 percent this summer. This is a vast improvement from estimates made in July last year, when the power shortage was put at 9.2 percent.

This year, western Japan is expected to face a power shortfall of 3.6 percent, while eastern Japan will enjoy a surplus of 3.7 percent.

A total of 7.29 million kilowatts of electricity has been added to the nation's supply thanks to an increase in output at thermal power stations and the purchase of electricity from businesses with private electrical power facilities. An additional 350,000 kilowatts were obtained from solar power generation.

To deal with the expected power shortages, the government sees a need to restrict power usage this summer through contracts with large-lot users such as factories and offices .

However, the combined effect of power conservation in areas covered by the nine utilities based on such contracts would only result in saving 4.91 million kilowatts, 2.9 percent of demand.

Of the 4.91 million kilowatts, the amount saved in areas covered by KEPCO would likely be 370,000 kilowatts, or about 1.2 percent of demand.

TEPCO is likely to see a supply surplus of 4.5 percent in summer thanks mainly to an increase in output from thermal power stations, exceeding the 3 percent benchmark figure that indicates a tight power supply.

However, if the reactivation of nuclear reactors is delayed, electricity rates are likely to rise regardless of whether power supplies meet demand.

The study committee will hold several meetings to verify the power supply-and-demand estimates before hammering out final estimates and countermeasures in mid-May.

For TEPCO, recovery is linked to restart

Wednesday, May 2, 2012

Tepco Recovery Plan Includes Restart Of Kashiwazaki Kariwa Units

http://www.nucnet.org/all-the-news/2012/05/02/tepco-recovery-plan-includes-restart-of-kashiwazaki-kariwa-units

Plant Operation
2 May (NucNet): As part of a recovery plan Tokyo Electric Power Company (Tepco) aims to cut costs by nearly 41 billion US dollars (31 billion euro) over the next decade and restart units at its Kashiwazaki Kariwa nuclear plant in 2013.
The operator of the Fukushima-Daiichi nuclear plant, which was shut down by a March 2011 earthquake and tsunami, has submitted a recovery plan to the government under which the state will inject about $12 billion for a controlling stake in the company. Banks will lend a further $12 billion, and costs will be cut and electricity rates increased.

The seven-unit Kashiwazaki Kariwa plant was struck by an earthquake in July 2007 leading to the automatic, safe shutdown of units 3, 4 and 7. Units 1, 5 and 6 were already shut down at the time of the earthquake for periodic inspections.

Unit 2 was technically undergoing a periodic inspection and start-up operations had just begun, but the unit was also shut down safely.

Tepco restarted units 1, 5, 6 and 7 at the plant after repair of damaged systems and inspections. But these units have since been shut down for planned refuelling and maintenance and not yet restarted following government-mandated safety checks in the wake of the Fukushima-Daiichi accident.

The recovery plan, which has been under discussion since January, aims to ensure Tepco can pay compensation for victims of the Fukushima-Daiichi accident and of decommissioning its reactors and fuel ponds.

In return for injecting $12 billion, the government will take an initial stake of 50.1 percent in Tepco along with rights to a further one-sixth of the company's shares that it can exercise later if it deems necessary.

The Japan Atomic Industrial Forum (JAIF) said Tepco hopes to return to the black by March 2015. The recovery plan needs to be approved by the industry minister, JAIF said.

Maybe not safe enough

Kyoto's top crisis manager slams safety explanation for Oi reactors' restart

Kyodo
http://www.japantimes.co.jp/text/nn20120502a7.html

KYOTO — The Ministry of Economy, Trade and Industry sought support Tuesday from the Kyoto Prefectural Government for restarting two idled reactors at the Oi nuclear plant in Fukui Prefecture.

Kyoto Gov. Keiji Yamada demanded the Agency for Natural Resources and Energy and the Nuclear and Industrial Safety Agency give further explanations about the issue, despite having been briefed by Senior Vice Industry Minister Seishu Makino last month that the two reactors are safe to restart, based on the results of computer-simulated stress tests.

On Tuesday, Kyoto's chief crisis manager, Kiyoshi Yamada, told the officials from the organizations that the prefecture cannot fully accept the state's explanations about the safety of the reactors.

In response, Tetsuya Yamamoto, chief nuclear safety officer at NISA, said the government's safety measures were compiled after learning lessons from the crisis at the Fukushima No. 1 plant.

Yamamoto also said the central government will set up a teleconference system with local governments within a 30-km radius from the Oi complex to share information in the event of a nuclear disaster, and the industry ministry will deploy more antidisaster equipment to the Oi plant.

In a joint statement issued in mid-April, Yamada and Shiga Gov. Yukiko Kada called on the central government to work out a road map to build up a society free of nuclear power.

Complete suspension on May 5

Friday, May 4, 2012

Last reactor halts Saturday

Jiji

http://www.japantimes.co.jp/text/nn20120504a5.html

The nation's last active nuclear reactor will go offline Saturday, leaving Japan completely devoid of an energy source that accounted for around 30 percent of its electricity when all systems were operating.

Hokkaido Electric Power Co. is set to halt reactor 3 at its Tomari nuclear plant for maintenance. It is the only one of Japan's 50 usable reactors still active.

None of the suspended reactors has been restarted because of safety concerns sparked by the triple-meltdown crisis at Tokyo Electric Power Co.'s Fukushima No. 1 power plant in March last year. The nation had an inventory of 54 reactors before the crisis.

If Japan continues to shun nuclear energy, power shortages will become a constant threat each summer, inconveniencing the public and acting as a drag on economic activity.

When the Tomari reactor is idled, it will mark only the second time that all of Japan's nuclear reactors have been halted since the industry got its start in 1966.

The last time was April 1970, when Japan had only two reactors — one in Tokai, Ibaraki Prefecture, and the other in Tsuruga, Fukui Prefecture. Both were run by Japan Atomic Power Co. It will also be the first total suspension since nuclear energy became a key energy source.

In hopes of easing the public's concerns, the government has introduced strict procedures for nuclear reactors to undergo before they can be restarted, although the deadlines for completing some of them can apparently be ignored.

One of the key procedures is computerized stress tests, which are simulations designed to check if reactors can withstand severe incidents like the quake and tsunami that crippled the Fukushima plant.

Last month, the government approved the stress test results for reactors 3 and 4 at Kansai Electric Power Co.'s Oi plant in Fukui and declared them safe to restart. But the government, which forfeit public trust in

atomic energy via lax oversight and by witholding data that could have reduced fallout exposure at the height of the crisis, has been struggling to persuade a wary public to agree to any reactor restarts.

Government estimates claim power supplies will come up 0.4 percent short of demand this summer if all the reactors stay suspended and if Japan goes through a repeat of the record-breaking heat wave of two years ago.

In Kepco's area in western Japan, power is projected to be 16.3 percent short of demand in a record-hot summer, while Hokkaido's shortage is projected to be 3.1 percent.

This raises the possibility that more of the public will be asked to engage in power conservation like last summer, unless an unusually cool summer like that of 2003 occurs, when Tepco's customers in eastern Japan were spared from outages after it was forced to shut down all 17 of its reactors amid a defect scandal.

Trade minister Yukio Edano has hinted that Japan may have to resort to rolling blackouts or mandatory curbs on power consumption in some regions to survive the summer.

Businesses, especially manufacturers, aren't keen on that idea.

"Last summer, we cooperated by saving electricity without considering the cost, but it is difficult to continue," said an official at a machinery maker.

Another headache is the soaring cost of procuring LNG and other fossil fuels for thermal power generation to offset the loss of atomic energy.

The nine major utilities outside Tepco booked a combined ¥3.6 trillion in fuel costs for thermal power plants in the year that ended in March.

Seven of them incurred net losses for the year, which means soaring fuel costs may force them to raise prices.

While problems are mounting from the break with atomic power, the movement for fully denuclearizing is winning growing public support.

Late last month, mayors of municipalities from 35 prefectures set up a forum to pursue the goal of completely abandoning nuclear power.

Hiroshi Takahashi, an analyst at Fujitsu Research Institute, said it would not be appropriate to force the public to make a choice over two extremes, such as reactor restarts or rolling blackouts.

"We should have calm discussions, separating long-term visions from short-term measures," he said.

Nagasaki mayor's plea

Kyodo

VIENNA — Nagasaki Mayor Tomihisa Taue has called on global leaders to work toward a world free of nuclear weapons at a preparatory meeting in Vienna for the 2015 nonproliferation review conference.

At the first session Wednesday of the committee tasked with organizing the event, Taue said he trusts the Nuclear Non-Proliferation Treaty Review Conference "will clearly show how and in what time frame a world without nuclear weapons will be realized," as urged by U.S. President Barack Obama.

Calling on leaders to make further efforts toward nuclear disarmament, Taue described the global amount of defense-related spending as "absurd" and "only leading to a more dangerous world."

"I wonder if representatives from the nuclear powers understand the true horror of nuclear weapons," Taue said, urging participants at the 2015 conference to "consider the inhumanity of atomic weapons."

Referring to hibakusha who are also visiting Vienna for the preparatory meeting, Taue said their voices enable the world to "see and discuss the humanitarian consequences of nuclear weapons."

Last one out

May 5, 2012

Japan to be without nuclear power for 1st time in 42 years

http://mainichi.jp/english/english/newsselect/news/20120505p2g00m0dm006000c.html

TOKYO (Kyodo) -- Japan's last operating commercial nuclear reactor is set to go offline Saturday night for mandatory routine maintenance, leaving the nation without atomic-generated electricity for the first time in 42 years.

Hokkaido Electric Power Co. is scheduled to have the No. 3 unit of its Tomari nuclear power plant in the northern Japan prefecture reduce its output power gradually from around 5 p.m. and end electricity generation at around 11 p.m.

Since the huge earthquake and tsunami on March 11, 2011 triggered the Fukushima nuclear crisis, resulting in radiation leaks, mass evacuation and heightened public concern over nuclear safety, no Japanese reactors that were halted for scheduled checkups have been restarted.

The government is trying to restart two offline reactors at the Oi nuclear power plant in Fukui Prefecture to cope with an expected rise in the electricity use over the coming summer in western Japan. But it is still struggling to persuade a wary public that it is safe to restart them in the wake of the world's worst nuclear crisis in 25 years.

The last time that all of Japan's commercial reactors went offline was the period between April 30 and May 4, 1970, just four years after commercial nuclear power generation began in Japan. At that time, Japan had only two nuclear reactors -- one at Japan Atomic Power Co.'s Tokai power plant in Ibaraki Prefecture and the other at its Tsuruga plant in Fukui Prefecture.

Currently, Japan has a total of 50 commercial reactors, down from 54 now that the Nos. 1 to 4 reactors at the Fukushima Daiichi plant have been declared defunct following the disaster.

Prime Minister Yoshihiko Noda and key ministers of his Cabinet judged last month that restarting the Nos. 3 and 4 reactors at the Oi plant on the Sea of Japan coast is necessary to help ensure a stable supply of electricity during summer's high temperatures.

Industry minister Yukio Edano, who oversees nuclear power plant operators, has said the possibility of introducing rolling blackouts cannot be ruled out if there is no atomic power available.

Prior to the Fukushima crisis, nuclear power provided about one third of Japan's electricity. The government, together with electricity firms, used to promote the development of nuclear power, touting

its efficiency and arguing that nuclear power plants can contribute to preventing global warming as they do not emit carbon dioxide during electricity generation.

The government is now crafting a new energy mix in light of the Fukushima crisis, terminating its earlier plan to boost the country's reliance on nuclear energy to more than 50 percent of total power supply by fiscal 2030.

In the wake of the accident at the Fukushima Daiichi plant, operated by Tokyo Electric Power Co. in Fukushima Prefecture, northeastern Japan, the government instructed emergency safety measures to be implemented at all the country's reactors.

In addition, then-Prime Minister Naoto Kan in May last year asked Chubu Electric Power Co. to suspend operation of its Hamaoka power plant in Shizuoka Prefecture due to concern about a powerful earthquake predicted for the area. In July, Kan's administration also introduced ''stress tests'' to check reactors' ability to withstand earthquakes and tsunami.

Under the stress-test system, reactors undergoing scheduled checkups cannot be restarted unless they pass the first round of stress tests. Test results on the Nos. 3 and 4 reactors of the Oi plant operated by Kansai Electric Power Co. have been endorsed by Japan's nuclear authorities, making them at the forefront of the government's efforts to restart offline reactors

But efforts to regain public support for restarting the Oi reactors appear to have made little headway. Leaders of local governments near the Oi plant, such as the governors of Kyoto and Shiga as well as the mayor of Osaka, have been voicing concern over restarting the reactors.

A recent poll conducted by Kyodo News also showed that 59.5 percent of respondents are opposed to restarting the Oi reactors, while 26.7 percent are in favor.

Meanwhile, the utilities powering the world's third biggest economy have been forced to turn to thermal power generation to keep factories, offices and households supplied with electricity. Buying oil and liquid natural gas is driving up the utilities' fuel costs and may lead to higher electricity bills.

The prolonged and widespread halt of reactor operations has also cast a shadow over the local economies in communities hosting nuclear power plants.

It is still uncertain how long Japan will continue keeping its commercial reactors offline. Noda and three ministers concerned are to make a formal decision on whether to restart the Oi reactors after taking into account the opinions of local authorities and of the public.

Kan on Hamaoka

May 5, 2012

Gov't never issued restart guarantee for Hamaoka nuke plant: Kan

http://mainichi.jp/english/english/newsselect/news/20120505p2a00m0na018000c.html

The Japanese government never issued any conditional guarantees that the Hamaoka nuclear plant would be given permission to restart, former Prime Minister Naoto Kan told the Mainichi recently in an exclusive interview.

On May 6 last year, then Prime Minister Kan demanded that operations at the Hamaoka plant in Shizuoka Prefecture -- on the Pacific coast and close to a major undersea fault line -- be halted. However, plant operator Chubu Electric Power Co. said it had received a guarantee from then Economy, Trade and Industry Minister Banri Kaieda for permission to restart the reactors after the firm had implemented a raft of new safety measures.

"That was just something they (Chubu Electric) wished for," Kan told the Mainichi, denying any such guarantee had been made.

Chubu Electric decided on May 9, 2011, to shut down the Hamaoka plant's reactors, three days after the government demand. At a news conference that day, Chubu Electric President Akihisa Mizuno revealed that he'd talked with Kaieda on the phone, and that the minister had "promised to allow the reactors' restart" if the completion of new tsunami safety measures was confirmed. Mizuno also announced items that confirmation would be based on.

"I won't deny that the utility presented something they were hoping for," Kan told the Mainichi in the interview. "But the Hamaoka plant is on a different level from the problem of Japan's energy policy as whole. That issue goes beyond whether a promise can be made based on a confirmation list or not. ... The Fukushima nuclear disaster proved that the risks involved cannot be borne by just one company.

"This is a policy issue that the entire nation must consider," Kan added.
On the Hamaoka shutdown demand, Kan pointed out that both the Tomei Expressway and the Tokaido Shinkansen bullet train line pass within 20 kilometers of the plant -- the same radius around the Fukushima No. 1 nuclear station now barred to human habitation.

"If a Fukushima-like disaster happened at Hamaoka, Japan's aorta would wind up inside the exclusion zone. I think the impact would be greater than that of the Fukushima crisis," Kan said, emphasizing the special characteristics of the Hamaoka area.

Regarding the possible restart of reactors at Kansai Electric Power Co.'s Oi nuclear power plant in Oi, Fukui Prefecture, Kan stated: "The opinions from the power supply side of the debate are very strong. But is it really true that we don't have enough electricity? I think that we can get through if each individual cuts back on consumption at peak times, among other measures."

How much electricity this summer?

May 7, 2012

Gov't checks electricity supply after halt of last running reactor

http://mainichi.jp/english/english/newsselect/news/20120507p2g00m0dm105000c.html

TOKYO (Kyodo) -- The Japanese government held its fourth meeting Monday to ascertain electricity supply and demand for this summer, as the nation is without nuclear power-generated electricity for the first time in 42 years.

The last operating commercial reactor, the No. 3 unit of Hokkaido Electric Power Co.'s Tomari nuclear power plant, was brought to a stable state of cold shutdown at around 11 a.m. Monday after ending its electricity generation Saturday night for routine maintenance.

With all of Japan's 50 commercial reactors now suspended, the government is accelerating efforts to verify how much electricity will be available this summer, with the aim of compiling the outcome as early as later this week.

At the latest meeting with experts, the government presented an estimate that the areas covered by Kansai Electric Power Co. will face a power shortage of 14.9 percent this summer, slightly better than the 16.3 percent shortage the utility projected in April but still a severe situation.

The government is trying to restart two offline reactors of Kansai Electric, which relied particularly heavily on nuclear power before the Fukushima nuclear crisis, but its efforts in relation to the firm's Oi nuclear power plant in Fukui Prefecture appear to have made little headway.

Since the massive earthquake and tsunami on March 11, 2011, triggered the world's worst nuclear crisis in 25 years at Tokyo Electric Power Co.'s Fukushima Daiichi power plant, resulting in radiation leaks, mass evacuations and heightened public concern over nuclear safety, none of the Japanese reactors halted for scheduled checkups have been restarted.

The reactor in the village of Tomari on Japan's northernmost main island reduced its output power from 5 p.m. Saturday and had its nuclear fission reaction ended at around 4 a.m. Sunday.
To check the nation's electricity supply and demand condition for this summer, the government launched the meeting with experts on April 23.

Renewed pressure to restart Oi reactors

May 11, 2012
Power crisis 'can be averted' / Govt says restarting Oi reactors key to preventing blackouts

http://www.yomiuri.co.jp/dy/national/T120510006329.htm

The Yomiuri Shimbun

This summer's expected power shortage in Kansai Electric Power Co.'s service area may be averted if two reactors at the Oi nuclear power plant are restarted in combination with power-saving efforts by businesses and households, according to the government's new power supply projection released Thursday.

This is the first time the government has presented a power demand-supply outlook on the assumption that a nuclear reactor will resume operations.

With no nuclear reactors operating in the country, KEPCO's service areas are expected to suffer a particularly serious power shortage this summer.

However, the government apparently believes a power crisis can be prevented if the resumption of the Oi nuclear reactors is coupled with energy-saving efforts from the public and private sectors, which initially took root after serious power shortages last summer.

The projection is likely to affect ongoing discussions among local governments and residents living near the Oi nuclear plant in Fukui Prefecture on whether to restart the Nos. 3 and 4 reactors, which were shut down last year for regular maintenance.

The government submitted a draft report on the assumption that nuclear reactors will not be reactivated to an expert panel tasked with verifying the country's power demand-supply outlook. It also presented projections on the assumption the Oi reactors were reactivated.

According to the government projections, reactivating the Oi reactors is expected to push up KEPCO's power supply capacity by 4.46 million kilowatts--2.36 million kilowatts of which are to be generated by the two reactors, plus an additional 2.1 million kilowatts to be generated by pumped storage hydropower using nighttime surplus power from the reactors.

The pumped storage hydropower system works most effectively in combination with nuclear reactors, which are able to generate a constant amount of electricity around the clock.

According to the projections, even if Japan experiences a record-breaking heat wave as it did in 2010, no power shortage is expected during peak hours if the Oi reactors are reactivated and KEPCO asks large-lot users to reduce their electricity consumption in accordance with a special contract asking them to do so in the event of a tight energy supply. Even if no such request were to be made, the power shortage will only reach 0.9 percent.

However, the figure is still short of a 3 percent power surplus--the amount generally considered necessary for sufficient supply if power generation facilities malfunction.

Even so, it will be possible for the government to avoid implementing compulsory energy-saving measures, such as power consumption limits and rolling blackouts.

The government projects that KEPCO's service areas will face a 15.7 percent power shortage, or 4.73 million kilowatts, if no nuclear reactors resume operation.

In that case, even if large-lot users are asked to curb their energy consumption, the region will still suffer a power shortage of 14.9 percent, or 4.45 million kilowatts.
Rene"

If no nuclear reactors are reactivated nationwide, nine electric power companies will suffer a combined electricity shortage of 0.3 percent, according to government projections. But this figure is expected to

recover to a 0.1 percent surplus if large-lot consumers take measures to save electricity under their special contracts with the utilities.

If the Oi reactors are restarted, there is expected to be an energy supply surplus even without efforts by large-lot users to reduce consumption, according to the projections.

Does this sound like blackmail?

May 11, 2012
Gov't forces choice on local bodies: restart nuclear reactors or face power restrictions

http://mainichi.jp/english/english/newsselect/news/20120511p2a00m0na006000c.html

The government released preliminary calculations on May 10 stating that areas serviced by Kansai Electric Power Co. (KEPCO) could avert a major power shortage this summer if the No. 3 and 4 reactors at the Oi Nuclear Power Plant in Fukui Prefecture were restarted and companies and households made an effort to conserve power.

The government is considering placing restrictions on power use this summer if the nuclear reactors, which have been shut down for inspections, are not restarted -- setting large power-saving targets and penalizing companies that fall short of them. However, local bodies have been reluctant to side with the government in its push to quickly restart the reactors.

The latest calculations can be viewed as forcing a choice on local bodies: restart the nuclear reactors or face restrictions on power use. However, KEPCO, which operates the Oi plant, originally predicted that it would face a power shortage of about 5 percent this summer even if the nuclear reactors were restarted. As such, the new calculations that equate restarting the reactors with alleviation of a power shortage seem abrupt.

If the government's approach of taking the restarting of the reactors for granted without a sufficient explanation prevails, then distrust toward the government could spread in Fukui Prefecture, the neighboring prefectures of Kyoto and Shiga, and among local bodies in Osaka Prefecture and elsewhere.

The new calculations were initially presented by KEPCO in a May 10 morning meeting of the government's supply and demand inspection committee. They state that if Japan experiences a scorching summer this year similar to that seen in 2010, then even if contracts were adjusted to have major power consumers conserve electricity at peak times, supply would fall short of demand by 14.9 percent (about

4.45 million kilowatts). On the other hand, if the No. 3 and 4 reactors at the Oi plant were restarted, in addition to the 2.36 million kilowatts of electricity they would produce, pumped water storage -- in which water is pumped to a high elevation at night, when demand for electricity is low, and then released during the day -- could be used to produce an additional 2.1 million kilowatts of electricity. This would raise supply by 4.46 million kilowatts, giving KEPCO a 10,000 kilowatt surplus. Taking into account assistance from Chubu Electric Power Co. and Chugoku Electric Power Co., supply could be raised even further.

The supply and demand inspection committee was originally to compile figures on electricity supply and demand on the presupposition that the nuclear reactors would not be restarted. However, a representative of the government's National Policy Unit, which serves as secretariat, commented, "We presented preliminary calculations envisaging the restarting of the Oi reactors this time because committee members asked us to do so at the last meeting (on May 7)."
The government is considering introducing power restrictions in areas serviced by KEPCO if it cannot restart the Oi reactors, but time is needed by companies to prepare for such restrictions, and there is little time to decide whether restrictions should be put in place.

A representative of Panasonic commented, "We would have to make full-scale adjustments in our dealings with clients and take our employees into consideration." In response to such industry concerns, the government plans to hold a meeting of Cabinet ministers concerned with the issue as early as next week to decide on summer power conservation measures in KEPCO's service areas.

The government wants to avoid power restrictions which greatly affect companies' operations and are unpopular. In a news conference on May 10, Chief Cabinet Secretary Osamu Fujimura commented that the explanations to local bodies with a view to restart the Oi reactors were "ripening," hinting that the government hoped the reactors would be restarted.

Oi OK for restart

Local town assembly OKs Oi nuclear reactors' restart

http://mainichi.jp/english/english/newsselect/news/20120514p2g00m0dm102000c.html

TOKYO (Kyodo) -- The assembly of Oi town, Fukui Prefecture decided Monday to support the restart of two idled reactors at Kansai Electric Power Co.'s Oi nuclear power plant.

The assembly made the decision in consideration of the damage to the local economy and employment that a prolonged halt of the reactors could bring, and is expected to convey its view to town Mayor Shinobu Tokioka later in the day.

The mayor will make a decision on whether to approve the reactors' restart after taking into account the assembly's decision as well as the results of an appraisal by the western Japan prefecture's nuclear safety commission and other matters. The mayor's decision will then be conveyed to Fukui Gov. Issei Nishikawa.

Since the massive earthquake and tsunami in March last year triggered the nuclear accident at the Fukushima Daiichi plant in Fukushima Prefecture, northeastern Japan, no Japanese reactor halted for scheduled checkups has been restarted amid heightened public concern over the safety of nuclear power.

Japan's last operating commercial nuclear reactor at Hokkaido Electric's Tomari plant went offline on May 5 for mandatory routine maintenance, resulting in the complete idling of nuclear power sources. Nuclear power had supplied about 30 percent of the nation's electricity before the Fukushima crisis.

At the mayor's request, the Oi town assembly has been examining the central government's steps to ensure the safety of the Oi plant, located on the Sea of Japan coast, as well as its measures to support the local economy. At its meetings, there were many opinions voiced that although safety concerns remain, the town should support the reactors' restart to protect the local economy and jobs.

The central government is trying to resume operation of the Nos. 3 and 4 reactors of the Oi plant to help ensure the stable supply of electricity ahead of the summer when demand for electricity peaks with the use of air conditioning.

Prime Minister Yoshihiko Noda and key members of his Cabinet judged in mid-April that the two Oi reactors meet the government's safety standards for reactivation. But leaders of municipalities near the plant, such as the Kyoto and Shiga governors, remain cautious and have been voicing reluctance to see the reactors restarted.

Tokioka has called on the central government to offer sufficient explanation about the reactors' safety as well as the nation's energy policy, claiming that insufficient explanations so far have led to the cautious views among municipality leaders.

Town assembly to accept Ohi nuclear plant restart
http://www3.nhk.or.jp/daily/english/20120514_07.html

The Ohi Town assembly is set to approve a resumption of nuclear reactors at the Ohi power plant.

Assembly members have agreed that restarting the plant is necessary to help maintain jobs and the

town's finances. The decision will become official when assembly members meet on Monday. They also plan to convey their decision to Mayor Shinobu Tokioka.

The assembly had been discussing the issue since local people were briefed by the government and Kansai Electric Power Company in late April about plans to restart the nuclear reactors.

Some local residents expressed their concerns over resumption. Assembly members of the township were asked to consider opinions of local people as well as those in other municipalities.

In April, the government asked officials of Ohi Town and Fukui Prefecture to approve the plan to restart the nuclear reactors.

Mayor Tokioka has said he will make a decision after considering the opinions of the local assembly and a prefectural panel of experts.

Doubts about Hamaoka

May 14, 2012
Hamaoka plant's neighboring governors not ready to permit reactivation: survey

http://mainichi.jp/english/english/newsselect/news/20120514p2a00m0na018000c.html

Seven of the eight governors of prefectures located close to the Hamaoka Nuclear Power Plant in central Japan -- whose operations were halted under government orders two months after the massive quake and tsunami hit northeastern Japan last spring -- are wary of restarting the plant, a Mainichi survey has found.

The governors said there remain large obstacles to restarting the plant, including obtaining "the consent of local bodies."

On May 14, 2011, some two months after the Great East Japan Earthquake and tsunami triggered a nuclear crisis, the national government ordered the halt of operations at the Hamaoka Nuclear Power Plant in the Shizuoka Prefecture city of Omaezaki.

In early May this year, ahead of the one-year anniversary of the plant's halt, the Mainichi surveyed the governors of eight prefectures within 150 kilometers of the plant -- Tokyo, Kanagawa, Yamanashi, Shizuoka, Nagano, Aichi, Gifu and Mie prefectures. The governors were asked about their views on the possibility of reactivating the Hamaoka plant and their assessment of the national government's handling of the issue.

Shizuoka Gov. Heita Kawakatsu said: "We are planning to independently run tests to determine the engineering safety of the plant and the economic rationality of power generation costs, and for the time being, will not approve reactivation of the plant."

Other governors echoed the sentiment, with Kanagawa Gov. Yuji Kurosawa saying, "Unless there is a guarantee of sufficient safety, consent will not be easily given." Mie Gov. Eikei Suzuki said, "There has been too little explanation from the national government about the need (to reactivate the plant) based on the plant's safety and power demand," while Gifu Gov. Hajime Furuta said, "A major prerequisite for consent is a watertight plan, including research on tsunamis' possible effects, and an explanation to the public."

Many governors also criticized the government's handling of the nuclear power issue after operations at the Hamaoka plant were stopped. "Reduction of our dependence on nuclear power is the direction that's been indicated, but we have yet to be presented with a process that will get us there, nor a vision of future energy demand and supply," said Aichi Gov. Hideaki Omura. Nagano Gov. Shuichi Abe likewise argued that "the government should promptly indicate a clearly defined vision." Kawakatsu, meanwhile, said, "The government has not informed us of the process leading up to the plant's reactivation, and has not taken any appropriate action toward the local economy that's been affected by the plant's halted operations."

Despite such concerns, governors are also worried about the risk of power outages, with Yamanashi Gov. Shomei Yokouchi saying, "After talks with local communities, I would like to see nuclear plants that can be restarted to be reactivated as soon as possible."

Meanwhile, unlike the seven other governors, Tokyo Gov. Shintaro Ishihara gave a single answer to the two-tiered survey.

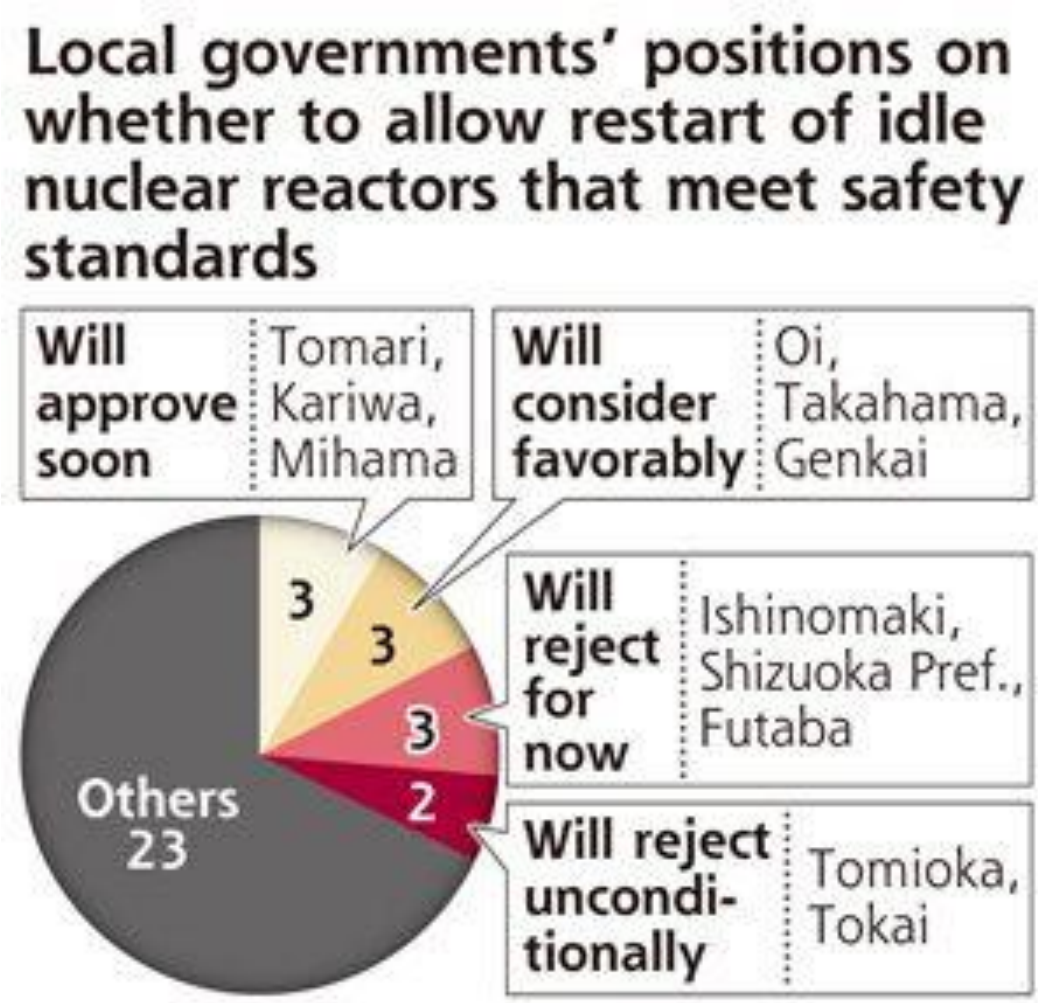
"The important thing is to construct a basic national strategy regarding the degree of economic growth we are seeking, and what kind of energy and how much of it we need to secure. If nuclear power does turn out to be necessary, the national government should take the responsibility of operating them appropriately," he said.

Not so simple a decision

6 local heads favor restart of N-reactors

http://www.yomiuri.co.jp/dy/national/T120513002371.htm

The Yomiuri Shimbun



Six out of 34 heads of prefectures and municipalities where nuclear power plants are located favor restarting suspended nuclear reactors if they meet government safety standards, according to a survey conducted by The Yomiuri Shimbun.

The survey, covering 13 governors and 21 heads of municipalities, was conducted this month after all the nation's nuclear reactors suspended their operations mainly due to regular checkups following the crisis at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant.

Five local government leaders said they disapproved of restarting the idle nuclear reactors, while 23 refrained from stating their position on the issue.

Many of the undecided leaders said they would decide based on the position of the central government and local residents on the restart of the Nos. 3 and 4 reactors at the Oi nuclear power plant in Fukui Prefecture, on which discussions have heated up.

The central government's safety standards were established in April to prepare for the restart of the Oi reactors. The plant is operated by Kansai Electric Power Co., and the restart of its reactors is considered essential in avoiding serious power shortages in the Kansai region this summer.

Among the six leaders in favor of restarting suspended reactors, the heads of Tomari village in Hokkaido and Kariwa village in Niigata Prefecture and the mayor of Mihama town in Fukui Prefecture said they "would approve [restarts] soon" after the reactors meet the safety standards.

The three municipalities are home to Hokkaido Electric Power Co.'s Tomari nuclear power plant, TEPCO's Kashiwazaki-Kariwa nuclear power plant and Kansai Electric's Mihama nuclear power plant, respectively.
Hiroomi Makino, the head of Tomari village, said: "In the case of the Fukushima No. 1 nuclear power plant, human errors have been reported in its operation. The Tomari nuclear power plant has established sufficient safety measures."
Kariwa village head Hiroo Shinada said, "It's desirable for the nuclear power plants to provide electricity under the precondition of securing safety."

Mayor Shinobu Tokioka of Oi town, where the disputed Oi nuclear power plant is located, was among the three mayors who said they "will consider [restarts] favorably."

"Our town has long supported the nation on nuclear policies and coexisted with the power plant," Tokioka said. However, Tokioka said, "Public consensus on the necessity of nuclear power is required" for the restart of nuclear reactors.

The other two were from Takahama town in Fukui Prefecture and Genkai town in Saga Prefecture. Kansai Electric's Takahama nuclear power plant and Kyushu Electric Power Co.'s Genkai nuclear power plant are located in the two towns.

Meanwhile, the mayor of Tomioka town in Fukushima Prefecture and the head of Tokai village in Ibaraki Prefecture said they will reject the restart of nuclear reactors "unconditionally."

TEPCO's Fukushima No. 2 power plant is located in Tomioka and Japan Atomic Power Co.'s Tokai No. 2 nuclear power plant is in Tokai.

Tatsuya Murakami, the head of Tokai village, has asked the central government to scrap the Tokai No. 2 nuclear power plant. "I don't think the hastily prepared safety standards will appease public criticism of nuclear power plants," Murakami said.

The mayors of Ishinomaki, Miyagi Prefecture, and Futaba town in Fukushima Prefecture and Shizuoka Gov. Heita Kawakatsu said they will reject restarts "for now."

Tohoku Electric Power Co.'s Onagawa nuclear power plant is located in Ishinomaki, the Fukushima No. 1 nuclear power plant is in Futaba and Chubu Electric Power Co.'s Hamaoka nuclear power plant is in Shizuoka Prefecture.
"We'll decide after conducting our own inspections of the [Hamaoka plant's] measures against tsunami and resistance to earthquakes," Kawakatsu said.

Many of the 23 local government heads who did not clarify their stance on the issue said they want to monitor developments regarding the restart of the Oi nuclear power plant's reactors, especially the opinions of local residents.
"I want to carefully study the movements of the government and local residents regarding the restart of the Oi nuclear power plant," Saga Gov. Yasushi Furukawa said.

Is GOv't winning or not ?

May 15, 2012
Fukui gov. calls on gov't to clarify nation's nuclear policy
http://mainichi.jp/english/english/newsselect/news/20120515p2g00m0dm124000c.html

FUKUI, Japan (Kyodo) -- Fukui Gov. Issei Nishikawa told visiting senior vice industry minister Seishu Makino on Tuesday that the central government should clearly outline the nation's nuclear policy as it seeks to restart two offline reactors in the prefecture.

"We want (the government) to clearly show its stance and system (toward the nation's nuclear policy) to citizens," Nishikawa said during a meeting with Makino at the prefectural government office in Fukui.

Makino responded by saying, "There is no change in our view that nuclear power is an important source of power." He promised to deal with Nishikawa's request with responsibility.

Makino was visiting Fukui in an effort to win local consent to reactivate the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Oi nuclear power plant in the Sea of Japan coastal town of Oi.

The government is trying to restart the two reactors to cope with an expected shortfall of electricity this summer as all of Japan's 50 commercial reactors are now suspended amid heightened public concern over nuclear safety in the wake of the Fukushima nuclear crisis.

Since local leaders near the Oi plant, such as the governors of Shiga and Kyoto, remain cautious about firing up the reactors again, Nishikawa has been calling on the central government to convince them of the need to do so.

The Oi town assembly decided Monday to support the restart of the two offline reactors in view of the damage a prolonged halt would cause the local economy and employment.

Industry minister Yukio Edano said Tuesday at a press conference in Tokyo, "I think this is a sign that we are winning a certain degree of consent" for the reactors' restart.

On April 14, Edano asked the Fukui governor to support the restart. During the meeting with Makino on Tuesday, Nishikawa asked about the government's recent approach to winning consent from local governments reluctant to see the reactors restarted, as well as for an explanation of the nation's electricity supply and demand situation for this summer.

To cope with an expected shortfall of electricity, the government is considering asking electricity users in wide areas of the nation to voluntarily save the use of electricity this summer by setting numerical targets.

For Kansai Electric's service areas, where electricity supply and demand condition is expected to be especially severe, the government said Monday it would prepare for the possible issuance of an order for companies' reduced electricity consumption as well as for possible rolling blackouts.

Gov't winning approval for Oi reactors' restart: Edano

http://mainichi.jp/english/english/newsselect/news/20120515p2g00m0dm123000c.html

TOKYO (Kyodo) -- Japanese industry minister Yukio Edano said Tuesday the decision by Fukui Prefecture's Oi town assembly to support the restart of two idled nuclear reactors shows the government is winning approval for their resumption.

Vowing to make further efforts to win public approval for restarting the two reactors, Edano dispatched senior vice industry minister Seishu Makino to the prefecture the same day to explain the government's approach to Gov. Issei Nishikawa.

The government is trying to restart the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Oi nuclear power plant to cope with an expected shortfall of electricity this summer as all of Japan's 50 commercial reactors are now suspended amid heightened public concern over nuclear safety in the wake of the Fukushima nuclear crisis.

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On April 14, Edano asked Nishikawa in Fukui to support the restart. During a meeting with Makino on Tuesday, Nishikawa is expected to ask about the government's recent approach to winning consent from local governments reluctant to see the reactors restarted, as well as for an explanation of the nation's overall nuclear policy.

Kyushu to reduce its consumption this summer

May 17, 2012

Kyushu Electric to request cut in power use July 2-Sept. 7

http://mainichi.jp/english/english/newsselect/news/20120517p2g00m0dm117000c.html
FUKUOKA (Kyodo) -- Kyushu Electric Power Co. plans to ask customers to limit the use of electricity between July 2 and Sept. 7 while compiling details about possible rolling blackouts in its service area, company officials said Thursday.

Kyushu Electric, which suspended all its nuclear power stations in the wake of the crisis at the Fukushima Daiichi plant triggered by the March 2011 quake-tsunami disaster, plans to ask customers to save power from 9 a.m. to 8 p.m. on weekdays during the three-month period, they said.

The utility covering the southwestern region of Kyushu has come up with the plan as the government is considering seeking a cut in power consumption of 12 percent from 2010 levels, which is sharper than the 7 percent cut achieved last year, in its service area.

Earlier this week, the government said it could request electricity users in areas covered by up to seven of Japan's 10 utilities, including Kyushu Electric, to reduce power consumption this summer to cope with tight supply conditions given all 50 commercial atomic power plants have been suspended nationwide.

The officials also said Kyushu Electric is considering dividing its service area into two groups and having them take turns picking zones in the event of possible rolling blackouts.

But it could exclude locations such as hospitals and railway facilities from such power outage plans, they added.

Not everybody wants a restart

Oi town bombarded with protests after nuke reactors' restart approved

http://mainichi.jp/english/english/newsselect/news/20120517p2a00m0na009000c.html

OI, Fukui -- Following the Oi Municipal Assembly's approval to restart two reactors at the Oi Nuclear Power Plant here, the municipal government has been receiving hundreds of protests against the decision, it has been learned.

As of May 16, two days after the town assembly decided by majority vote to support the central government's request to restart the No. 3 and 4 reactors of Kansai Electric Power Co.'s Oi plant, the Oi Municipal Government had received some 300 fax and e-mail messages, most of which were against the assembly's decision.

The number of protests made via telephone on May 14 alone was nearly 40, with most of them coming from residents living outside of Fukui Prefecture. In one of the phone calls, the caller spoke for over 30 minutes.

The municipal government has increased the number of night-duty staff, among other measures, to cope with the increasing queries.

The number of protests began to increase noticeably after Economy, Trade and Industry Minister Yukio Edano requested the Fukui prefectural and the Oi municipal governments approve the reactors' restart on April 14.

Meanwhile, although the town assembly has approved the reactors' restart, Oi Mayor Shinobu Tokioka has not announced the town's official stance on the issue yet.

"If I say OK (to the restart of the reactors), it will mean that the Oi town residents have assisted in reaching this decision," Tokioka said during a press conference after he was informed of the town assembly's decision. "It is necessary to base my decision on careful consideration."

Part of Tokioka's reluctance to finalize the decision on the reactors' restart may be related to the opposition of other related nearby municipalities.

Kansai leaders against Oi restart but pressure from gov't continues

May 21, 2012

Kansai leaders oppose govt call to back Oi reactor restarts

http://www.yomiuri.co.jp/dy/national/T120520002663.htm

OSAKA (Jiji Press)--Local government leaders in the Kansai region have voiced their opposition to restarting reactors at Kansai Electric Power Co.'s Oi nuclear power plant in Fukui Prefecture, despite calls from central government officials asking for their support.

At a meeting with local leaders in Osaka on Saturday, nuclear disaster management minister Goshi Hosono asked them to approve the reactivation of the Nos. 3 and 4 reactors at the Oi power plant.

However, Osaka Mayor Toru Hashimoto and other participants at the meeting cast doubt over the safety of nuclear power.

Deputy Chief Cabinet Secretary Tsuyoshi Saito also attended the meeting.

"The economy and people's lives cannot be sustained if all the country's nuclear reactors stop operating," Saito said.
The last operating nuclear reactor in Japan was taken offline earlier in May for regular maintenance. No idled reactor has been reactivated since the onset of the crisis at Tokyo Electric Power Co.'s Fukushima No. 1 plant triggered by the March 2011 earthquake and tsunami.

Hosono explained measures implemented by the government and power firms emphasized the safety of the two Oi reactors.

In response, Hashimoto said: "I expect the new nuclear regulatory agency will put together comprehensive safety standards. Until then, the reactors should not be allowed to resume full operations."

The government plans to create the new regulatory agency by integrating the industry ministry's Nuclear and Industrial Safety Agency and the Cabinet Office's Nuclear Safety Commission. The new agency will operate under the Environment Ministry.

Hashimoto also suggested that even if the Oi reactors are restarted, they should only be used when the supply-demand balance is tight.

Wakayama Gov. Yoshinobu Nisaka criticized the government for pushing reactor restarts. "Politicians should wait for the green light from experts, but they are taking the initiative," he said.

Nishikawa's consent sought

http://www3.nhk.or.jp/daily/english/20120615_33.html

Fukui governor meets Kansai Electric chief

The governor of Fukui Prefecture, host of the suspended Ohi nuclear power plant, has confirmed steps to ensure safety at the facility in a meeting with its operator's chief.

Issei Nishikawa met Kansai Electric Power Company President Makoto Yagi on Friday, one day before

Nishikawa is likely to convey his approval to restart two of the plant's reactors to Prime Minister Yoshihiko Noda.

Yagi briefed Nishikawa on the firm's plan to ensure safety at the plant, put more workers there, and carry out measures under his direct supervision.

Yagi also explained the firm's implementation of measures such as building an anti-earthquake structure to be used as headquarters during emergencies such as nuclear accidents. The structure was initially to be built in three years.

Yagi said he will keep in mind the significance of restarting the plant, which he said will decide the future of the country's nuclear power generation.

In Tokyo, Chief Cabinet Secretary Osamu Fujimura said at a news conference that the prime minister and 3 cabinet members will meet Nishikawa on Saturday.

Fujimura said the 4 ministers will then convene a meeting, and Economy and Industry Minister Yukio Edano will hold a news conference.

The government says it wants to officially approve the restart after obtaining Nishikawa's consent on Saturday.

Safe enough?

June 14, 2012
Fukui gov. visits Oi nuclear plant over safety issue
The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120613004902.htm

FUKUI--Fukui Gov. Issei Nishikawa appears to be satisfied with the safety measures taken at Kansai Electric Power Co.'s Oi nuclear power plant, which the government hopes to restart as summer power shortages loom.

On Tuesday, Nishikawa inspected the idled Nos. 3 and 4 reactors during a three-hour visit to the plant in Oi, Fukui Prefecture. He was accompanied by Hideyuki Nakagawa, the head of the prefectural nuclear safety commission, and Hideki Toyomatsu, vice president of KEPCO.

"Safety measures have been carried out" **to a certain degree**, the governor said.

The nuclear safety commission has already concluded the reactors' safety measures are adequate. During his visit to the plant, Nishikawa inspected the emergency electricity generators that have been installed on higher ground as a tsunami countermeasure, a facility that will be used as a command headquarters in the event of a nuclear accident until a seismically isolated headquarters building is completed, and seawalls, which are under construction.

Hundreds of thousands of signatures ignored

June 19, 2012

Tokyo metro assembly votes down proposed nuclear reactor restart referendum bills

http://mainichi.jp/english/english/newsselect/news/20120619p2a00m0na013000c.html

A citizens group demand that the Tokyo Metropolitan Government hold referendums on the restart of idled nuclear reactors went down to a narrow defeat in the metropolitan assembly committee on June 18.

Parties backing Tokyo Gov. Shintaro Ishihara, including the Liberal Democratic Party (LDP) and New Komeito, voted down the original bill, as well as two revised bills on the referendums put by opposition parties at the metropolitan assembly's general affairs committee. If passed, the bills would have required the assembly and the metropolitan government to make efforts to implement policy reflecting the results of local referendums on the restart of reactors run by Tokyo Electric Power Co. (TEPCO), which operates the disaster-stricken Fukushima No. 1 nuclear plant.

A full assembly vote on the original referendum bill is scheduled for June 20, though with the ruling parties holding a solid majority it is likely to be defeated.

A similar bill was rejected by the Osaka Municipal Assembly in February.

The citizens group "Minna de kimeyo 'genpatsu' kokumin tohyo" (Let's everyone decide on nuclear power national referendum) collected 323,076 signatures on a petition to have the proposal put to the Tokyo government in May this year under the Local Autonomy Law; well above the just over 210,000 necessary.

In submitting the bills to the metropolitan assembly, Gov. Ishihara wrote in his opinion that "deciding on the restart of nuclear reactors is the responsibility of the central government."

After the June 18 vote, Akira Miyazaki, secretary-general of the LDP's Tokyo Metropolitan Assembly caucus, explained his party's opposition to the bill, saying, "A steady electricity supply is essential to protect the economic activities of Tokyo's small- and medium-sized businesses and the livelihoods of its citizens. Energy policy is an issue that must be discussed on a national scale, and not something for individual local governments to get involved with."

Meanwhile, Yoshio Nakajima, secretary-general of Komeito's metropolitan assembly caucus, called the vote "the result of careful discussion within our assembly bloc." However, he also stated that "regarding the movement to build a society freed from dependence on nuclear power," his party was "in agreement" with anti-nuclear Tokyoites and wanted to "work toward that end."

Opposition parties, meanwhile, were bitterly disappointed at the bill's failure, particularly as the proposal was backed by over 320,000 signatures.

"It's sad that even the revised bills put together by the assembly factions were defeated," said Taro Yamashita, secretary-general of the opposition Democratic Party of Japan (DPJ) caucus.

Nobuo Yoshida, leader of the assembly's Communist Party members, said that he could "feel the anger at this result, which ignored the people's intent.

"Even if a referendum isn't held, we must deepen discussion on the restart of nuclear reactors," Yoshida added.

Time for citizens to redress the national policy

June 19, 2012

Time for Japan to introduce national referendum on role of nuclear reactors

http://mainichi.jp/english/english/perspectives/news/20120619p2a00m0na016000c.html

A citizens' group failed to win the hearts and minds of many members of the metropolitan assembly for its proposal to hold a local referendum to determine whether nuclear reactors in Tokyo Electric Power Co.'s service area should be reactivated. The reason for this was because many assembly people have feelings of resistance toward the local government deciding through a referendum on what the central government is supposed to be in charge of handling.

Taking a different form than an election being fought on various campaign issues, a local referendum can be used to reflect the intentions of local residents in policy. A local referendum is particularly suited to deal with issues that are closely linked to the local community such as construction of troublesome facilities and preservation of the appearance of the streets in the local community.

Nevertheless, in the latest case of the civic group's request to hold a local referendum on the nuclear reactors, even if a majority of voters voted against restarting the nuclear reactors, the Tokyo Metropolitan Government has no authority to put it into effect. Moreover, Tokyo's intention could be taken to turn its back on the intention of municipalities that are hosting nuclear power plants to supply electricity to Tokyo residents.

The civic group that had called for the direct petition to the Tokyo Metropolitan Government has said, "Let's decide on the rights or wrongs of the nuclear reactors through a national referendum." The civic group has already collected about 120,000 signatures for its proposal, but unlike European countries, Japan does not have a law that stipulates procedures to hold a national referendum on issues other than amendments to the country's Constitution. Therefore, the ordinance for the proposed local referendum emerged as a next best possible means under the direct claim system provided by the Local Autonomy Act.

Shinji Miyadai, a 53-year-old sociologist and one of the representatives who collected and submitted the signatures directly to the metropolitan assembly, said, "Although we are told that 'nuclear power is national policy,' people as sovereign members of society have to correct the distorted national policy." His words sound convincing when we come to look back on the accident at the Fukushima No. 1 Nuclear Power Plant and subsequent handling of it. The civic group collected more than 320,000 effective signatures for the direct petition to the Tokyo Metropolitan Government and a similar trend is spreading elsewhere in the country, an indication that the time has come for Japan to introduce a national referendum to decide on its future path after the earthquake disasters. (By Kenji Shimizu, Tokyo City News Department)

Japan Forum on International Relations Inc. on restarting

June 20,2012

Forum still pushes nuclear power with strict safety proviso added

http://www.japantimes.co.jp/text/nn20120620f3.html#.T-G88FJIwpU

By HIROKO NAKATA
Staff writer

The nonprofit think tank Japan Forum on International Relations Inc. has issued a policy proposal calling for the restart of nuclear reactors after making every effort to improve their safety.

"Those nuclear power stations now . . . shut down should resume operations as soon as possible, after their safety has been verified, their facilities structurally reinforced, and their operational management improved in line with the lessons learned from the accident at the Fukushima (No. 1) nuclear power station," says a JFIR proposal released Monday.

The proposal was endorsed by some 70 academics and business leaders and submitted to Prime Minister Yoshihiko Noda last week.

"(Industry chiefs) had repeatedly said the nuclear reactors were safe. But they are actually very dangerous," Haruo Shimada, president of Chiba University of Commerce, told reporters in explaining the need for strict safety inspections of reactors.

Shimada is one of the academics who contributed to the proposal and signed the recommendations.
The forum said that even though more use of renewable energy would improve energy self-sufficiency and provide alternative sources of power, renewables can't immediately replace nuclear power.

"We cannot share the optimistic view of some that the introduction of renewable energy would serve as a quick remedy or substitute for nuclear power and instantly enable denuclearization," it said.

But at the same time, too much dependence on thermal power plants will lead to a rise in electricity prices, the forum said.

In its policy recommendations, the forum also said the country should actively contribute to peace and safety in the Middle East to ensure a stable supply of energy, as well as build cooperation with other East Asian nations, including South Korea, to enable Japan to purchase electricity from those countries.

The country should also promote globalization of the shale gas market, which started in the United States, it said.

And now Ohi No.4

June 21, 2012

Work starts to restart Ohi No.4 reactor
http://www3.nhk.or.jp/daily/english/20120621_36.html

The operator of the Ohi nuclear plant in Fukui Prefecture has begun work to restart the No. 4 reactor, following similar operations at the No. 3 reactor last Saturday.

Kansai Electric Power Company began the 2-week job of cleaning pipes connected to the turbine at the No. 4 reactor on Thursday.

The company then plans to spend about 10 more days checking pipes connected to the reactor, and testing control rods.

The No. 3 reactor is scheduled to restart on July 1st, and the No. 4 reactor, on the 17th.

Full operation is expected to start at the No. 3 reactor on July 8th, and the No. 4, on July 24th.

Restart of Oi plant imminent

June 26, 2012

Oi nuclear power plant reactor to be reactivated July 1

http://mainichi.jp/english/english/newsselect/news/20120626p2g00m0dm027000c.html

TOKYO (Kyodo) -- One of the two reactors slated to be fired up again at Kansai Electric Power Co.'s Oi nuclear power station is expected to be restarted on July 1, utility officials said Monday.

Work to restart the No. 3 reactor at the Oi plant in Fukui Prefecture has been largely progressing well, said officials, noting rods used to control nuclear fission reactions will be pulled from the reactor core sometime during the evening to late night on July 1.

The operator suggested earlier it would reactivate the No. 3 unit between July 1 and 3.

In a related development, the Nuclear and Industrial Safety Agency suggested it will not immediately disclose incidents involving some alarm activations at the seaside power plant, following several recent incidents when alarms sounded, indicating abnormalities with equipment used to monitor power transmission lines.

"Similar alarm activations have occurred about 200 times a year," said Yoshinori Moriyama, an agency official in charge of nuclear disaster countermeasures, at a news conference.

After reporters protested the move, asking for prompt disclosure, Moriyama later said he would consult with the press over the matter.

The Nos. 3 and 4 reactors at the Oi plant will be reactivated to help alleviate potential summertime power shortages in areas served by the Osaka-based utility, amid lingering public concerns over nuclear safety following the accident at the Fukushima Daiichi nuclear power plant triggered by an earthquake and tsunami in March 2011.

Pdt Naomi Hirose on the restart of Kashiwazaki-Kariwa plant

June 28, 2012

New TEPCO president says utility not set on reactivating Kashiwazaki-Kariwa nuclear plant

http://mainichi.jp/english/english/newsselect/news/20120628p2a00m0na008000c.html

Newly appointed Tokyo Electric Power Co. (TEPCO) President Naomi Hirose has denied that the company is set on reactivating its idled Kashiwazaki-Kariwa Nuclear Power Plant in Niigata Prefecture -- a move stiffly opposed by local communities.

In an interview with the Mainichi Shimbun, Hirose also described TEPCO's situation and called for a review of current nuclear regulatory legislation that holds power suppliers primarily responsible for any accident at nuclear power stations they operate.

Excerpts of the interview follow:

Question: Would you please describe the current situation of TEPCO and its future business plan?

Answer: Residents of Fukushima Prefecture and the Kanto region have been adversely affected not only by the crisis at the Fukushima No. 1 Nuclear Power Plant, but also by our request to customers to accept rolling blackouts and an electricity charge hike, and to save power in summer. We've lost a significant amount of public confidence. We'd like to make good use of advice from newly appointed Chairman Kazuhiko Shimokawabe and others who have experience both in and out of the company in our effort to rehabilitate the company and restore the public's trust in us.

Q: Why did you incorporate a plan to reactivate the Kashiwazaki-Kariwa nuclear plant sometime after fiscal 2013 even before the government works out its atomic power policy?

A: We only tentatively decided to reactivate the plant around that time. Otherwise, we can't make any plan on reactivation. We haven't decided to make an all-out effort to resume operations at the power station or developed a specific schedule for that.

Q: You said, "tentatively." Does that mean the plant won't necessarily have to be in operation again?

A: Unless it's reactivated, it will affect the cost of electric power we supply. The question of whether or not to resume operations at nuclear plants is a major factor that determines the original cost of generating power.

Q: If the plant isn't restarted, will electricity fees increase?

A: Yes, they'll certainly rise. The cost of generating power at nuclear plants is quite low, and the suspension of operations at nuclear power stations is the biggest factor behind the fare hike. There is a wide gap in the expenses of generating power at nuclear plants and thermal power stations. In particular, the gap in fuel costs is quite wide. However, we'd like to minimize the fare hike by rationalizing our operations.

Q: Do you think TEPCO's plan to reduce its costs by about 3.3 trillion yen over the next decade is sufficient?

A: We incorporated all possible measures we can take now to reduce expenses in our cost-cutting plan. We've received tough suggestions from the Nuclear Damage Liability Facilitation Fund, and I believe we've incorporated substantial rationalization measures in our cost-cutting plan.

Q: What do you think about the responsibility for the nuclear accident?

A: The Act on Compensation for Nuclear Damages stipulates that power suppliers must assume unlimited liability for any accident at nuclear plants they operate even if they're not at fault. At the same time, it stipulates that the government must take necessary measures to respond to such accidents. Therefore, it's unclear where the responsibility lies. There could be cases where power suppliers can't assume full responsibility, such as our case, and I'd like discussions on the issue to be held. The government will review the system under which the Nuclear Damage Liability Facilitation Fund extends assistance to utilities. We would like to participate in discussions on the issue if we're allowed to do so.

Restart of Oi No.3 reactor on Sunday

June 29, 2012
Ohi nuclear power plant to restart on Sunday
http://www3.nhk.or.jp/daily/english/20120629_34.html

Kansai Electric Power Company, the operator of the Ohi nuclear power plant in Fukui Prefecture, will restart the No.3 reactor on Sunday night for the first time in 15 months.

The company has been cleaning cooling water pipes, checking for water leaks and making other preparations. The government decided on the resumption on June 16th.

The reactor will be resumed at 9 PM on Sunday in the presence of senior vice industry minister Seishu Makino.

This will be the first reactor to be restarted since the earthquake and tsunami in March of last year.

It will reach the critical stage on Monday morning. This is where a self-sustaining chain reaction of nuclear fission is established.

The reactor is expected to start generating power 2 days later. It will then take 4 more days to operate at full capacity.

The utility also plans to restart the No.4 reactor on July 17th and it will reach full capacity a week later.

The 2 reactors have been undergoing strict around-the-clock monitoring since June 16th by plant workers and officials of the national and prefectural governments.

An interruption in the power grid monitoring signal, an accidental switch-off of the power source for monitoring instruments and six other minor problems have taken place.

Reboot of Oi reactor

July 1, 2012

Ohi nuclear reactor back online

http://www3.nhk.or.jp/daily/english/20120701_22.html

A reactor at the Ohi nuclear plant in Fukui Prefecture, central Japan, is back online for the first time in 15 months.

The operator, Kansai Electric Power Company, began lifting the control rods of the Ohi plant's No.3 reactor at 9 PM on Sunday.

Senior Vice Industry Minister Seishu Makino and Ohi Town Mayor Shinobu Tokioka were at the site to watch the resumption.

The reactor is the first to resume operation in Japan since early May. All 50 of the country's reactors had been offline following the accident in March last year at the Fukushima Daiichi nuclear plant.

KEPCO said the fission chain reaction in the reactor is expected to reach criticality around 6 AM on Monday.

The reactor will start generating power on Wednesday and operate at full capacity 4 days later.

The utility has been preparing for the restart since June 16th. Nine minor problems were reported, but the utility says the reactor is not affected by them. It says it found no problem in its final review at 3:30 PM.

The central and Fukui prefectural governments have stationed officials at the Ohi plant to monitor the reactor around the clock.

Reactor to be rebooted, 1st after checkups since Fukushima accident

http://mainichi.jp/english/english/newsselect/news/20120701p2g00m0dm015000c.html

FUKUI (Kyodo) -- A reactor at the Oi nuclear power plant in western Japan will become late Sunday the first in the country to be reactivated after regular checkups since last year's Fukushima nuclear crisis, bringing an end to the situation since early May in which Japan has had no operating reactors and easing power constraints.

Kansai Electric Power Co. said it plans to pull out control rods that have contained fission reactions from 9 p.m. at the No. 3 reactor of the plant in Fukui Prefecture on the Sea of Japan coast. It aims to attain a sustained nuclear fission chain reaction, known as criticality, early Monday, begin power transmission Wednesday, and bring it to full operation possibly July 8.

Although a growing group of protestors has blocked a road leading to the plant since Saturday, preventing workers' access, the utility serving western Japan expects there will be no impact on Sunday's work as it has already secured enough workers for the job, officials said.

Once the 1.18 million kilowatt reactor runs at full capacity, the utility will likely see its projected power shortage in its service area fall to 9.2 percent from 14.9 percent this summer.

Following government approval June 16, it is also preparing to reboot the plant's No. 4 reactor to put it back into full service possibly in late July.

Senior Vice Minister of Economy, Trade and Industry Seishu Makino is set to witness Sunday's work as part of the government's efforts to enhance monitoring of the plant's resumption amid lingering public concerns about nuclear safety in the wake of the meltdowns of three reactors at Tokyo Electric Power Co.'s Fukushima Daiichi plant in northeastern Japan.

A series of minor troubles has haunted preparations to restart the plant, however, with alarms activated at such locations as a place where the plant receives external power supply and equipment used to monitor power transmission lines.

Oi restart effective

July 2, 2012

Oi plant's No. 3 reactor reaches criticality

http://mainichi.jp/english/english/newsselect/news/20120702p2a00m0na013000c.html

FUKUI -- The No. 3 reactor at the Oi Nuclear Power Plant in Fukui Prefecture attained criticality, or a self-sustaining nuclear fission chain reaction, at 6 a.m. on July 2.

The nuclear plant operated by Kansai Electric Power Co. (KEPCO) is the first in Japan to restart after mandatory inspections and regular checkups following the nuclear disaster at the Fukushima No. 1 nuclear plant.

KEPCO will accelerate the 1.18-million kilowatt reactor's heat output while checking the movement of the turbines. If everything goes as planned, the reactor will start generating electricity July 4 before becoming fully operational July 8.

Plant workers reactivated the reactor at 9 p.m. on July 1. They then pulled out the reactor's 53 control rods that prevent nuclear fission and lowered the concentration of boric acid before it reached criticality.

Once the reactor's heat output reaches around a dozen percent, workers will pump vapor into the generator turbine before starting electricity transmission. If the reactor operates without a hitch for about a month , the Nuclear and Industrial Safety Agency will give the go-ahead for resumption of commercial operations.

Meanwhile, demonstrators at the Oi plant, some of whom had blocked the road to the plant, ended their anti-nuclear rally and left the area in the wee hours of July 2.

Oi reactor restarted, 1st reactivation since Fukushima accident

http://mainichi.jp/english/english/newsselect/news/20120702p2g00m0dm013000c.html

FUKUI, Japan (Kyodo) -- A reactor at the Oi nuclear power plant in western Japan became late Sunday the first in the country to be reactivated after regular checks since last year's Fukushima nuclear crisis, bringing an end to the halt since early May of Japan's nuclear reactors and easing power constraints.

In reactivating the reactor, the plant's operator, Kansai Electric Power Co., pulled out control rods from around 9 p.m. that have contained fission reactions at the No. 3 reactor at the plant in Fukui Prefecture on the Sea of Japan coast.

The utility is aiming to attain a sustained nuclear fission chain reaction, known as criticality, early Monday, begin power transmission Wednesday, and bring the reactor to full operation possibly on July 8.

Although a growing group of protesters had blocked a road leading to the plant since Saturday, preventing workers' access, officials of the utility serving western Japan said the protest had no impact on Sunday's reactivation as it had already secured sufficient workers.

Meanwhile, local police started Sunday evening to forcibly remove the protesters for alleged trespass on the plant's premises.

Senior Vice Minister of Economy, Trade and Industry Seishu Makino arrived at the site Sunday evening to witness the reactivation as part of the government's efforts to enhance monitoring of the plant's resumption amid public concern over nuclear safety in the wake of the meltdown of three reactors at Tokyo Electric Power Co.'s Fukushima Daiichi plant in northeastern Japan.

Makino had to use a boat to enter the plant from the sea because the road was blocked by the protesters.

"I've watched it with a tense feeling. The government was able to take a necessary step forward amid a controversy that split the nation," Makino told reporters after monitoring the reactivation.

In Tokyo, more than a thousand people rallied in front of JR Shinjuku Station and Shinjuku Central Park to protest at the restart of the reactor.

Once the 1.18 million kilowatt reactor runs at full capacity, the utility will likely see its projected power shortfall for this summer drop to 9.2 percent from 14.9 percent and the government will lower its summer power-saving target for the utility's service area to 10 percent from 15 percent.

Following government approval on June 16, the utility is also preparing to restart the plant's No. 4 reactor to return it to full operation possibly as early as July 17.

Since mid-April, when Prime Minister Yoshihiko Noda and related ministers confirmed the safety of the Oi reactors, the government had been seeking approval for the reactors' restart from Fukui Prefecture and the coastal town of Oi where the plant is located.

After recognizing power shortages were likely to occur this summer, governors and mayors in western Japan backed off from their earlier opposition in late May, and the Union of Kansai Governments effectively gave consent for the reactivation.

Since the last operating reactor in Hokkaido was deactivated for routine checks in early May, all of Japan's 50 operational commercial reactors had been idled amid heightened public concern over the safety of nuclear power following the Fukushima disaster, triggered by the March 2011 earthquake and tsunami.

Makino's relief

Makino reaction to Ohi plant restart
http://www3.nhk.or.jp/daily/english/20120702_12.html

After the Ohi nuclear power plant reached criticality, senior vice industry minister Seishu Makino said the restart operation went smoothly.

Makino spoke at a video news conference at the Ohi plant in Fukui Prefecture. He watched the restart procedure from the central control room.

He looked relieved and said that the operation should continue with utmost caution.

Makino said the government will take responsibility for supervising the situation on behalf of the people. He said officials have learned from the accident in Fukushima and, for the sake of safety, they will work with the plant's operator and discuss even minute operational changes.

What does it mean?

July 4

Power transmission by Oi nuclear plant's No. 3 reactor to be delayed

http://mainichi.jp/english/english/newsselect/news/20120704p2g00m0dm026000c.html

FUKUI, Japan (Kyodo) -- The No. 3 reactor at Kansai Electric Power Co.'s Oi nuclear power plant in Fukui Prefecture will resume power transmission on Thursday at the earliest, instead of Wednesday as initially expected, the utility said Tuesday.

The delay is unavoidable as the power-generation turbine needs to be adjusted, Kansai Electric said.

After being idled for over 15 months for mandatory checks, the 1.18 million kilowatt reactor was reactivated Sunday night, the first reactor restart in Japan since the Fukushima Daiichi nuclear plant disaster triggered by the earthquake and tsunami in March last year.

The reactor attained a sustained nuclear fission chain reaction, known as criticality, early Monday.

July 3, 2012
Ohi No.3 reactor power generation postponed

http://www3.nhk.or.jp/daily/english/20120703_35.html

The operator of the Ohi nuclear plant in Fukui Prefecture has decided to postpone by at least one day the start of power generation at the facility's Number 3 reactor.

Kansai Electric Power Company restarted the reactor for the first time in 15 months on Sunday night. It reached criticality on Monday morning.

On Tuesday, the utility began adjusting a turbine so that the reactor could start generating power on Wednesday. But as the procedure took more time than expected, power generation was put off until at least Thursday.

The reactor was to operate at full capacity by next Sunday, but that too has been delayed by at least one day.

No nuclear reactor in Japan has produced power since a reactor at the Tomari plant in Hokkaido was halted for tests in May.

Japan back in the nuclear club

July 5, 2012

Japan regains nuclear power supply with Oi reactor's transmission

http://mainichi.jp/english/english/newsselect/news/20120705p2g00m0dm032000c.html

FUKUI, Japan (Kyodo) -- Japan regained supply of nuclear-generated electricity early Thursday when a reactor at the Oi plant in western Japan was connected to the generator and transmission grid, with all other reactors in the country remaining idled for prolonged checkups in the wake of last year's Fukushima nuclear crisis.

Following its reactivation Sunday after being idled for 15 months for mandatory checks, the No. 3 reactor at the Kansai Electric Power Co. plant in Fukui Prefecture had its turbine linked and began generating and supplying power around 7 a.m. It will gradually increase output and run at full capacity as early as from Monday, officials said.

The resumption of the 1.18 million-kilowatt reactor is expected to ease the utility's projected power shortfall for this summer to 9.2 percent from 14.9 percent and lead the government to lower its summer power-saving target for the firm's service area in western Japan to 10 percent from 15 percent.

"We have made a step toward the safe and stable supply of electricity by being able to deliver nuclear-generated electricity for the first time in four and a half months," Kansai Electric President Makoto Yagi said in a statement, referring to the shutdown in February of the last of its 11 reactors.

The reactor attained a sustained nuclear fission chain reaction, known as criticality, early Monday and had been expected to resume power generation Wednesday, but it took another day to adjust the turbine.

Following government approval on June 16, Kansai Electric is also preparing to reactivate the plant's No. 4 reactor as early as July 18 and return to full operation possibly on July 25.

Since the last operating reactor in Hokkaido was deactivated for routine checks in early May, all of Japan's 50 commercial reactors had been idled amid heightened public concern over the safety of nuclear power following the disaster at Tokyo Electric Power Co.'s Fukushima Daiichi plant, triggered by the March 2011 earthquake and tsunami.

Gov't and TEPCO have ignored the lesson from 3/11

July 6, 2012

Irresponsible reactor startup

http://www.japantimes.co.jp/text/ed20120706a1.html#.T_bRlpFIwpU

The No. 3 reactor at Kansai Electric Power Co.'s Oi nuclear power plant in Fukui Prefecture started transmitting electricity Thursday morning, ending a two-month period in which Japan has been without nuclear power.

The reactor is expected to reach full-capacity operation on Monday at the earliest. Kepco is also expected to restart the plant's No. 4 reactor on July 18 at the earliest and have it running at full-capacity on or after July 25.

The reactor restart at the Oi plant shows that both the government and Kepco have ignore the lesson from the catastrophe at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant following 3/11 — that **building and operating nuclear power plants in this quake-prone country could lead to an irreparable catastrophe and that Japan should pursue the path of decreasing and eventually ending its reliance on nuclear power.**

Almost one year and four months have passed since the Fukushima nuclear crisis began, yet the government has not worked out a time-bound road map to reduce and end the nation's reliance on nuclear power. The fact that the reactor restart has taken place in the absence of such a plan shows that the government and the power industry are not serious about reducing and ending the reliance on nuclear power.

The government and the power industry must honestly look at the long-term problems that nuclear power generation will continue to impose on human beings. It takes 100,000 years for the radiation levels of high-level nuclear waste from nuclear power plants to drop to a safe levels. At present, the technology to safely dispose of such high-level waste has not been established. Even if materials to contain such waste are developed, nobody can predict with precision what will happen to them 100 years or 1,000 years later.

Safety procedures in the restart of the Oi reactors are based only on provisional standards written before a full study of the Fukushima nuclear crisis was completed, and on a stress test consisting of computer simulations whose results can change depending on the data and computer programs used. It will take three years for Kepco to install filters to remove radioactive materials that might have to be vented from reactor cores in an emergency and establish a seismically isolated emergency command center.

The government and Kepco have also restarted the Oi reactor without working out an evacuation plan based on the worst-case scenario — a reactor core meltdown. This is completely irresponsible. The government and Kepco, which once roused fears of power shortages during the summer months, at the very least, should limit Oi reactor operations to this summer.

Despite jellyfish... Ohi no.3 reactor has just reached full capacity

July 8, 2012
Ohi No.3 reactor reaches full capacity

http://www3.nhk.or.jp/daily/english/20120709_04.html

A nuclear reactor in central Japan has achieved its full operating capacity. The nuclear reactor was restarted on July first after being shut down for maintenance that lasted 15 months.

The output of the electric generator at the No.3 reactor at the Ohi nuclear plant Fukui Prefecture reached 100-percent power output of 1.18 million kilowatts on Saturday.

On Sunday afternoon, a swarm of jellyfish prevented sea water from being absorbed to cool the reactor.

Kansai Electric was forced to reduce the power output, but went ahead with the work as scheduled when the amount of jellyfish receded.

At one o'clock on Monday morning, the No.3 reactor's output reached full capacity.

Senior Vice Industry Minister Seishu Makino and Ohi Town Mayor Shinobu Tokioka are observing the event at the plant's central control room.

This is the first time since the Fukushima Daiichi nuclear power plant accident in March, 2011 that a nuclear reactor has achieved full operating capacity after having been idled for such a long time.

Kansai Electric officials say they will make every effort to bring the No.4 reactor up to full operating capacity on 25th this month.

Oi reactor back on tracks

July 10, 2012

KEPCO's Oi reactor now fully operational

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120709004611.htm

The No. 3 reactor at Kansai Electric Power Co.'s Oi nuclear power plant in Fukui Prefecture resumed full operations early Monday, the utility said.

The 1.18 million kilowatt reactor increased its output to 100 percent at 1 a.m., becoming the first reactor to attain full capacity since the No. 3 reactor at Hokkaido Electric Power Co.'s plant in Tomari, Hokkaido, suspended operations for scheduled inspections May 5.

Due to the increased power output, the government will reportedly reduce a voluntary summer power-saving target for the region covered by KEPCO on Tuesday. The government had previously requested at least 15 percent cuts from 2010 levels in KEPCO's service area from 9 a.m. to 8 p.m. on weekdays. The revised figure will only ask for a 10 percent reduction, sources said.

The reactor is the first to return to full capacity after regular inspections since the crisis broke out at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant on March 11, 2011.

Having the No. 3 reactor back up to speed will allow KEPCO to generate an additional 530,000 kilowatts through supplemental storage power generation using surplus nuclear power generated during off-peak hours, in addition to the reactor's original capacity.

It was thought the Kansai region would face a 15.7 percent power shortage during peak hours if hit by a severe heat wave similar to what was seen in 2010. However, with the reactor back online, this figure declines to 10 percent. If the No. 4 reactor at the nuclear plant resumes full operations, which could happen as early as July 25, experts believe the region will be nearly into the black in terms of electricity.

The No. 3 reactor restarted July 1, and resumed power generation and electricity transmission last Thursday, gradually increasing power output.

A smack of jellyfish clogged the reactor's seawater intake Sunday afternoon and prevented it from taking in sufficient cooling water, but the jellyfish were removed and the reactor resumed operations that night.

Commenting on the reactor attaining full capacity, Fukui Gov. Issei Nishikawa said in a statement, "Through continued safe operations, I hope nuclear power can regain the public's trust, and that the

restart of this reactor will become the first step in practical discussions on the use of nuclear power as a reliable energy source."
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Kansai power cuts to be eased

Chief Cabinet Secretary Osamu Fujimura announced Monday the government will relax power-saving targets in service areas of the Kansai, Chubu, Hokuriku and Chugoku electric power companies beginning Tuesday, as the No. 3 reactor at the Oi nuclear power plant has resumed full operations.

KEPCO's target rate will be cut to 10 percent from the original 15 percent reduction from the power consumption level for the summer of 2010. The government had asked Chubu, Hokuriku and Chugoku power companies to set a 5 percent power-saving target. This rate will be reduced to 4 percent for Chubu and Hokuriku power companies, while Chugoku Electric's target will be cut to 3 percent.

The three firms had been asked to observe the 5 percent energy-saving rate because they have to supply electricity to KEPCO.

No.4 reactor at Oi plant to restart very soon

July 11, 2012
No.4 reactor at Ohi plant to restart July 18th

http://www3.nhk.or.jp/daily/english/20120711_38.html

The operator of the Ohi nuclear plant in Fukui Prefecture, central Japan, says it aims to restart a second reactor at the facility next Wednesday.

The No.4 reactor at the plant has been shut down for routine inspections.

Kansai Electric Power Company said on Wednesday that it will lift the reactor's control rods on July 18th. It is expected to reach criticality the following morning.

The reactor is expected to start generating power on July 21st, and to reach full output capacity by July 25th.

The plant's No.3 reactor, which was restarted on July 1st, went into full-scale operation on Monday.

Reactor no. 4 at Ohi will restart whatever happens

July 16, 2012

Alarms go off during unit 4's restart in Oi

Kyodo
http://www.japantimes.co.jp/text/nn20120716x2.html#.UARbv5FIwpU

TSURUGA, Fukui Pref. — Alarms sounded Sunday evening and early Monday at the Oi nuclear power plant in Fukui Prefecture, raising doubts about efforts launched Wednesday to restart the second reactor since the Fukushima nuclear crisis erupted in March 2011.

Government officials ruled out any delay in the restart procedure.

The first alarm sounded around 6:20 p.m. Sunday, indicating a rise in pressure at a tank for reactor 4's primary coolant system. The second, which went off around 1:20 a.m. Monday, showed an auxiliary motor for the reactor's emergency diesel generator was malfunctioning, Kansai Electric Power Co. said.

But the Nuclear and Industrial Safety Agency said the incidents won't impact its restart schedule because the rise in pressure was marginal and the emergency generator is functioning normally, although its auxiliary motor may now be useless.

Reactor 4 is slated to be restarted Wednesday night, achieve criticality the next morning and return to full service four days later.

Here we go again

July 18, 2012

Ohi plant restarts second reactor
http://www3.nhk.or.jp/daily/english/20120718_34.html

Kansai Electric Power Company has restarted another reactor at its Ohi nuclear power plant in Fukui Prefecture, central Japan.

The utility started lifting control rods at the No.4 reactor at 9 PM on Wednesday in the presence of senior vice industry minister Seishu Makino.

Kansai Electric says that if things go as planned, chain reactions will begin on Thursday morning. It adds that the reactor will start generating power as early as Saturday and begin operating at full capacity next Wednesday.

The plant on the Sea of Japan coast is the only one operating in the country. The facility's No.3 reactor began full operation on July 9th.

Nuclear power generation resumed ahead of possible power shortages in the country this summer.

The government plans to remove the power-saving targets allocated to Chubu Electric, Hokuriku Electric, and Chugoku Electric when the No.4 reactor generates at full capacity.

Another reactor at Oi power plant to be reactivated Wednesday

http://mainichi.jp/english/english/newsselect/news/20120718p2g00m0dm042000c.html

TOKYO (Kyodo) -- The No. 4 reactor at the Oi nuclear power plant in Fukui Prefecture is due to be reactivated Wednesday night, becoming the second reactor to resume operation after regular checks since last year's Fukushima nuclear crisis.

The 1.18 million kilowatt No. 4 reactor is scheduled to begin power transmission on Saturday and commence full operation on July 25, further easing power constraints in western Japan.

Kansai Electric Power Co., the operator of the plant, reactivated the No. 3 reactor on July 1 and brought it to full operation on July 9, prompting the government to lower summer power-saving targets imposed for the service areas of four power suppliers in western Japan.

When the No. 4 reactor begins full operation, the government plans to remove power-saving targets for Chubu Electric Power, Hokuriku Electric Power and Chugoku Electric Power companies, while further easing the target for Shikoku Electric Power Co. from 7 percent to 5 percent. However, it intends to maintain the 10 percent target -- recently reduced from 15 percent -- for Kansai Electric.

The No. 4 reactor was idled on July 22 last year for regular checks. As in the case of the No. 3 reactor, Senior Vice Minister of Economy, Trade and Industry Seishu Makino will witness the No. 4 reactor's reactivation as part of the government's efforts to enhance monitoring of the plant's resumption amid

public concern over nuclear safety in the wake of the meltdown of three reactors at Tokyo Electric Power Co.'s Fukushima Daiichi plant.

Meanwhile, investigations into fault fracture zones, or soft earth layers, running under the Oi plant appear unavoidable as many members of an expert panel of the Nuclear and Industrial Safety Agency pointed to the risk posed by them at a meeting the same day.

Experts, including Toyo University professor Mitsuhisa Watanabe, said in June that the zones could move the surface of the ground by acting together with nearby active faults.

"We will immediately study countermeasures as experts' views are extremely important," an agency official said.

But Kansai Electric was more reserved, with an official saying, "We will make studies based on (experts') views."

Given the developments related to the plant's safety, some residents of the town of Oi in Fukui Prefecture seem puzzled by the moves to restart the facility's reactors.

A local man who runs a company said, "When building a nuclear power plant there, it must have been determined after consultations with experts that there was no problem. It is difficult to understand why they are saying now that a reinvestigation is necessary."

Members of the nuclear safety agency panel also called for investigations into Hokuriku Electric Power Co.'s Shika plant in Ishikawa Prefecture due to the possibility of active faults under the plant's No. 1 reactor unit.

In a related development, a group of residents of Kyoto and Shiga prefectures presented the Cabinet Office and the Ministry of Economy, Trade and Industry with around 23,000 signatures calling for the government to rescind its decision to allow the Nos. 3 and 4 reactors at the Oi plant to resume operation.

Before the reactivation of the No. 3 reactor, a group of protestors blocked a road leading to the plant, prompting local police to forcibly remove them.

No.4 reactor at Oi plant reactivated -What about checking for faults?

July 19, 2012

Kepco again fires up Oi plant's reactor 4

Probe the fault fracture zones under Fukui site: NISA panel

Kyodo
http://www.japantimes.co.jp/text/nn20120719a1.html#.UAgtHaBIwpU

Reactor 4 at the Oi nuclear plant in Fukui Prefecture was reactivated Wednesday night and became the second to be restarted since the Fukushima nuclear crisis began in March 2011.

The reactor, capable of generating 1.18 million kw, is scheduled to begin transmitting power Saturday and commence full operation July 25, further easing power constraints in western Japan.

Kansai Electric Power Co. reactivated the plant's reactor 3 on July 1 and brought it to full operation July 9, prompting the government to lower summer power-saving targets for the service areas of four power suppliers in western Japan.

When reactor 4 begins full operation, the government plans to remove power-saving targets for Chubu Electric Power, Hokuriku Electric Power and Chugoku Electric Power, while further easing the target for Shikoku Electric Power from 7 percent to 5 percent. However, it intends to maintain the 10 percent target — recently reduced from 15 percent — for Kansai Electric.

Reactor 4 was idled July 22, 2011, for regular inspections and maintenance. It also had to pass disaster-stress tests introduced in light of the Fukushima crisis.

As was the case with reactor 3, Seishu Makino, senior vice minister of economy, trade and industry, observed unit 4's restart as part of the government's efforts to enhance monitoring to ease the public outcry over the Fukushima nuclear crisis.

Meanwhile, investigations into fault fracture zones, or soft layers also known as crushed zones, running under the Oi plant appear unavoidable after several members of an expert panel of the Nuclear and Industrial Safety Agency pointed Tuesday to the risk they pose.

Experts, including Toyo University professor Mitsuhisa Watanabe, said in June that the zones could move the surface of the ground by acting together with nearby active faults.

"We will immediately study countermeasures as experts' views are extremely important," a NISA official said.
But Kepco was more reserved. "We will make studies based on (experts') views," an official with the utility said.
The conflicting responses appeared to puzzle Oi residents.

"When building a nuclear power plant there, it must have been determined after consultations with experts that there was no problem," said a local business owner. "It is difficult to understand why they are saying now that another investigation is necessary."

Members of the NISA panel also called for investigations into Hokuriku Electric Power Co.'s Shika plant in Ishikawa Prefecture due to the possibility of active faults under the now-idled plant's reactor 1.

In a related development, a group of residents of Kyoto and Shiga prefectures presented the Cabinet Office and METI with around 23,000 signatures calling for the government to rescind its decision to allow the two reactors at the Oi plant to restart.

Restarted Oi nuclear power reactor reaches criticality

http://mainichi.jp/english/english/newsselect/news/20120719p2a00m0na006000c.html

OI, Fukui -- The No. 4 reactor at the Oi nuclear power plant here reached criticality on the morning of July 19 after becoming the country's second nuclear reactor to have been restarted since all of Japan's 50 commercial reactors were halted in May.

Senior Vice Minister of Economy, Trade and Industry Seishu Makino and other officials were present in the plant's central control room when officials from plant operator Kansai Electric Power Co. (KEPCO) reported that the No. 4 reactor reached criticality at 6 a.m.

The No. 4 reactor was restarted the previous night at 9 p.m. for the first time in almost a year, with Makino, Fukui Vice Gov. Homare Mitsuda and Oi Town Vice Mayor Masaharu Tokioka present in the central control room. If inspections proceed smoothly, the reactor will resume power transmission on July 21 before operating at full capacity on July 25.

Because citizens from across the country had staged a protest near the plant in Oi, Fukui Prefecture, when the No. 3 reactor was reactivated on July 1, blocking the road leading to the plant, the government deployed riot police and patrol cars and checked vehicles on the road leading to the plant prior to the No. 4 reactor's restart on July 18. There were, however, no protests near the facility against the latest reactivation.

The government is poised to eliminate the energy-saving target set earlier for the service areas of Chubu Electric Power Co., Hokuriku Electric Power Co. and Chugoku Electric Power Co. once the No. 4 reactor at the Oi nuclear plant operates at full capacity. The energy-saving target will also be eased for the service area of Shikoku Electric Power Co. from 7 percent to 5 percent, while that for KEPCO's service area will be retained at 10 percent.

Meanwhile, the government's Nuclear and Industrial Safety Agency (NISA) ordered KEPCO and Hokuriku Electric Power Co. on July 18 to conduct additional surveys on the faults running directly under the premises of the Oi nuclear power plant and Shika nuclear power plant in Ishikawa Prefecture, respectively, to determine whether they are active faults or not. NISA indicated that it will withhold from making a final decision on the screening of the preliminary assessment on the safety of the No. 1 and No. 2 reactors at the Shika nuclear plant as part of the stress test on the facility until the results of the fault surveys are produced. The preliminary assessment has already been submitted to NISA.

NISA, however, said it will not demand the suspension of the No. 3 and No. 4 reactors at the Oi nuclear plant, which were reactivated earlier this month, during the additional fault surveys.

During an expert meeting at NISA on July 17, experts pointed out that the "S-1" fault running directly under the No. 1 reactor at the Shika nuclear power plant is highly likely to be an active fault. During the upcoming survey, the relationship of the S-1 fault with another fault running nearby will be examined, among other things.

NISA demanded that Hokuriku Electric and KEPCO submit their survey plans by July 25 and July 31, respectively. Those plans will be screened for their validity at an expert meeting later this month. Once they are approved, experts will also take part in on-site surveys of the faults.

Under the instruction of Economy, Trade and Industry Minister Yukio Edano, NISA will also examine to see how and why the possibility that the S-1 fault may be active had earlier been overlooked during the quake-resistance reappraisal of the No. 1 reactor at the Shika nuclear plant, which was conducted in accordance with a revision to the seismic-resistant design screening guidelines in 2006. NISA will interview officials who were in charge at the time and examine documents, while checking whether such a

possibility was also overlooked at other nuclear complexes. However, the construction permit for the Shika nuclear plant and other past safety screenings will not be reviewed.

As for the Oi nuclear power plant, some experts pointed out during a July 17 meeting that faults called "fracture zones" running under the plant's premises are "not active faults," but an additional survey was called for due to lack of relevant material.

Ishikawa Gov. Masanori Tanimoto released a comment, saying, "The fault to be subject to the (additional) survey had already been declared safe by the central government when the Shika nuclear plant was constructed. It is extremely regrettable that doubts have been raised for the fault, which undermines the public's confidence in the government's screening."

Oi Town Mayor Shinobu Tokioka hailed NISA's order that the "F-6" fracture zone running directly under the Oi nuclear plant be surveyed, saying, "I hope they will conduct a solid survey for the sake of residents' safety and security."

Danger of faults not severe enough to halt restart process, says S.Makino

July 20, 2012

Oi's reactor 4 achieves criticality

Kyodo
http://www.japantimes.co.jp/text/nn20120720a4.html#.UAkj_KBIwpU

FUKUI — Reactor 4 at the Oi nuclear power plant in Fukui Prefecture reached criticality Thursday morning following its reactivation the night before by Kansai Electric Power Co.

The 1.18-million-kw reactor is scheduled to begin generating and transmitting power Saturday after turbine checks, and reach full operation on July 25.

The reactor is the second to be brought back online since the use of nuclear power briefly ceased earlier this year. All commercial reactors were kept offline after regular checks as the Fukushima nuclear crisis

rekindled nuclear safety fears in March 2011. The first to resume operation was Oi's reactor 3, which resumed full operation on July 9.

When reactor 4 reaches full operation, the power-saving targets issued by Chubu Electric Power Co., Hokuriku Electric Power Co. and Chugoku Electric Power Co. are expected to be scrapped, and the target for Shikoku Electric Power Co. is expected to be cut from 7 percent to 5 percent. The target for Kepco, however, is expected to be kept at 10 percent, following an earlier reduction from 15 percent.

On Wednesday, the Nuclear and Industrial Safety Agency told Kepco to re-examine fault fracture zones, or soft earth layers, running under the Oi plant, after experts pointed out the earthquake risks the previous day.

Seishu Makino, senior vice minister of economy, trade and industry, said he does not believe the danger is great enough to justify halting the restart process.

Kepco reactivated reactor 4 at 9 p.m. Wednesday by extracting the control rods used to moderate the fission reaction in the core. As Makino watched, the utility began adjusting the control rods and the boron level in the primary coolant water through early Thursday until it achieved a self-sustaining fission reaction.

Reactor 4 was idled on July 22 last year for regular checks. After the government decided June 16 to restart it, the unit was tested with reactor 3 under a special monitoring regime hastily drawn up by the nuclear safety agency, Kansai Electric and the Fukui Prefectural Government so its reactivation could proceed despite regional opposition.

Oi No.4 starts transmitting power

July 21, 2012

Oi nuclear plant's No. 4 reactor begins generating power

http://mainichi.jp/english/english/newsselect/news/20120721p2g00m0dm018000c.html

TSURUGA, Japan (Kyodo) -- The No. 4 reactor at the Oi nuclear power plant in Fukui Prefecture started generating and transmitting electricity Saturday, its operator Kansai Electric Power Co. said.

Power transmission from the 1.18-million-kilowatt reactor will cover the Kansai area in western Japan and part of Fukui Prefecture along the Sea of Japan, the operator said, adding the reactor is expected to start full-capacity generation next Wednesday after gradually raising power output.

The reactor is the second to go back online after all of Japan's commercial reactors were taken offline for regular checks in the wake of the March 2011 nuclear accident at Tokyo Electric Power Co.'s Fukushima Daiichi plant in northeastern Japan. The first to resume operation was the Oi plant's No. 3 reactor which was brought to full operation on July 9.

When the No. 4 reactor begins full operation, the government will remove power-saving targets for Chubu Electric Power Co., Hokuriku Electric Power Co. and Chugoku Electric Power Co., while further easing the target for Shikoku Electric Power Co. from 7 percent to 5 percent. It is considering maintaining the 10 percent target -- recently reduced from 15 percent -- for Kansai Electric.

The No. 4 reactor was booted up Wednesday night and the following morning reached criticality -- the state at which a chain reaction of nuclear fissions becomes self-sustaining. Its operations were idled July 22 last year for a periodic checkup.

Oi 3 & 4 now both at full speed

July 25, 2012

Oi plant's No. 4 reactor starts capacity operation

http://mainichi.jp/english/english/newsselect/news/20120725p2g00m0dm025000c.html

FUKUI (Kyodo) -- The No. 4 reactor of Kansai Electric Power Co.'s Oi nuclear plant in Fukui Prefecture started full-capacity power generation early Wednesday to ease electricity shortages in western Japan, the operator said.

It is the second reactor to do so, following the plant's No. 3 reactor, after all of Japan's 50 commercial reactors were suspended gradually in the wake of the March 2011 nuclear disaster at Tokyo Electric Power Co.'s Fukushima Daiichi plant.

While the government has decided to restart the two reactors to ease electricity shortages, there are no prospects for any of the other 48 reactors resuming operation, leaving Japan's future electricity supply uncertain.

The government plans to inaugurate a new nuclear regulation body in September to take procedures to restart the remaining reactors.

The No. 4 reactor was reactivated on the night of July 18 for the first time in about one year, reached criticality for a self-sustaining chain reaction of nuclear fissions the following morning and began to transmit electricity Saturday.
The Oi Nos. 3 and 4 reactors' full operation is expected to nearly eliminate an estimated electricity shortage of 14.9 percent based on the peak 2010 consumption in Kansai Electric's service area including Osaka.

But the government plans to retain an electricity-saving target of 10 percent for the area set after the No. 3 reactor's start of full operation July 9, while lowering the target to around 5 percent for firms that feel affected seriously by the 10 percent restriction.

Instead, it plans to remove power-saving targets for three other utilities' service areas neighboring the Kansai Electric area. They are 4 percent power-saving targets for Chubu Electric Power Co. and Hokuriku Electric Power Co., and a 3 percent target for Chugoku Electric Power Co.

The three power companies are providing part of their electricity output to Kansai Electric to ease the supply crunch.
The government is also expected to ease the 7 percent target set for Shikoku Electric Power Co.'s service area to 5 percent.

The government plans to retain power-saving targets of 10 percent for the Kyushu Electric Power Co. area and 7 percent for the Hokkaido Electric Power Co. area due to tight electricity supply conditions there. No targets have been set for the areas served by Tokyo Electric Power and Tohoku Electric Power Co.

Since the government-requested power-saving period began July 2, electricity supply and demand conditions have been stable due to relatively low temperatures in Japan.

But utilities' electricity supply operations have been temporarily disrupted by glitches and for other reasons at some non-nuclear power plants. Furthermore, temperatures are expected to rise, raising the likelihood of increased power usage for air conditioning.

Ohi No.4 reactor working at full capacity
http://www3.nhk.or.jp/daily/english/20120725_01.html

The second reactor to resume operation in Japan after the nuclear accident in Fukushima is now generating power at full capacity.

Officials raised the output of the No.4 reactor at the Ohi nuclear plant in Fukui Prefecture, central Japan, at midnight on Tuesday after final safety checks.

The reactor reached its full capacity about one hour later on Wednesday morning. Senior vice industry minister Seishu Makino was at the plant's central control room to oversee the procedure.

The plant operator, Kansai Electric Power Company, restarted the No.4 reactor on July 18th.

Ohi's No.3 reactor resumed operation earlier this month and is running at full capacity.
The 2 reactors have the biggest output of those run by Kansai Electric, whose service area covers the country's second-largest city, Osaka.

Now that the 2 reactors are working at full swing, the government plans to lift the power-saving targets imposed on the service areas of 3 other utilities in central and western Japan.

These firms are supposed to supply electricity to Kansai Electric in the event of power shortages.

The government gave the go-ahead for Ohi's restart last month, saying its safety has been confirmed.

But a panel of experts is calling for a fresh survey of the underground cracks at the plant to check if they are active faults.

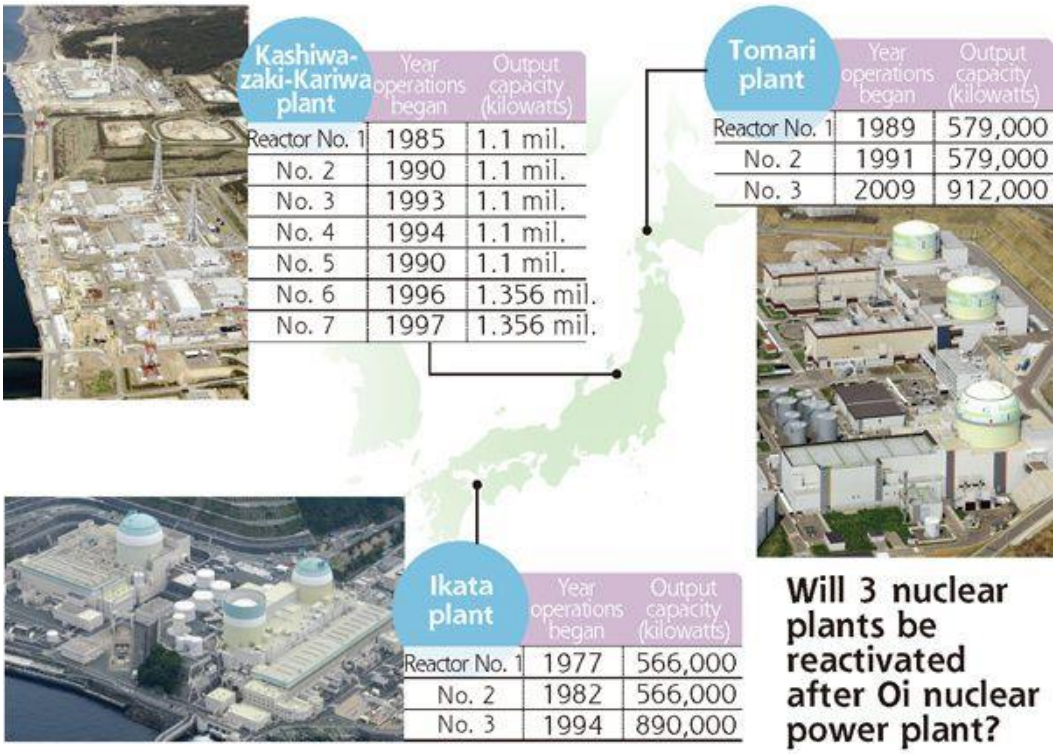
Three more facilities to be restarted?

July 26, 2012

3 N-facilities eyed following Oi plant restart / Process to bring Ikata, Tomari and Kashiwazaki-Kariwa reactors back online filled with hurdles

http://www.yomiuri.co.jp/dy/national/T120725005032.htm

Fumitsuki Funaki and Koichiro Shigematsu / Yomiuri Shimbun Staff Writers



Following the reactivation of Kansai Electric Power Co.'s Oi plant this month, the focus is now on whether to restart three other power facilities--Shikoku Electric Power Co.'s Ikata plant, Hokkaido Electric Power Co.'s Tomari plant and Tokyo Electric Power Co.'s Kashiwazaki-Kariwa plant.

The No. 4 reactor of the nuclear plant in Oi, Fukui Prefecture, reached full capacity at 1 a.m. Wednesday, which will greatly improve KEPCO's ability to meet power demand in its service area.

However, the road map for restarting the three other power facilities remains unclear.

Hokkaido faces the most serious challenge if the Tomari plant, which is hosted by Tomari village, is not restarted, as people in the region cannot live without heating in winter, when power demand peaks.

Hokkaido Electric Power has a total output capacity of 5.35 million kilowatts, excluding the Tomari plant. The maximum demand in the winter of fiscal 2010 was 5.79 million kilowatts, indicating a potential shortfall of 440,000 kilowatts.

Regarding the Oi plant, it took more than two months from the time the government asked for consent from local entities to when the reactors could be restarted.

For the Tomari plant to be reactivated by the start of next winter, discussions in Hokkaido over whether to allow the restart need to begin no later than September.

As personnel decisions for a new nuclear regulatory commission have been delayed, Hokkaido residents have complained the government must make progress more steadily.

On July 18, the Hokkaido government asked Hokkaido Electric Power to review the supply-demand situation for next winter.

The No. 3 reactor of Shikoku Electric Power Co.'s Ikata nuclear plant in Ehime Prefecture is seen as the next to be reactivated after the Oi plant.

This is because it is the only idle reactor to have its first-stage stress test results deemed appropriate by the Economy, Trade and Industry Ministry's Nuclear and Industrial Safety Agency.

Normal procedures, such as examination by the Cabinet Office's Nuclear Safety Commission, have effectively been shelved.

Ehime Gov. Tokihiro Nakamura criticized the central government's nuclear energy policy at a meeting of the National Governors' Association on July 19.

"Until the new regulatory commission is launched, members [of the existing commissions] should do their jobs," the governor said.

He made the remark partly because even if all thermal power plants operate at full capacity, the region's power supply reserve rate in August will be only 0.3 percent.

"If a thermal power plant is halted due to trouble, the negative impact on the economy and people's lives in the prefecture would be enormous," Nakamura said.

In the town of Ikata, which hosts the nuclear plant, regular inspections of the No. 2 reactor were completed this spring. Since then, inns and hostels in the area, which usually accommodate about 20,000 workers a year, have seen a steep drop in reservations.

In July, the town's commerce and industry union submitted written requests for the swift restart of the Ikata plant to the town government and assembly.

Kiyokichi Nakamoto, head of the union, said, "Restarting nuclear reactors whose safety has been confirmed can help protect the livelihoods of this town's residents."

Whether the Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture is restarted will have a significant impact on TEPCO's business reform, as it tries to shoulder huge amounts of compensation over damage related to last year's nuclear crisis at its Fukushima No. 1 power plant.

Under TEPCO's special comprehensive business plan, which was approved by the government in May, reactors at the Kashiwazaki-Kariwa plant are to be restarted one after another starting next April.

If the reactors are not restarted, thermal power plant fuel costs will increase and TEPCO's business conditions will become even more difficult.

To avoid this situation, TEPCO Chairman Kazuhiko Shimokobe and President Naomi Hirose visited Niigata Gov. Hirohiko Izumida on July 13 in preparation for the restart.

However, the governor said, "It's impossible to discuss the restart before the cause of the Fukushima accident is clear."
Kashiwazaki and other municipalities in the prefecture are also cautious about restarting the plant, making it difficult to know when the plants can go back online.

In addition, there is a gubernatorial election in the prefecture slated for October and Kashiwazaki and Kariwa village mayoral elections for November, the results of which may make the restart more difficult.

Kansai in too much of a hurry to restart

July 26, 2012

Kansai Electric irks industry minister over nuclear reactor plan

http://mainichi.jp/english/english/newsselect/news/20120726p2g00m0dm057000c.html

TSURUGA, Japan (Kyodo) -- The president of Kansai Electric Power Co. displeased the energy minister Wednesday by expressing an intention to reactivate more nuclear power reactors following the recent restart of two reactors without sufficient coordination with the state government.

Kansai Electric Power President Makoto Yagi said the utility serving western Japan wants to see two reactors at its Takahama nuclear power station restarted now that two reactors at its Oi complex, both on the Sea of Japan coast in Fukui Prefecture, have gone into full operation.

But Economy, Trade and Industry Minister Yukio Edano, whose portfolio includes the electricity industry, said of Yagi's comments, "They are very unpleasant remarks."

Edano also said none of the reactors will be reactivated before their safety is thoroughly checked, urging utilities to await a judgment by a new nuclear regulation authority the government is trying to launch in September.

Yagi told reporters in the town of Oi, "We think Takahama's Nos. 3 and 4 reactors are the most promising."

"We intend to make adjustments with the state toward giving priority to their reactivation," he said, referring to the four-reactor plant in the town of Takahama.

Yagi said nuclear power is important in terms of energy security, climate change response and the economy, while expressing readiness to continue putting efforts into safe operations.

The Oi plant's No. 4 reactor started full-capacity power generation early Wednesday to help supply electricity to the Kansai region, being only the second reactor to do so following the plant's No. 3 reactor after all of Japan's 50 commercial reactors went offline by early May in the wake of the March 2011 nuclear disaster at Tokyo Electric Power Co.'s Fukushima Daiichi plant.

The judgment on whether to restart any of the remaining 48 reactors will rest with a nuclear regulation authority slated to be launched in September. **But with exact procedures for their possible restart yet to be worked out, it remains uncertain when or if any of them will get go online again.**

Senior Vice Minister of Economy, Trade and Industry Seishu Makino, who oversaw the restart at the Oi plant to help ease safety concerns, expressed a sigh of relief at the start of full-capacity generation at both reactors, saying, "I feel relieved to be able to provide electricity to the Kansai region in a stable manner."

Beginning Thursday, the government will remove power-saving targets for three other utilities' service areas neighboring Kansai Electric's, and ease the 7 percent target set for Shikoku Electric Power Co.'s area to 5 percent. But it will retain the electricity-saving target of 10 percent for Kansai Electric's service area.

Reactor still OK after 58 years!!

July 28, 2012

Nuclear agency deems aging No. 1 reactor at Genkai plant safe until 2033

http://mainichi.jp/english/english/newsselect/news/20120728p2a00m0na012000c.html

The Nuclear and Industrial Safety Agency (NISA) has deemed that the idled No. 1 reactor of the Genkai Nuclear Power Plant in Saga Prefecture, whose pressure vessel is feared to have deteriorated more than expected, will remain safe until 2033 -- **58 years after the start of its operations,** agency officials have announced.

NISA's view is inconsistent with the government's general policy of decommissioning nuclear reactors 40 years after the start of their operations for safety reasons. The assessment is expected to influence a review of the government's policy by a new nuclear power regulatory body that the government will launch in September.

Pressure vessels of nuclear reactors become fragile after being constantly exposed to neutrons generated through nuclear fission. In order to check the extent of deterioration, nuclear plant operators insert test specimens made of the same materials into such vessels, and take them out and examine them during regular inspections to ascertain the so-called "fracture appearance transition temperature." An extremely high temperature raises the risk of the vessels being damaged if water is injected in the event of an accident.

Kyushu Electric Power Co., the operator of the Genkai nuclear plant, checked the test specimens in the its No. 1 reactor's pressure vessel in 2009 and confirmed that the fracture appearance transition

temperature was 98 degrees Celsius, about 14 degrees higher than the estimated level, and the highest figure observed in Japan -- raising questions about the safety of the vessel.

In response, NISA's panel of experts began to examine the safety of the vessel in November last year. Experts precisely examined the specimens using an electronic microscope, and concluded that the vessel is still safe.

The inner wall of the reactor pressure vessel is farther from the reactor core than the spot where the specimens are placed, and is therefore exposed to fewer neutrons. Because of this, it deteriorates at a slower pace than that of the specimens, according to NISA officials.

The experts deemed that the No. 1 reactor's pressure vessel would not deteriorate to the extent of its specimens being damaged by water injection until around 2033 -- 58 years after it began operations in 1975.

Setbacks at Hamaoka

July 31, 2012

Construction of tsunami defenses delayed at Hamaoka nuke plant

http://mainichi.jp/english/english/newsselect/news/20120731p2a00m0na009000c.html

NAGOYA -- Chubu Electric Power Co. announced July 30 that construction of tsunami defenses at its suspended Hamaoka Nuclear Power Plant in Shizuoka Prefecture will be delayed by a year, pushing the completion date back to December 2013.

The rescheduling is the result of unforeseen difficulties in installation work, including the installation of emergency power equipment. The total cost of construction is expected to remain unchanged at about 14 billion yen.

"Reactivation (of reactors at the plant) will be delayed because of this, and it will be quite tough on finances," the utility's president, Akihisa Mizuno, told a news conference.

After construction is completed, the utility hopes to win understanding from local bodies and other related parties in restarting reactors at the plant. However, as a result of the setback, the schedule for restarting the reactors remains in doubt.

Power company officials said that delays had been seen in the installation of a platform 40 meters above sea level for gas turbine power generators, and an emergency seawater intake facility next to the reactor buildings. Officials said that the spot where the platform was being installed was narrow, and cables for the water intake facility and generators were getting tangled.

Construction of a seawall standing 18 meters above sea level -- a main feature of the tsunami defenses -- would be completed as scheduled in December 2012, officials said.

Oi, Oi

August 17, 2012

Ohi No.4 reactor begins commercial operation

http://www3.nhk.or.jp/daily/english/20120816_38.html

Another reactor at the Ohi nuclear power plant in central Japan has returned to full commercial operation.

The reactor had been in test-run mode since operator Kansai Electric Power Company began to generate power at full capacity on July 25th.

Japan's Nuclear and Industrial Safety Agency told the utility on Thursday that the No.4 reactor is operating safely after completing a final 2-day check on the facility.

Last month, the plant's No.3 and No.4 reactors became the nation's first to resume operation since the Fukushima accident. The reactors had been shut down for routine inspection.

Kansai Electric is allowed to run the reactors for up to 13 months, until September next year, when regular inspection begins again.

But, experts have urged the utility to carry out a fresh survey of underground cracks near the plant to check whether they are active faults.

The company plans to reassess the potential risks of the faults by drilling the ground. It will submit a report to the government by the end of the year.

A referendum to decide on Hamaoka's restart?

August 28, 2012

Shizuoka governor supports idea for referendum on restart of Hamaoka nuke plant

http://mainichi.jp/english/english/newsselect/news/20120828p2a00m0na008000c.html

SHIZUOKA -- Shizuoka Gov. Heita Kawakatsu has expressed his support for the establishment of an ordinance to hold a referendum over whether to restart the Hamaoka Nuclear Power Plant in the prefecture, which has been suspended following the Fukushima nuclear disaster.

The move came after a citizens group called "Genpatsu Kenmin Tohyo Shizuoka" (Referendum over a nuclear plant in Shizuoka) filed a direct petition with the governor on Aug. 27, demanding the introduction of the referendum ordinance and handing him 165,127 signatures the group collected.

"Signatures of 160,000 people mean a lot. I will strive to implement the referendum," said Kawakatsu during a regular press conference that day.

The governor is expected to propose the ordinance to the Shizuoka Prefectural Assembly in September. The assembly's largest faction, Jimin Kaikaku Kaigi, and the second largest group, Minshuto Fujinokuni Kengidan, have not decided whether to approve the initiative.

"I was really surprised that the governor has upheld the ordinance as I had thought that he was against a referendum," said Nozomu Suzuki, representative of the citizens group, during a press conference following the direct petition. "I want the prefectural assembly to take the governor's decision seriously and pass the ordinance bill."

The Hamaoka nuclear plant, located in the prefectural city of Omaezaki, is the only nuclear power station run by Chubu Electric Power Co. Its operation has been suspended since May last year following the central government's request out of consideration for potential quake damage.

After the nuclear crisis at the Fukushima No. 1 Nuclear Power Plant broke out in March 2011, citizens groups in the city of Osaka and Tokyo filed direct petitions for referendums over nuclear power, but the Osaka mayor and the Tokyo governor disapproved of the initiatives, with the Osaka Municipal Assembly and the Tokyo Metropolitan Assembly voting down the ordinance bills, respectively.

A referendum for Hamaoka?

September 19, 2012

Shizuoka Gov. seeks referendum on whether to restart nuclear plant

http://mainichi.jp/english/english/newsselect/news/20120919p2g00m0dm022000c.html

SHIZUOKA (Kyodo) -- Shizuoka Gov. Heita Kawakatsu on Wednesday submitted an ordinance bill to the prefectural assembly calling for a referendum on whether to restart the suspended Hamaoka nuclear power station.

The move came after a civic group collected a total of 165,127 signatures to urge the prefectural government to enact an ordinance to hold a nonbinding referendum on the restart of the plant on the Pacific coast.

The Hamaoka complex in Omaezaki is known to be standing on an assumed epicenter area for a massive earthquake.
The proposal will be discussed and voted on at a plenary session of the assembly on Oct. 11.

Kawakatsu had been negative on holding a plebiscite on the issue but changed his stance after seeing the petition, saying, "The nuclear power plant is an attention-grabbing matter. I fully understand" people's wish to express their opinions.

People's bids in Tokyo and Osaka for similar referendums were rejected by their respective assemblies.
The Hamaoka plant, operated by Chubu Electric Power Co., has been suspended since May last year at the government's request in the wake of the March 2011 accident at the Fukushima Daiichi nuclear plant.

Wait for new standards

September 20, 2012
No restart for nuke reactors until new standards drawn up: Regulation chief

http://mainichi.jp/english/english/newsselect/news/20120920p2a00m0na008000c.html

No additional nuclear reactors will be restarted in Japan until new regulatory standards are drawn up sometime after next spring, the chief of the newly launched Nuclear Regulation Authority (NRA) said on Sept. 19.

NRA Chairman Shunichi Tanaka made the statement during a press conference on the NRA's inauguration in Tokyo the same day, saying, "It is impossible to give the green light until we finish reviewing the current provisional standards (for reactivating reactors)."

Tanaka's remarks suggest that 48 nuclear reactors across the country -- whose operations have been suspended for regular inspections and other reasons -- will not be restarted within fiscal 2012 as it is expected to take around 10 months for the NRA to formulate new regulatory standards. The remaining two reactors -- the No. 3 and No. 4 reactors at the Oi nuclear plant in Fukui Prefecture -- have already been reactivated, drawing harsh criticism from the public still reeling from last year's Fukushima nuclear disaster.

"The Oi nuclear plant was restarted based on political judgment, out of consideration for energy supply and demand during the summer. The provisional standards are incomplete, allowing the plant to be restarted with no disaster-prevention measures in place," Tanaka said, criticizing the government's hasty decision for the restart.

The NRA has begun reviewing the framework of the current standards, including stress tests on nuclear reactors. Regarding whether the 40-year cap on the operation of reactors will be extended by 20 years, Tanaka said, "It will be considerably difficult." However, he stopped short of clarifying whether the No. 1 and No. 2 reactors at the Mihama nuclear plant and the No. 1 reactor at the Tsuruga nuclear plant -- both more than 40 years old -- should be decommissioned. "I can't make any prejudgment," he said.

The NRA is adopting a so-called "backfit system" in judging whether reactors under construction -- including the No. 3 reactor at the Shimane nuclear plant -- meet the new regulatory standards while allowing their construction to continue. If those reactors -- as well as other existing reactors -- fail to meet the new criteria, the NRA will suspend their operations.

"The most important thing is to recover confidence in the nuclear safety administration, which has reached rock-bottom," Tanaka said during the NRA's inauguration ceremony.

New safety standards before any restart

September 22, 2012
No more reactors likely to go online until next year: NRA
http://www.japantimes.co.jp/text/nn20120922a7.html

By KAZUAKI NAGATA
Staff writer

The newly launched Nuclear Regulation Authority suggested Friday that reactor restarts will be on hold at least until next year because it needs about six months to draft new safety standards.

This means the nation will have to pass the winter without atomic energy, except for two reactors at the Oi nuclear plant in Fukui Prefecture, the only reactivations to date since the triple meltdowns in Fukushima in March 2011.

In an interview published Friday by the Nikkei Shimbun, NRA chief Shunichi Tanaka said drawing up the safety regulations will take time.

Hideka Morimoto, a spokesman for the new nuclear watchdog, concurred, saying, "We want to draft them as soon as possible, but we have to review a lot of things so it will be a tough job."

The NRA, which was launched Wednesday, is required by law to come up with new safety measures within 10 months.
Under the regulatory system overseen by its predecessor, however, the 10 regional utilities were required to check the ability of reactors to withstand quakes and tsunami through stress tests introduced in response to the disaster at the Fukushima No. 1 nuclear plant.

The first stage of the tests examined the possibility of natural disasters damaging reactor cores, while the second stage gauged how much radioactive fallout might be discharged into the environment by such events. Reactors had to pass the first stage to be considered for reactivation, and results for 30 reactors were submitted before the NRA was launched.

It is unclear what will happen to that requirement under the new watchdog. Morimoto said the NRA has yet to decide how the results of stress test will be reflected in its new safety standards.

Public hearings and no immediate restart

September 26, 2012

NRA chief: 'No plant restarts before summer'

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T120925003804.htm

There will be no additional restarts of the nation's nuclear facilities until at least next summer following the reactivation in July of the Nos. 3 and 4 reactors at the Oi nuclear power plant in Fukui Prefecture, remarks by the chief of the newly launched nuclear safety watchdog indicated.

In an exclusive interview with The Yomiuri Shimbun on Monday, Shunichi Tanaka, chairman of the Nuclear Regulation Authority, said the NRA plans to finish working out the outline of safety rules before the end of this fiscal year as a precondition for resumption of reactor operations.

It will take considerable time to finalize the envisioned safety rules, which Tanaka said will be preceded by about two months of public hearings on the outline.

The remarks by the head of the NRA, which was inaugurated on Sept. 19, appear to indicate reactor safety screening by the NRA, based on the new reactivation rules, will not happen before the summer of 2013.

According to the law for establishing the NRA, the task of working out new nuclear safety rules must be completed within 10 months of its launch, or by July next year.

Tanaka said the NRA is determined to undertake a radical review of existing safety standards.

"Such tasks as drawing up countermeasures against severe nuclear accidents and [deciding] how to deal with possible active faults beneath nuclear facilities will take a lot of time. I think the time frame is very tight," he noted.

Regarding criteria to judge whether to restart reactors, the NRA chief stressed the regulatory body will dedicate itself exclusively to scientific evaluations. It will not consider issues such as future electricity supply and demand or utilities' difficulties stemming from idle reactors, Tanaka said.

He also made it clear the NRA--in working out its safety standards--will not take into account the stress tests the Democratic Party of Japan administration imposed on utilities as prerequisites to restart reactors after the Great East Japan Earthquake.

"Our criteria to judge whether a reactor should be considered safe will be made independently of the stress tests the government adopted before the launch of the NRA," he said.

Tanaka brushed off Prime Minister Yoshihiko Noda's statement on the role of the NRA to the effect the authority is supposed to "play a leading role" in making decisions on restarting reactors.

"Making such decisions is not our duty, that is up to the government, in particular, the Economy, Trade and Industry Ministry's Natural Resources and Energy Agency," he said, emphasizing **the NRA will concentrate exclusively on objective safety screening.**

The NRA will make no specific efforts to obtain the public's acceptance of restarting reactors, which Tanaka said should be undertaken by government organizations concerned.

Regarding radiation-related health issues involving residents in areas around Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant, Tanaka said the NRA will produce its proposal by the year-end.

Will J-Power finish Ohma plant?

September 29, 2012
Japan's 1st recycled-fuel plant
http://www3.nhk.or.jp/daily/english/20120928_37.html

A Japanese power company plans to finish building Japan's first nuclear power station to run exclusively on recycled fuel, a mixture of plutonium extracted from spent fuel and uranium.

J-Power's plant in Ohma Town, Aomori Prefecture, would have a maximum power output of 1.38 million kilowatts, the most in Japan.

The firm began building the plant in 2008 but stopped after the Fukushima nuclear accident last year. The facility is nearly 40 percent complete.

J-Power initially aimed to start operating the plant in November 2014, but told the government in March that the start date was undecided.

Ohma Town still supports the construction even after the accident.

But Hokkaido's Hakodate City, located 20 kilometers from the town, has asked the central government that the project be suspended indefinitely. A group of Hakodate citizens has filed for a court injunction to stop the project.

Hakodate Mayor Toshiki Kudo said at a hastily arranged news conference on Friday that the city will never approve resuming the construction.

Kudo said J-Power told him that a senior official will visit Hakodate next Monday to explain the matter. He suggested that he will renew the city's request.

He added that the city is considering filing a lawsuit if J-Power goes ahead with its plan.

J-Power may resume building nuke plant

Utility hopes to restart work at Aomori facility

http://www.japantimes.co.jp/text/nb20120929a1.html

Kyodo

J-Power plans to resume construction of its nuclear plant in Aomori Prefecture this year, sources close to the matter said Friday, which would make it the first utility to do so since the Fukushima nuclear crisis.

The plan by the company otherwise known as Electric Power Development Co. is consistent with government policy but will be controversial.

Under the new national energy strategy the Cabinet weakened earlier this month, a nuclear power phaseout is to be pursued and new reactors are not to be built.

But trade minister Yukio Edano said that incomplete nuclear plants that were already under construction at the time of the Fukushima disaster would not be categorized as new.

The sources said that J-Power officials will visit Aomori on Monday to discuss the issue. The plant is being built in the city of Oma.

The move is certain to stir controversy among local and prefectural governments, and Hokkaido leaders have called for work on the facility to be suspended.

J-Power started building the plant, which is to have an advanced boiling water reactor, in May 2008 with the goal of bringing it online by November 2014.

The work, about 40 percent completed, was suspended because of the Fukushima nuclear crisis.

The utility does not need government permission to resume construction.

The Oma complex and two other reactors elsewhere in Japan were approved for construction by the government before the Fukushima crisis started in March 2011.

Restart of Ohma plant

October 1, 2012

Construction resumes at Oma nuclear plant in conflict with gov't policy

People protest the resumption of construction of the Oma Nuclear Power Plant, at a park in the Chiyogadai district of Hakodate, Hokkaido, on Sept. 30. (Mainichi)

http://mainichi.jp/english/english/newsselect/news/20121001p2a00m0na021000c.html

OMA, Aomori -- Electric Power Development Co. (J-Power) has resumed construction of its Oma Nuclear Power Plant following a suspension of work in the wake of the Fukushima nuclear disaster, the company announced on Oct. 1.

J-Power President Masayoshi Kitamura announced the move at a special Oma town council committee meeting. It is the first time for construction of a nuclear power plant to resume since the nuclear disaster triggered by the March 11, 2011 Great East Japan Earthquake and tsunami.

Completion of construction would enable the plant to run until the 2050s. This conflicts with the government's policy of abandoning nuclear plants by the end of the 2030s, and the construction is likely to stir controversy. Kitamura said the company would present a detailed construction schedule in the future.

"Government policy has provided clear stipulations on power plants under construction," he said.
Oma Mayor Mitsuharu Kanazawa said he was "very relieved" over the announcement.

Kitamura also visited the adjacent municipality of Kazamaura, where mayor Koichi Iida grilled him about evacuation in the event of a combined natural- and nuclear-plant disaster.

Hakodate, Hokkaido Prefecture, located on the coast opposite Oma and 23 kilometers away from Oma at its nearest point, is calling for an indefinite halt to the plans. Kazamaura, too, is hesitant over the resumption of construction, partly because evacuation routes have not been established.
Construction of the Oma Nuclear Power Plant began in May 2008 and 37.6 percent of the work is finished. Industrial minister Yukio Edano has said that "there will be no change" in the permission given for plants already under construction.

Nuclear plant construction to resume in Japan
http://www3.nhk.or.jp/daily/english/20121001_31.html

A Japanese power company says it will resume the construction of a nuclear power plant. This is the first such move in the country since last year's nuclear accident at Fukushima.

President Masayoshi Kitamura of the Electric Power Development Company, or J-Power, announced the decision on the Ohma plant in Aomori Prefecture on Monday.

Kitamura told a special session of the Ohma town assembly that his company decided to restart the project because of the government's recent clarification of its stance on uncompleted nuclear plants.

The assembly members welcomed the decision.

J-Power also dispatched officials to Hakodate City in Hokkaido to explain the decision. The city is located about 20 kilometers from the plant and is against the project.

Hakodate Mayor Toshiki Kudo told the officials that his city will never accept the decision, because the Ohma project received government approval based on criteria set before the Fukushima accident.

Kudo told reporters that the city will take legal action to stop the project.

J-Power began building the plant in 2008 but stopped after the Fukushima accident. The facility is nearly 40 percent complete.

Public protest in Ohma

October 2, 2012

Public disapproval: Protesters show their displeasure with the resumption of work to build J-Power's nuclear power plant in Oma, Aomori Prefecture, on Monday. KYODO

Work resumes at Oma nuclear plant

J—Power boss visits, explains situation to local communities

http://www.japantimes.co.jp/text/nn20121002a4.html

Kyodo

Electric Power Development Co. (J-Power) said Monday it has resumed construction of a nuclear plant in Aomori Prefecture, becoming the first utility to do so since the disaster at the Fukushima No. 1 complex last year.

Speaking in the town of Oma, site of the construction project, J-Power President Masayoshi Kitamura said he expects the plant's start to be delayed for at least about 18 months from the initially planned November 2014.

To explain the decision to resume the work, Kitamura visited Oma, located at the northernmost tip of Honshu, and two adjacent villages. He told reporters Monday that the three municipalities accepted the company's decision.

The government is allowing utilities to finish building reactors that have already been approved.

The decision is controversial, seeming to contradict another government plan to phase out nuclear power generation by the 2030s and forbid construction of new plants under an energy strategy worked out in September.

"Given that it has become clear how nuclear plants in the process of construction should be handled, we have decided to resume construction work with the understanding of locals," J-Power said in a statement.

Economy, Trade and Industry Minister Yukio Edano told a news conference in Tokyo that it is up to the operator to decide to resume the work, but he added that the new nuclear regulatory commission will check the safety of the plant before it goes into operation.

The Oma plant, which J-Power started building in May 2008, was slated to open in November 2014. The Fukushima crisis halted construction when it was about 40 percent complete.

The plant will house an advanced boiling-water reactor, with plans to use plutonium-uranium mixed oxide (MOX) fuel, which contains plutonium extracted from spent fuel.

"The plant will be highly safe and reliable, using the most advanced technology," the company said in the statement.
Local governments in Aomori Prefecture have called for construction of the plant to continue.

Mitsuharu Kanazawa, the mayor of Oma, said he is "extremely relieved" that the utility will resume the project, which will create jobs for the town.

But the city of Hakodate, Hokkaido, which lies within a 30-km radius of the plant, separated by a strait, is against the plan.

Sumitomo worker freed

Kyodo

JAKARTA — A Japanese employee of trading house Sumitomo Corp. and his Indonesian driver were briefly abducted Saturday on Java Island by local residents opposed to a power plant project, police and people affiliated with the project said.

The Sumitomo employee is connected with the project to build Indonesia's largest power plant. The pair, who were not injured, were rescued by the police about five hours later, they said.

The Japanese employee, who was on a business trip from Japan, and the driver were abducted Saturday afternoon while visiting a village in Batang in north-central Java, police said, adding they were taken to a private residence.

The protesters threw rocks at the police, who responded with warning shots and tear gas. The vehicle in which the man was riding was destroyed, and the police temporarily detained some of the protesters.

See also on the Yomiuri online: Construction to resume at N-plant
http://www.yomiuri.co.jp/dy/national/T121001003490.htm

Public protest in Ohma (2)

October 2, 2012
Hakodate mayor to file suit demanding halt to construction of nuke plant

Citizens group members call for a suspension of the resumption of construction of the Oma Nuclear Power Plant, in this picture taken in front of the Hakodate Municipal Government office in Hakodate, Hokkaido, on Oct. 1. (Mainichi)
http://mainichi.jp/english/english/newsselect/news/20121002p2a00m0na014000c.html

HAKODATE, Hokkaido -- The mayor of this city has announced a plan to file a suit demanding the suspension of the construction of the Oma Nuclear Power Plant, which lies only 23 kilometers away from this exotic port city.

Hakodate Mayor Toshiki Kudo made the announcement on Oct. 1, after Electric Power Development Co. (J-Power) announced a resumption of the construction of the plant in Oma, Aomori Prefecture, earlier the same day. The construction had been suspended following the disaster at the Fukushima No. 1 Nuclear Power Plant in Fukushima Prefecture in March last year.

Local governments neighboring Hakodate are also opposing J-Power's move, prompting the issue to extend beyond the Tsugaru Straits between mainland Honshu, where Aomori Prefecture is located, and Hokkaido.

J-Power President Masayoshi Kitamura visited the Aomori Prefecture village of Kazamaura, adjacent to the town of Oma, on Oct. 1, but Kazamaura Village Mayor Koichi Iida expressed displeasure, saying, "I didn't expect J-Power would come here this hastily. We haven't approved of the construction yet."

The village has demanded that J-Power prepare evacuation routes in case of a nuclear disaster as a prerequisite for restarting the plant's construction. However, no progress has been made on such routes, nor has the location of an off-site center to serve as a base in the event of a nuclear disaster been determined yet. "If the village is cut apart by tsunami or other disasters, where can we escape to?" questioned Mayor Iida.

Meanwhile, J-Power Managing Director Toshifumi Watanabe visited Hakodate, where he told Mayor Kudo, "As a plant operator, we have secured enough evidence to support a resumption of the construction."

However, Kudo demanded an indefinite freezing of the construction, arguing that the reason for building a new nuclear plant is unclear; no briefings have been held for residents in southern Hokkaido; and that the mayor is concerned about possible damage to local tourism and the fishing industry due to harmful rumors in case of a nuclear accident.

The city of Hakodate will fall under the Urgent Protective Action Planning Zone (UPZ) within a 30-kilometer radius from the Oma plant in case a disaster hits the nuclear complex. At a press conference following their meeting, Mayor Kudo said, "I'm considering filing a suit if construction gets into full swing, in order to protect the safety and security of our citizens." If filed with a court, the lawsuit will be the nation's first for a local government to demand the suspension of a nuclear power station.

The mayors of neighboring municipalities also voiced concern about a resumption of the plant's construction. Hokuto Mayor Toshimine Takaya said, "We, along with the city of Hakodate, will call on the company to freeze the construction," while Nanae Town Mayor Yasukazu Nakamiya said, "They've learned nothing from the lessons of the Fukushima nuclear disaster."

J-Power Vice President Minoru Hino visited the Hokkaido Prefectural Government and sought understanding for the construction, saying, "We've made a comprehensive decision as a company." However, Hokkaido Vice Gov. Kenichiro Tada counter-argued, saying, "The decision to restart the construction is extremely regrettable. Our awareness toward the safety of nuclear plants has changed a great deal in the aftermath of the Fukushima nuclear crisis."

Not our job

October 3, 2012

NRA: No judgment on reactors resumption
http://www3.nhk.or.jp/daily/english/20121003_29.html

The head of Japan's new Nuclear Regulation Authority, or NRA, says his authority will not make judgments on whether currently idled nuclear reactors should be allowed to be restarted after safety checks.

Shunichi Tanaka told reporters on Wednesday that the NRA should be in a position to enforce scientific and technical regulations and check whether nuclear plants satisfy safety standards.

Tanaka noted that his authority is responsible only for judgments on nuclear safety.

He added that plant operators and the state government should take on the task of deciding on the resumption of reactors and building consensus with local communities.

The NRA is expected to provide an outline of new safety standards by next March as a precondition for restarting halted reactors.

New guidelines raise new questions

October 4, 2012

New nuclear disaster guidelines raise hurdles for nuke plant reactivation

http://mainichi.jp/english/english/newsselect/news/20121004p2a00m0na013000c.html

The new nuclear disaster guidelines released by the Nuclear Regulation Authority (NRA) largely expanded the municipalities to fall under anti-disaster measures from 45 to 135 cities, towns and villages, raising hurdles for the reactivation of nuclear plants that require local permission.

The NRA released the new guidelines on Oct. 3 and they presuppose that "nuclear accidents could happen," according to an NRA member. Under the latest guidelines, the number of municipalities subjected to disaster prevention measures was raised from 45 in 15 prefectures to 135 in 21 prefectures. Because power companies are required to gain understanding from local municipalities surrounding nuclear plants before reactivating reactors, the new guidelines apparently made it more difficult for early plant restarts.

Meanwhile, areas that had thus far been free from nuclear disaster prevention are now faced with the need to pursue measures for resident evacuation and other steps, leaving some municipalities at odds.

"We have yet to examine where and how all our residents would be evacuated," said an official with the Ibaraki Prefectural Government's nuclear safety measures department. The prefecture hosts the Tokai No. 2 Power Station, whose Urgent Protective Action Planning Zone (UPZ) is home to some 930,000 residents -- the nation's largest.

According to an estimate by the Ibaraki Prefectural Government, the 7,080 buses registered in the prefecture can only transport up to 240,000 people. The prefectural government also envisages evacuation using private cars but is faced by a mountain of challenges including traffic jams.

The Tokai Municipal Government has repeatedly asked the Ibaraki Prefectural Government to "take the initiative in deciding where to evacuate residents as it is expected to become an extensive evacuation," whenever information exchange meetings were held between village and prefectural officials in charge.

In June, the Ibaraki Prefectural Government organized a study meeting at its office inviting representatives from 14 cities, towns and villages that will fall under the UPZ in case of a nuclear accident at the Tokai No. 2 Power Station.

The UPZ surrounding the Hamaoka Nuclear Power Station in Shizuoka Prefecture -- which has been under suspension at the government's request in the wake of the Fukushima nuclear disaster -- hosts some 740,000 residents.

"We still can't specifically designate the UPZ and draw up concrete evacuation methods because the central government hasn't presented us with the results of radioactive material diffusion simulations," said Kunihiko Sugiura, head of the nuclear safety measures department at the Shizuoka Prefectural Government. The prefectural government is also faced with challenges including the relocation of an off-site center from the current location only about 2.3 kilometers away from the Hamaoka plant to somewhere else.

Kyoto Prefecture, which is only 4.4 kilometers away from the Takahama nuclear power plant in Fukui Prefecture and has thus heretofore formulated disaster-prevention measures with the UPZ in mind, is apparently upset with the central government's delayed initiatives. The prefectural government is waiting for the central government to come forward with radioactive material diffusion simulation results before deciding where to evacuate residents in the event of a nuclear disaster at the Takahama plant.

Specifically, the city of Kyoto -- which falls under a 30-kilometer radius from the Oi nuclear power plant in Fukui Prefecture and is the nation's only government-designated major city to fall under the UPZ -- mapped out a provisional plan on the city's nuclear disaster responses in March. On Sept. 1, the city conducted radiation dosimetry tests on residents near the UPZ. "The central government should make decisions with a greater sense of urgency," complained Fujio Yoshida, head of the crisis control department at the Kyoto Prefectural Government.

Shiga Prefecture, which is only 13 kilometers away from the Tsuruga nuclear plant in Fukui Prefecture, used to be ineligible to receive information from the System for Prediction of Environmental Emergency Dose Information (SPEEDI) under the former government guidelines. While the prefectural government used to predict the extent of radioactive material diffusion on its own and designated areas up to 43 kilometers away from the Tsuruga plant as falling under the UPZ, the new guidelines allow the prefecture to receive SPEEDI information. The prefectural government is planning to combine its own projections and data from SPEEDI in demanding the central government to take fiscal measures for preparing protective equipment and iodine tablets.

Power supply situation may sway gov't decision to restart

October 4, 2012

Gov't may judge resumption of reactors to be unnecessary: spokesman

http://mainichi.jp/english/english/newsselect/news/20121004p2g00m0dm008000c.html

TOKYO (Kyodo) -- The government may not back the restart of nuclear reactors even if they are judged to be safe by the nation's new regulatory body, **depending on the power supply situation**, Chief Cabinet Secretary Osamu Fujimura said Wednesday.

"The problem of power supply and demand will naturally crop up. The government may decide it is unnecessary (to restart reactors)," the top government spokesman said, suggesting the government will exercise its discretion on the reactivation issue that has become highly controversial since the disaster at the Fukushima Daiichi nuclear complex last year.

Uncertainty has arisen over who is the main actor in making judgments on the issue following a recent revamp of the country's nuclear regulatory framework, with Prime Minister Yoshihiko Noda saying the new Nuclear Regulation Authority will play "a leading role" but the regulatory body objecting.

During its regular meeting Wednesday, the NRA took up the issue and reached a consensus that its mission is to assess the safety of reactors from a scientific standpoint and not to make judgments on reactivation.

Noting that electricity supply and demand, and economic aspects should be taken into account when rebooting reactors, commission head Shunichi Tanaka said, "Government offices in charge of energy policy as well as plant operators should make the decision on activating reactors and reach a consensus with local people."

Another member of the NRA said clearing the safety assessments carried out by the authority is a "necessary condition" for reactivation but "not a sufficient condition."

The regulatory commission also unveiled at its meeting a rough draft of new guidelines for nuclear disaster mitigation measures, including expanding areas that should make special preparations from the current radius of 10 kilometers from a plant to 30 km.

Under the draft guidelines, to be compiled later this month, the number of prefectures to be designated as such areas will increase to 21 from 15, officials of the authority's secretariat said.

The draft also notes the need to be fully prepared for accidents that result in the massive release of radioactive substances due to hydrogen explosions that may damage reactor containers and the buildings housing the reactors.
Regarding the distribution of iodine tablets to help prevent thyroid cancer among residents living close to nuclear plants, the draft says, "Organizations closer to the residents should issue instructions."

The recommendation is based on the experience of the Fukushima crisis, in which the distribution of iodine tablets was limited due to delayed action by the central government.

So many contradictions

October 4, 2012

Editorial: Resumption of construction on Oma nuclear plant contradicts zero-nuclear policy

http://mainichi.jp/english/english/perspectives/news/20121004p2a00m0na001000c.html

The resumption of construction work on the Oma Nuclear Power Plant in Aomori Prefecture contradicts with the government's policy of eliminating all nuclear plants by the 2030s.

Economy, Trade and Industry Minister Yukio Edano has given the green light to the resumption of the work, which had been suspended since the outbreak of the crisis at the tsunami-stricken Fukushima No. 1 plant.

In addition to an end to Japan's reliance on atomic power, the government's Innovative Strategy for Energy and the Environment stipulates that nuclear reactors must be decommissioned after 40 years in operation and that no more nuclear plants must be build in principle.

If the Oma plant is put into operation in accordance with these principles, Japan cannot achieve its goal of eliminating nuclear power by the 2030s. The explanation that the construction of the Oma nuclear plant, which had begun before the strategy was worked out, does not constitute new construction under the strategy is purely a fabrication.

Since the owner of the plant J-Power, which is officially called Electric Power Development Co., is a private company, it is difficult for the government to ban the firm from resuming its construction work. However, nuclear power plants in Japan have been built in accordance with national policy. The government should stick to its new nuclear power policy it has worked out in the wake of the Fukushima nuclear accident.

Other questions remain about the Oma plant. Currently, the newly established Nuclear Regulation Authority (NRA) is drafting new safety standards for nuclear power stations. The authority is scheduled to unveil the outline of the standards in spring 2013 and complete the standards in the summer of the same year. Even if the power supplier continues construction of the Oma plant, it cannot be operated if it fails to meet the new standards.

Since the world's first reactor that uses only plutonium-uranium mixed-oxide fuel will be installed at the power station, the NRA needs to conduct a particularly cautious and strict inspection on the facility's safety. As such, one cannot help but wonder why J-Power is making haste in building the plant.

Under the new guidelines for nuclear disasters, priority zones where special nuclear disaster prevention measures must be implemented will soon be expanded to cover areas 30 kilometers from nuclear plants. Therefore, it is only natural that the city of Hakodate in Hokkaido, which falls in such a zone around the Oma plant, has voiced stiff opposition to the construction.

Furthermore, the government's decision to continue the nuclear fuel cycle project, in which plutonium is extracted from spent nuclear fuel and used for fast-breeder reactors, is also currently inconsistent with the zero nuclear power policy. Needless to say, it is necessary for the government to show consideration to the local community that is expected to host a fuel processing plant, but the government has failed to clarify how it intends to keep consistency between the project and the no nuclear power policy.

The government has been confused over how to judge whether idled nuclear reactors can be reactivated. The NRA says it will judge the safety of nuclear reactors but not whether operations at the reactors can be resumed. However, Prime Minister Yoshihiko Noda states that the regulation authority will play a leading role in deciding whether to give the green light to reactivation.

Noda has expressed concern that political intervention could impair the independence of the regulation authority. However, politics must not intervene in the scientific judgment of the safety of nuclear reactors. The government must take responsibility for deciding whether to grant permission for the reactivation of nuclear reactors based on judgment of safety made by the authority and in line with its energy policy.

The government should seriously try to achieve its goal of eliminating nuclear power by the 2030s, instead of taking ad hoc measures to respond to the situation.

Pass the buck?

October 5, 2012

Government tries to duck reactor-restart decisions

Fujimura hints decision rests with new body

http://www.japantimes.co.jp/text/nn20121005a1.html

By MASAMI ITO
Staff writer

Chief Cabinet Secretary Osamu Fujimura suggested Thursday that the central government does not have the ultimate say, or responsibility, in reactivating nuclear reactors, triggering confusion over who is in charge of making the decision.

At a news conference, Fujimura repeatedly stressed that the new Nuclear Regulation Authority is in charge of assessing the safety of reactors and that power companies are only tasked with explaining reactor restarts to host municipalities and seeking their consent.

But Fujimura refused to clarify the government's precise role in the process, saying only that once the safety of a reactor has been confirmed by the NRA, it will be brought back online.

"As I have repeatedly stated, confirming the safety of reactors is the most important thing when considering a reactivation, and the NRA is in charge of making a decision over their safety as an independent entity," Fujimura said. "The government has decided to utilize nuclear reactors that have been confirmed as a safe source of power."

But Fujimura repeatedly refused to give a straight answer when asked whether the government is ultimately responsible for approving reactor restarts, reiterating that units judged to be safe would be "used as a source of energy."

"In terms of giving approval, that duty has shifted from the trade minister and the (now-defunct) Nuclear and Industrial Safety Agency to the regulatory committee that is now in charge of authorizing" reactor restarts, Fujimura said, dumping the responsibility squarely on the NRA.

But this view was flatly contradicted by the NRA just a day before, when its new head, Shunichi Tanaka, stated that its responsibility is to scientifically assess the safety of nuclear reactors and that ultimate responsibility to authorize restarts does not lie with the nuclear watchdog.

Restarting reactors "is a major decision that must be made by somebody, and I believe that our safety assessment plays an important role in making that judgement," Tanaka said. "But to reactivate the reactors, there are various issues to consider, including gaining permission from local residents and municipal officials, and that is beyond the bounds of our authority."

After the Great East Japan Earthquake triggered the Fukushima meltdowns, all of Japan's commercial reactors were gradually brought to a halt by May.

In June, Prime Minister Yoshihiko Noda authorized the restarts of two units at the Oi nuclear plant in Fukui Prefecture amid widespread public outrage. After that chastening experience, it now appears the government is trying to wriggle its way out of approving any more reactivations and to find some other entity to which it can pass the buck.

During a news conference Sept. 21, Noda said the NRA would play a "leading role" in resuming operations at nuclear plants. Trade minister Yukio Edano also said last week that reactors would be restarted once the NRA confirms their safety and host municipalities have given their blessing, suggesting the central government would play no role in the final decision.

Last month, the government adopted a new energy policy that aims to completely abolish nuclear power in the 2030s. But depending on future energy demand, the government may eventually decide that not all idled reactors will need to be brought back online. Fujimura, however, insisted that such a decision will not be made in the short term.
"It might be a few years from now, but naturally there might come a time to review energy demand if other issues surface, including renewable energies," he said.

Nuke safety: so many hurdles ahead

October 13, 2012

Nuke chief hints no restarts this year

By MARI YAMAGUCHI
AP
http://www.japantimes.co.jp/text/nn20121013a4.html

The head of the new nuclear regulatory agency says reactors will not be allowed to restart until they pass seismic inspections and meet safety standards to be instituted next year.

Under the new requirements, emergency procedures for accidents and terrorist attacks will become compulsory for nuclear plant operators, said Shunichi Tanaka, chairman of the Nuclear Regulation Authority.

This follows criticism that collusion between the plant operators and authorities left the Fukushima No. 1 power plant unprepared for last year's crisis. Before the disaster struck, operators were allowed to decide for themselves whether to follow safety guidelines recommended by regulators.

Tanaka has criticized as political the government's decision to restart two reactors in Oi, Fukui Prefecture, in July to avoid a power crunch during the high-demand summer. The reactors are the only ones to resume operations since all reactors were shut down for safety checks and disaster countermeasures in light of the Fukushima disaster.

"Right now we don't have the legal basis to make any judgment over reactors," Tanaka said Thursday in an interview. "We don't have the legal power to stop the Oi reactors."

Tanaka said his agency will draft the new requirements by March and they should become law by July.

Nuclear power provided a third of Japan's electricity before the March 11, 2011, earthquake and tsunami, and the intention was to increase that to 50 percent. But last month, a Cabinet panel called for Japan to phase out nuclear power over the next three decades.

Tanaka said his five-member regulatory commission needs the new rules to make clear what it takes to safely restart a reactor.

The agency will also raise safety hurdles, ordering reactors shut down if ongoing seismic inspections find active faults in their vicinity. Tanaka said towns around the plants must come up with expanded emergency procedures by March before any reactor is considered for a restart.

Under a guideline issued by the agency last week, communities around the plants must compile emergency measures as far as 30 km from the plant, tripling the current requirement and affecting more than 130 municipalities and nearly 5 million people across the country.

Tanaka acknowledged that some of the densely populated areas will face difficulties compiling feasible emergency plans.

Reactors 3 and 4 at the Oi power plant are also under scrutiny for suspected active fault lines, and the regulatory commission and independent seismologists are to inspect the ground structure underneath the reactors.

The plant's operator, Kansai Electric Power Co., had failed to submit key data about possible faults, but the then-regulator, the Nuclear and Industrial Safety Agency, allowed the reactors to operate without further checks.
Tanaka said the two reactors will have to be halted if the faults are confirmed.

He said Japan has faced increased seismic activity in recent years, causing temblors exceeding designed quake resistance at some plants, including Kashiwazaki-Kariwa, which is run by Tokyo Electric Power Co.

The regulatory agency was inaugurated in September after a delay due to demands from opposition lawmakers for more independence and criticism from some pronuclear agency members.

A nuclear physicist and Fukushima native, Tanaka is a former executive of the Japan Atomic Energy Agency, which promotes nuclear energy. Tanaka, 67, has helped decontaminate areas around Fukushima No. 1.

"We must clear questions and concerns one by one, otherwise we will never regain the public trust," Tanaka said. "No reactor should operate unless the community has emergency plans that residents can accept."

Reform panel hit
Kyodo

A panel of experts monitoring Tepco's efforts to reform its under-fire nuclear division held its first meeting Friday, with its leader calling for the utility to be thoroughly revamped.

The Nuclear Reform Monitoring Committee, which is headed by Dale Klein, a former chairman of the U.S. Nuclear Regulatory Commission, serves as an advisory body to Tokyo Electric Power Co.'s board of directors
Tepco set up the committee as part of its drive to improve safety measures and technical capabilities, whose shortcomings were glaring when the Fukushima nuclear disaster hit. But some are continuing to

speculate that the utility is simply laying the groundwork to restart its idled reactors by restoring public confidence in nuclear power.

The need to bring its reactors back online is stipulated in a 10-year comprehensive special business plan.

Hakodate Mayor against resumption of work at Oma plant

October 16, 2012

Hakodate mayor urges gov't to freeze construction of Oma Nuclear Power Plant

http://mainichi.jp/english/english/newsselect/news/20121016p2a00m0na008000c.html

Hakodate Mayor Toshiki Kudo and other local government officials filed a petition with the central government on Oct. 15, urging Prime Minister Yoshihiko Noda and Chief Cabinet Secretary Osamu Fujimura to freeze the work recently resumed to construct the Oma Nuclear Power Plant in Aomori Prefecture.

Kudo and other officials submitted the petition addressed to Noda and Fujimura when they met Deputy Chief Cabinet Secretary Tsuyoshi Saito at the Prime Minister's Office on Oct. 15. In his reply to their calls, Saito stopped short of making any firm commitment, saying only, "We will discuss it among ourselves including with the Nuclear Regulation Authority (NRA)."

The construction of the Oma Nuclear Power Plant was resumed this month by Electric Power Development Co. (J-Power) for the first time in one year and seven months since the outbreak of the crisis at the Fukushima No. 1 Nuclear Power Plant.

After holding talks with Saito, Hakodate Mayor Kudo told reporters that of the total population within a radius of 50 kilometers from the Oma nuclear power station, about 90,000 people live on the Aomori side while as many as about 370,000 people live on the Hokkaido side.

"I think the resumption of the construction should be endorsed by all municipalities within a radius of 30 kilometers or 50 kilometers (from the nuclear plant)," Kudo said.

"Impossible for utilities to survive"

November 10, 2012

Senior industry ministry official 'begs' for reactor restarts

http://www.japantimes.co.jp/text/nn20121110a4.html

KYODO

Sapporo — Senior vice industry minister Isao Matsumiya said he is "begging" the Nuclear Regulation Authority to allow the restart of the country's idled nuclear reactors, a statement that could be seen as pressuring the independent body.

His remarks Thursday during a meeting with officials of the Hokkaido Prefectural Government and the ministry's local bureau on winter power-saving measures, contrasts with those of industry minister Yukio Edano, Matsumiya's boss, who has placed importance on the NRA's independence in making key decisions.

"I am begging the NRA to enable the restart of suspended reactors nationwide as soon as possible," Matsumiya said. "It is impossible for utilities to survive if a situation like this continues next year and the year after next. I hope this kind of problem will not emerge again next year."

Of the 50 operational reactors nationwide, only two — at Oi in Fukui Prefecture — have been allowed to restart since the Fukushima meltdowns the March 2011. Since the crisis started, the public has turned against atomic power and all reactors are required to undergo stress tests to ascertain their survivability.

Matsumiya, a Lower House member from Fukui Prefecture, site of many reactors, is also an ex-industry ministry bureaucrat.

Impact of inspection delay at Hamaoka plant

November 20, 2012

Hamaoka reactor inspection delay may push back planned restart

http://mainichi.jp/english/english/newsselect/news/20121120p2a00m0na004000c.html

The planned restart of a reactor at the Hamaoka Nuclear Power Plant may be pushed back due to an inspection delay, plant operator Chubu Electric Power Co. announced on Nov. 19.

Chubu Electric was set to complete its inspection on the Hamaoka plant's No. 5 reactor, which was flooded with seawater in May 2011, in preparation for its planned restart of the unit in September 2014.

According to the utility, however, the completion of the inspection must be delayed all the way to September 2014 while spent fuel rods from the plant's No. 1 and 2 reactors -- now being dismantled -- are transferred to the No. 5 unit's quake-resistant fuel pool from January 2013.

The transfer of the 1,099 used fuel rods is expected to continue until March 2014, forcing Chubu Electric to delay the completion of its inspection of the No. 5 reactor until September 2014 to secure enough space to store the spent fuel rods.
If, however, inspectors detect any damage in the No. 5 reactor, restart could be further pushed back for repairs.

"In order to reassure local residents, we decided it was necessary to proceed with the plans (to disassemble the No. 1 and 2 reactors," Hiromu Masuda, head of the utility's nuclear power division, told reporters at a Nov. 19 news conference.
The No. 3 and 4 reactors at the plant in Omaezaki, Shizuoka Prefecture, are also idle.

The utility is seeking a quick restart to the nuclear plant, but in addition to the delay in the reactor check, completion of tsunami-resistance improvements have also been pushed back by a year, to December 2013.

Rates hike or restart?

November 22, 2012

Utility may up rates beyond hike eyed for April

Kepco plans two reactor restarts

http://www.japantimes.co.jp/text/nn20121122x1.html

Kyodo

OSAKA — Kansai Electric Power Co. has presented to potential lenders a business plan that includes reactivating two reactors, in addition to the pair that were brought back online this summer, according to sources.

Kepco, one of the most nuclear-dependent of the nation's 10 utilities, aims to return to profitability in fiscal 2013 if it wins government approval to raise electricity rates in April and gets two more reactors fired up, the sources said Wednesday.

It wants to hike rates by an average of 10 to 15 percent for homes and 15 to 25 percent for businesses. Kepco says it also plans to streamline operations.

However, it remains to be seen if the utility can pull off the reactor plan because the government and the Nuclear Regulation Authority have not yet outlined a road map for bringing reactors back online after they were sidelined by the Fukushima crisis.

It did manage to get two of the reactors at its Oi power plant in Fukui Prefecture online in July following government-mandated "stress tests" quickly put in place after Fukushima.

If Kepco can't restart the reactors it's counting on, it could be forced to seek higher rate hikes.

Targeted for reactivation are units 3 and 4 at the Takahama power plant in Fukui Prefecture. In July, immediately after Kepco rebooted the two Oi reactors, President Makoto Yagi said, "we are thinking Takahama reactors 3 and 4 are most promising" for a next round of reactivation.

"We would like to hold discussions with the government with the view to giving top priority to reactivating them," he added.

The remark drew anger from Yukio Edano, head of the Ministry of Economy, Trade and Industry, and others in the government because it was made before the September inauguration of the NRA, which is aiming to draw up a new set of safety criteria by next July.

METI's Nuclear and Industrial Safety Agency, before it was disbanded, released the results of preliminary stress tests for the Takahama reactors. But an NRA official said, "safety will be judged under the new set of guidelines."

Kepco has 11 reactors, all in Fukui Prefecture, and derived 51 percent of its power supply from nuclear sources in fiscal 2010, before the Fukushima crisis.

Tokyo Electric Power Co. raised electricity rates for households by an average of 8.46 percent in September and is counting on further easing the pressure of fossil fuel costs on its bottom line by restarting reactors at its massive Kashiwazaki-Kariwa nuclear plant in Niigata in April.

But with no prospects for reactivation in sight, industry watchers are speculating another Tepco rate hike may loom.
Kepco posted a heavy ¥116.7 billion in consolidated net loss for the first half of this business year through Sept. 30 because of increased fuel costs for its nonnuclear power plants.

A Kepco official said that if the two Takahama reactors are rebooted, "fuel costs would be cut by around ¥160 billion per year."

Sharp Corp. said later Wednesday that its costs could grow by ¥1 billion to ¥2 billion annually if electricity rates are increased by 10 to 20 percent.

A senior Sharp official told reporters the company would be dealt a blow if Japan's second-largest power utility raises its rates, as Sharp's major production bases are located in and around Osaka.

The official said it is "difficult to transfer such large facilities," indicating the company would not move its plants outside the Kansai region to avoid rising costs.

The planned power rate hike has not been factored into Sharp's projected largest-ever group net loss of ¥450 billion for fiscal 2012, which ends next March 31, it said.

Japan Future Party OK with restarting reactors?

December 1, 2012

Nuke power foe Kada open to reactor restarts

Jiji
http://www.japantimes.co.jp/text/nn20121201x3.html

Shiga Gov. Yukiko Kada, who founded the antinuclear Nippon Mirai no To (Japan Future Party) last week, on Saturday signaled the possibility of supporting the restart of atomic reactors if their safety is verified.

"If the Nuclear Regulation Authority guarantees their safety and the government concludes there is a need, (reactors) would resume operations," Kada said on a TV program.

"It may sound correct in theory to say that we can approve (reactor) operations if there are safety standards. But, first of all, we will not allow any further increase in (nuclear) waste," she said.

Kada has previously insisted that none of Japan's 48 idled reactors should be restarted because the NRA has yet to lay down new safety rules.

Her remarks could cause controversy at a time when Nippon Mirai no To is gearing up for the Dec. 16 election on a platform backing the complete elimination of atomic energy, and given the strong opposition to firing up reactors within her party.

Kada said she will make her first poll speech Tuesday in Fukushima Prefecture, home to the crippled Fukushima No. 1 plant

Another lawsuit against Kepco

November 30, 2012

Another suit filed against Kansai Electric over Oi nuclear plant

http://mainichi.jp/english/english/newsselect/news/20121201p2g00m0dm006000c.html

FUKUI, Japan (Kyodo) -- A group of 154 people in Fukui and other prefectures filed on Friday a lawsuit seeking suspension of the Oi nuclear power plant, contending Kansai Electric Power Co. resumed the operation of two reactors there while their safety has yet to be guaranteed.

The complaint filed with the Fukui District Court said the Fukushima Daiichi disaster last year had demonstrated the "totally unacceptable risks of nuclear power plants."

The move came a day after a group of around 1,100 people in 17 prefectures filed a similar complaint seeking stoppage of the Oi plant against the power company and the central government.

The 154 plaintiffs from 19 prefectures argued that the nuclear plant should be halted immediately instead of continuing fault surveys while keeping it in operation.

They pointed out that experts are still divided on whether faults believed to be running underneath the Oi plant are active or not.

The plaintiffs claimed there is a strong possibility of the fault being an active one, making the plant prone to a serious accident in case of a major earthquake.

They also said the Fukushima disaster triggered by last year's devastating earthquake and tsunami had shown the inadequateness of the conventional safety standards and that any approval of nuclear plant operation based on those standards is now invalid.

The Oi plant located in Fukui Prefecture, western Japan, resumed operation of two of its four reactors in July after all of the country's reactors went offline amid strong public concern over the nuclear safety in the wake of the Fukushima disaster.
The complaint said the prospect of power shortage, a reason cited in the resumption of the two reactors at the Oi plant, had proved wrong as power supply would have been sufficient in July and August without the resumption.
Fukui Prefecture hosts 14 nuclear reactors, the largest number in Japan.

Situation at Tsuruga not so obvious

December 6, 2012

Tsuruga nuke plant's reactivation faces further obstacles

http://mainichi.jp/english/english/newsselect/news/20121206p2a00m0na011000c.html

The Nuclear Regulation Authority (NRA) chief has suggested the possibility that the reactivation of the No. 1 and No. 2 reactors at the Tsuruga nuclear power plant could be disapproved even though the reactors do not sit directly above an active fault.

"It's not that nuclear reactors can be reactivated because an active fault is not running directly beneath reactor buildings. Under special circumstances, the way such faults should be assessed needs to be reviewed," NRA Chairman Shunichi Tanaka said during a press conference on Dec. 5.

Tanaka apparently put weight on the fact that an active fault line called the "Urazoko fault" runs underneath the premises of the Tsuruga plant in Fukui Prefecture, which is operated by the Japan Atomic Power Co., when he suggested that a decision over whether to reactivate the reactors could be made regardless of conventional standards.

The central government has heretofore not approved construction of such key facilities as reactor buildings right above active faults. However, the government has approved the operation of reactors situated away from active faults after assessing their seismic resistance and determining their safety.

The NRA dispatched a team of experts to the Tsuruga plant on Dec. 1 and 2 to conduct field surveys. The authority is now looking into the possibility of whether the crush zone running right underneath the building housing the No. 2 reactor could move in conjunction with the Urazoko fault, which lies some 200 meters away from the reactor. The NRA will decide whether to allow the plant's reactivation following a meeting scheduled for Dec. 11.

The Tsuruga 'series' continues

December 10, 2012
Tsuruga nuclear power plant may be on active fault
http://www3.nhk.or.jp/daily/english/20121210_27.html

Japan's Nuclear Regulation Authority has determined that faults running underneath the Tsuruga nuclear power plant in Fukui Prefecture are active.

The NRA Chairman Shunichi Tanaka said the body cannot give a permit to restart the plant's reactors, which have been off-line since last year's nuclear accident at the Fukushima Daiichi power plant.

This comes after NRA official Kunihiko Shimazaki and 4 other experts carried out an on-site inspection earlier this month to see whether crush zones under the Tsuruga plant are actually active faults.

The Tsuruga plant sits near the major Urasoko Fault. The team conducted a boring survey on Urasoko Fault and a fault called the D-1. The D-1 Fault branches out from Urasoko and runs directly beneath the Number 2 reactor.

The experts said the Urasoko Fault is active and its possible impact on the fault under the plant in the

event of an earthquake cannot be overestimated.

They said that the stratum deformation found near the D-1 Fault was caused by forces similar to those that cause the Urasoko Fault to move.

State regulations prohibit building nuclear reactors above active faults. Tanaka expressed readiness to convene a NSA meeting to hear opinions of members on what to do.

Tsuruga nuclear plant may have to be decommissioned as active fault found

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201212100096

REUTERS

Japan Atomic Power Co. may have to decommission one of its reactors after seismologists concluded the plant is sitting over an active faultline, potentially the first permanent shutdown of a nuclear unit in Japan since the Fukushima disaster last year.

"There is no way we can carry out safety assessments for a restart," the chairman of Japan's Nuclear Regulation Authority (NRA), Shunichi Tanaka, said on Dec. 10 at an open meeting after being presented with an assessment there is an active fault under the No. 2 reactor at the Tsuruga nuclear plant.

The government in Japan, one of the world's most seismically active countries, does not allow nuclear plants to be situated over active faultlines. An NRA panel of seismologists has been reviewing geological records and this month visited Tsuruga to watch the results of boring and other tests.

A fault line extending from below the reactor was assessed to have moved in the past in tandem with another nearby fault, Kunihiko Shimazaki, an NRA commissioner who led the seismic panel, told the meeting.

While Tanaka has no authority to order a permanent shutdown, his comment implies he will not allow the reactor to be restarted, forcing a decision on Japan Atomic over whether to mothball the unit.

A Japan Atomic official who attended the meeting said the company would carry out further seismic studies.

The agency will meet at a later date to make an official announcement on the 1,160 megawatt reactor, the larger of two at the plant in western Japan. The No. 2 unit started operating in 1987, while the 357-megawatt No. 1 reactor started in 1970.

The NRA is reviewing possible faultlines under or near Tsuruga and five other nuclear stations as part of moves to beef up safety and Tanaka has said any reactors sitting above won't be allowed to restart.

All but two of Japan's nuclear reactors are idled for safety checks after the Fukushima disaster, forcing the country to spend billions of dollars extra on fossil fuels to run power stations.

An earthquake and tsunami in March last year knocked out cooling and power at Tokyo Electric Power Co.'s Fukushima No. 1 plant north of the Japanese capital, causing the biggest release of radiation since Chernobyl in 1986.

See also : in the Japan Times

Monday, Dec. 10, 2012

Fault under reactor at Tsuruga likely active

Kyodo
http://www.japantimes.co.jp/text/nn20121210x3.html

in the Yomiuri

Fault running under Tsuruga plant reactor likely to be active: panel

http://mainichi.jp/english/english/newsselect/news/20121210p2g00m0dm078000c.html

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December 9, 2012

Active fault under Tsuruga nuclear power plant
http://www3.nhk.or.jp/daily/english/20121210_03.html

Japan's Nuclear Regulation Authority and other experts will hold discussions Monday on whether another active fault exists beneath the Tsuruga nuclear power plant in Fukui Prefecture.

The Tsuruga nuclear plant is the only one in Japan that has an active fault running beneath it.

If another fault underneath the plant's reactors is determined to be active the plant will be barred from restarting.

Regulation Authority official Kunihiko Shimazaki and 4 scientists examined the plant on the Japan Sea coast on December 1st and 2nd.

They conducted a so-called trench survey by digging into the ground beneath the compounds to examine the active Urasoko Fault and those branching out from it.

They confirmed that the Urasoko Fault is active. They also found stratum deformation near another fault, called D-1, which runs directly beneath the Number 2 reactor.

Shimazaki said his team shared the view that the deformation was caused by a force similar to the one that caused the Urasoko Fault to move.

Government's guidelines prohibit building a key nuclear power facility on an active fault.

Monday's meeting is drawing attention as the Number 2 reactor may have to be scrapped. That will depend on the assessment reached by the Nuclear Regulation Authority and the experts.

Tsuruga update - Dec.11

December 11, 2012
UPDATE: Tsuruga nuclear plant may have to be decommissioned as active fault found

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201212110030

THE ASAHI SHIMBUN AND WIRE REPORTS

Japan Atomic Power Co. may have to decommission one of its reactors after seismologists concluded the plant is sitting over an active fault line, potentially the first permanent shutdown of a nuclear unit in Japan since the Fukushima disaster last year.

A panel of seismologists and geologists with Japan's Nuclear Regulation Authority (NRA) has been reviewing geological records and this month visited the Tsuruga nuclear power plant to watch the results of drilling and other tests.

"There is no way we can carry out the safety assessments (that are required) for a restart," the chairman of the NRA, Shunichi Tanaka, said on Dec. 10 at an open meeting after being presented with the panel's assessment that there is an active fault under the plant's No. 2 reactor.

The government in Japan, one of the world's most seismically active countries, does not allow nuclear plants to be situated over active fault lines.

But about 160 geological fault lines cut across the premises of the Tsuruga nuclear power plant, including some that lie directly beneath its two reactor buildings. In addition, the Urasoko fault, which is active, runs about 200 meters east of the reactor buildings.

Much attention has been given to whether the fault lines situated directly beneath the reactor buildings could slide in tandem with the Urasoko fault when the latter shifts.

A fault line called D-1, situated directly beneath the No. 2 reactor building, was assessed to have moved in the past in tandem with the Urasoko fault and thus likely active, according to Kunihiko Shimazaki, deputy chairman of the NRA and head of the seismic panel.

"You could call it an active fault," Shimazaki told reporters after the Dec. 10 meeting. "It likely represents simultaneous movement induced by the motion of the Urasoko fault."

The experts intensively studied the vicinity of the point where the D-1 fault branches out from the Urasoko fault during an on-site survey on Dec. 1-2. The survey revealed a new fault line near D-1, and the experts agreed that the fault line was formed under approximately the same stress that drives the activity of the Urasoko fault. The panel concluded that future slippage along that fault line could not be ruled out.

Though Tanaka has no authority to order a permanent shutdown, his comment implies he will not allow the reactor to be restarted, forcing a decision on Japan Atomic over whether to mothball the unit.

A Japan Atomic official who attended the meeting said the company would carry out further seismic studies.

The results of the Dec. 10 expert panel meeting will be presented to a regular meeting of the NRA on Dec. 12, when the agency may make an official announcement on the 1,160-megawatt reactor, the larger of two at the plant in western Japan. The No. 2 unit started operating in 1987, while the 357-megawatt No. 1 reactor started in 1970.

The NRA is reviewing possible fault lines under or near Tsuruga and five other nuclear plants as part of moves to beef up safety, and Tanaka has said any reactors sitting above won't be allowed to restart.

All but two of Japan's nuclear reactors are idled for safety checks after the Fukushima disaster, forcing the country to spend tens of billions of yen extra on fossil fuels to run power stations.

An earthquake and tsunami in March last year knocked out cooling and power at Tokyo Electric Power Co.'s Fukushima No. 1 plant north of the Japanese capital, causing the biggest release of radiation since Chernobyl in 1986.
THE ASAHI SHIMBUN AND WIRE REPORTS

Utility yet to decide on scrapping Tsuruga reactor

http://www3.nhk.or.jp/daily/english/20121211_35.html

The operator of the Tsuruga nuclear power plant on the Sea of Japan coast says it has not decided whether to decommission one of the facility's reactors.

The Nuclear Regulation Authority said in an assessment meeting with experts on Monday that a fault directly under the Number 2 reactor is likely active. The assessment could lead to decommissioning of the reactor. Government guidelines prohibit building key nuclear power facilities above active faults.

Speaking to reporters on Tuesday, officials of Japan Atomic Power Company said it is studying what would make decommissioning unavoidable. They said the utility will consult other energy firms that buy power from it, as the matter could affect plans to raise electricity rates.

The utility's Vice President Hiroshi Masuda said it will provide a scientific explanation to the authority to win its approval for restarting the reactor.
Dec. 11, 2012 - Updated 11:58 UTC (20:58 JST)

N-plant operator questions regulator's assessment

http://www3.nhk.or.jp/daily/english/20121211_31.html

The operator of the Tsuruga nuclear power plant on the Sea of Japan coast has asked a nuclear regulator to explain its assessment that faults running under one of the facility's reactors may be active.

Japan Atomic Power Company on Tuesday sent an open letter to the Nuclear Regulation Authority, saying its assessment is beyond comprehension.

On Monday, an NRA expert panel concluded that so-called crush zones under the Number 2 reactor of the plant in Fukui Prefecture may be active faults.

The firm asked the authority why it concluded that the nearby active Urasoko fault and a fault called D-1 that runs beneath the reactor could move together.

The company's Vice President Hiroshi Masuda said he understands that the authority makes judgments based on science, and that he hopes it will provide scientific responses.

A senior official of the NRA secretariat says the authority will examine the letter and respond.

Government guidelines prohibit building key nuclear power facilities over active faults. If fissures lying beneath the Tsuruga plant's reactor are officially determined to be active, the plant may have to be scrapped.

Tsuruga - Legal obstacles

Scrapping Tsuruga nuclear plant faces legal hurdles

http://mainichi.jp/english/english/newsselect/news/20121211p2a00m0na019000c.html

While the Nuclear Regulation Authority (NRA) suggested on Dec. 10 that it would not allow reactivation of a reactor at the Tsuruga Nuclear Power Station in Fukui Prefecture due to an active fault line running beneath the building, actually scrapping the reactor faces serious legal obstacles.

NRA Chairman Shunichi Tanaka said at a meeting of experts, "My impression is that if it were to remain the way it is now, we would not be able to carry out safety assessments for the resumption (of reactor operations)." His remark serves to back up NRA's determination to adopt "the world's best safety regulations," but under the current law, it does not have legal authority to order the suspension or decommissioning of nuclear power plants.

A senior official of the NRA secretariat, meanwhile, said, "That was Mr. Tanaka's personal view." Therefore, a decision on decommissioning the No. 2 reactor at the Tsuruga plant is up to Japan Atomic Power Co., the owner and operator of the facility.

The Nuclear Reactor Regulation Law stipulates that measures necessary to prevent nuclear disasters can be taken when there is "imminent danger." Furthermore, government safety inspection guidelines for earthquake-resistant designs forbid construction of important facilities such as reactor buildings above active faults.

Nevertheless, with respect to the legal interpretation of "imminent danger," the NRA secretariat says, "It points to cases in which danger cannot be clearly predicted such as missile attacks, satellites falling to earth and volcanic eruptions."

Active faults are said to move about every 1,000 years, and therefore it is deemed difficult to recognize active faults as "imminent" dangers. Moreover, the guidelines are designed to be used when the government decides on whether to give authorization to build new nuclear plants. Thus, the guidelines have no teeth when it comes to nuclear facilities already built.

And yet **a so-called "back-fit system" to judge whether even pre-existing reactors meet the new regulatory standards will take effect in July 2013 under the law authorizing the establishment of NRA, paving the way for the NRA to order the suspension of operations at nuclear reactors affected by active faults**. The Tsuruga nuclear plant is currently offline for regular inspections.

A senior official with the NRA secretariat told the Mainichi that "it's difficult to order the decommissioning of the Tsuruga plant." But NRA Chairman Tanaka has suggested that decommissioning orders would be inevitable if reactors are judged to be -- or highly likely to be -- sitting above active faults.

Scrapping Tsuruga No.2 won't help Japan Atomic's financial crisis

Japan Atomic financial fears deepen

By KAZUAKI NAGATA
Staff writer
http://www.japantimes.co.jp/text/nn20121211x2.html

Concern over Japan Atomic Power Co. suffering a major financial crisis is spreading after the nuclear industry watchdog determined this week that a fault running directly beneath reactor 2 at the firm's Tsuruga nuclear plant is active and poses a serious danger.

The announcement by a Nuclear Regulation Authority panel Monday could force Japan Atomic Power to decommission the unit, and also makes it highly unlikely that it can proceed with the planned construction of two more reactors at the facility in Fukui Prefecture.

Nuclear safety guidelines ban power companies from building reactors and other critical safety equipment on top of active faults, meaning Japan Atomic Power will likely be left with no alternative other than to scrap the No. 2 reactor.

To make matters worse, the only other unit at the complex is 42 years old and, according to revised legislation enacted this year to regulate nuclear plant operators, reactors in operation for more than 40 years should in principle be decommissioned.

The company's only other commercial nuclear reactor, at the Tokai No. 2 power station in Ibaraki Prefecture, has meanwhile been suspended in the wake of the Fukushima meltdowns and there appears little prospect of it resuming operations anytime soon.

If Japan Atomic Power were forced to scrap both reactors at the Tsuruga facility as well as the Tokai No. 2 plant's sole unit in the current fiscal year, the loss it would incur from writing off equipment and t**he company's shortage of reserves for the decommissioning work w**ould total some ¥256 billion, according to estimates released by the industry ministry in May.

This figure greatly exceeds the firm's total net assets of around ¥162.6 billion. Japan Atomic Power posted a ¥12.8 billion net loss for the business year through last March, its first net loss in 12 years.

Tsuruga - New episode in the 'series'

NRA queried over active fault beneath Tsuruga nuclear plant

http://mainichi.jp/english/english/newsselect/news/20121212p2a00m0na005000c.html

Japan Atomic Power Co. sent an open letter of inquiry to the Nuclear Regulation Authority (NRA) on Dec. 11, asking it to clarify the scientific basis for its conclusion that it is highly possible that a fault running underneath a reactor at JAPC's Tsuruga nuclear plant in Fukui Prefecture is in fact active.

Arguing that NRA did not provide sufficient scientific explanations about its assessment of a fault running right beneath the No. 2 reactor at the Tsuruga nuclear power station, JAPC submitted the open letter to NRA in which the power company asked the nuclear regulator to answer its questions in writing.

JAPC Vice President Hiroshi Masuda visited the nuclear regulatory agency, which serves as NRA's secretariat, and handed the open letter to Deputy Director-General Tetsuo Nayuki.

The open letter contained 10 questions, including those about the basis for which NRA judged that the "Urasoko" fault, which runs on the plant's premises, had moved simultaneously with a fault zone of crushed rock called D-1, which runs right underneath the plant's No. 2 reactor, and about how the regulatory authority simulated that the Urasoko fault had moved in tandem with D-1.

The power company also asked why NRA had drawn the conclusion before JAPC conducts an additional survey. In the open letter, JAPC called on NRA to make a fresh judgment after examining overall assessments of the results of the additional survey to be conducted later by the power firm.

After submitting the open letter, JAPC Vice President Masuda said at a news conference in Tokyo, "I think they will sincerely answer our questions." Asked about the envisaged impact on corporate management of the possibility of the company being forced to decommission the nuclear facility for safety reasons, he only said, "That's hypothetical. I decline to comment."

The reason why JAPC adopted a rather confrontational approach to NRA is that if it is forced to decommission the Tsuruga plant's No. 2 reactor, which has been running for less than 30 years since it was first put into operation, it could be crushed by huge debt stemming from disposition of losses and lose the foundation of its very survival.

There is no provision in the current Nuclear Reactor Regulation Law for procedures for decommissioning nuclear power plants. Therefore, not only the power industry but also the Ministry of Economy, Trade and Industry were taken by surprise [????]by NRA's decision on the Tsuruga plant. Complaining about NRA's decision, people concerned said that at the very least they would need to put off the inevitable.

Tsuruga nuke plant operator disputes NRA verdict on fault

http://www.japantimes.co.jp/text/nn20121212a4.html

Kyodo

The operator of the Tsuruga nuclear plant in Fukui Prefecture is rejecting the finding of a team of experts Monday that an earthquake fault under the plant precludes the restart of one of its reactors.

Japan Atomic Power Co. said the conclusion is "totally unacceptable," noting the experts focused largely on geological formation data and not other aspects, and vowed to continue an additional probe on the plant's premises to counter the assessment.

But Kunihiko Shimazaki, the Nuclear Regulation Authority commissioner who led the team, said at a news conference they had "reached a decision based on the data we have now" and there is no need for the company to carry out further studies.

It is the first time that a panel under the newly launched NRA has concluded that an existing reactor may be sitting directly above an active fault, a situation banned by safety screening guidance for nuclear power stations.

The NRA will release its own judgment based on the outcome of the experts' discussions Monday, but NRA Chairman Shunichi Tanaka, who attended the meeting, said he feels the authority "cannot implement safety assessments for the resumption (of the plant) in the current situation."

Some local residents were stunned by the NRA-led team's conclusion. Tsuruga Mayor Kazuharu Kawase said the outcome was "very tough," but added it is possible safety could be confirmed through additional studies.

It has been known for years that a major active fault, called Urazoko, lies about 250 meters from the reactor buildings. But the focus of the latest discussions has been on whether another fault called D-1, with a zone of crushed rock, located beneath the No. 2 reactor could move in conjunction with the Urazoko fault.

The experts agreed that what appears to be an extended section of D-1 had moved as an active fault in the past, together with the movement of the Urazoko fault, Shimazaki said in wrapping up the meeting.

The extended section of D-1 falls within the definition of an active fault Shimazaki thinks appropriate, which is a fault that has moved in the last 400,000 years.

He also said the experts took into consideration the fact that a large fault like Urazoko exists on the premises of the plant.

"If plant operators know there is an active fault at the site in the first place, they will usually not build (a nuclear complex) there," Shimazaki added.

The Tsuruga plant has two units, with reactor 1 starting commercial operation in 1970 and reactor 2 in 1987. But it was not until 2008 that the Urazoko fault was confirmed to be active by Japan Atomic Power.

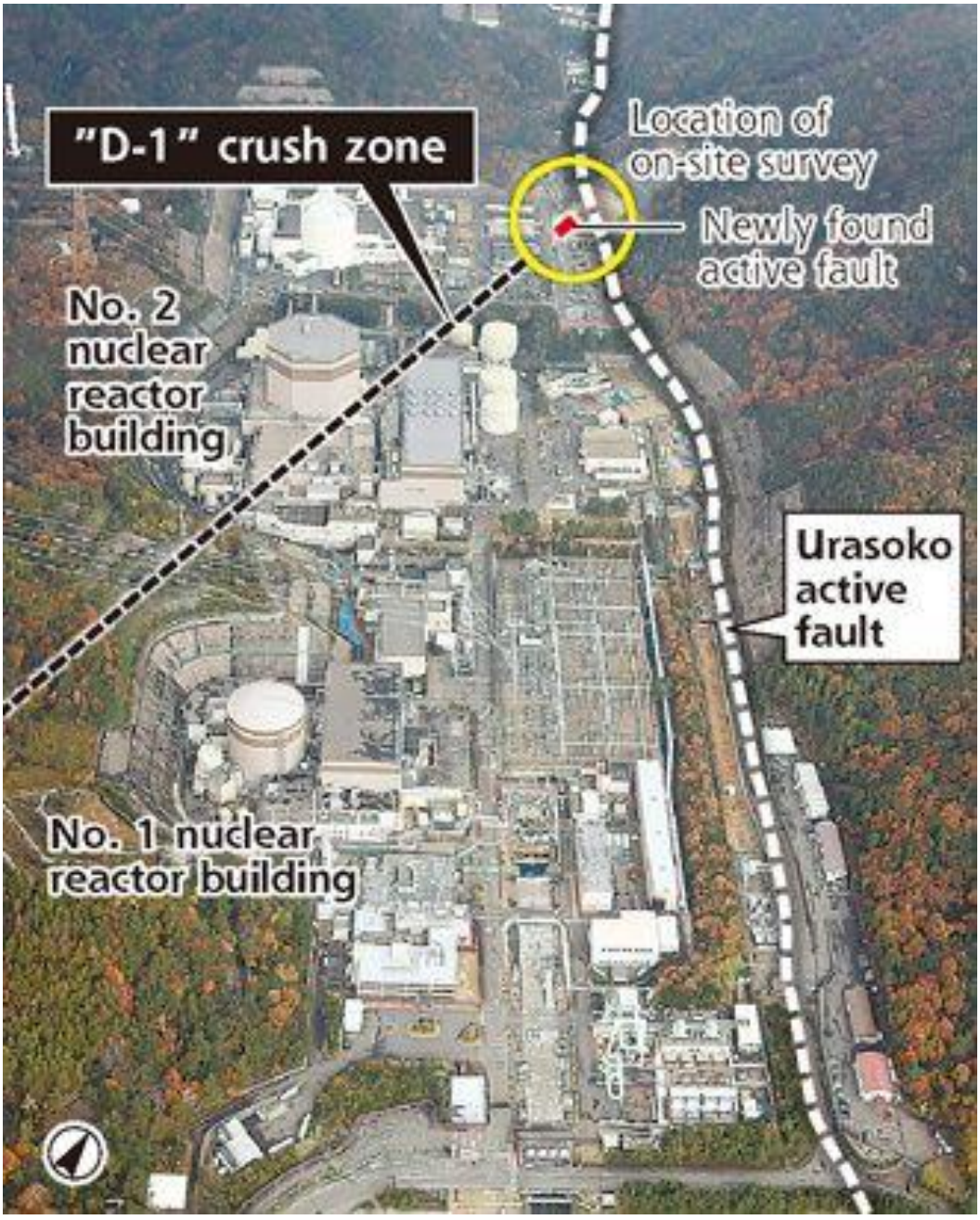
Another NRA-appointed team has already visited the Oi plant to check for faults, but it has not yet reached a conclusion. The NRA plans to send similar teams of experts to at least four other facilities around the country.

The Yomiuri on the Tsuruga conclusions

December 12, 2012

OK unlikely for restart of N-plant / Authority cites possible fault at Fukui site

The Yomiuri Shimbun
http://www.yomiuri.co.jp/dy/national/T121211004106.htm



A Nuclear Regulation Authority expert panel has concluded a crush zone underneath the No. 2 reactor building of the Tsuruga nuclear power plant in Fukui Prefecture is highly likely to be an active fault, leading the NRA chairman to indicate the authority will not approve restarting the idle reactor.

"As things stand now, we cannot conduct a safety evaluation of the [No. 2] reactor to resume operation," NRA Chairman Shunichi Tanaka said Monday.

The crush zone--called D-1--was found through surveys and discussions by the experts to be at risk of moving in tandem with the Urasoko active fault, which runs under the plant.

This fails to meet the criteria under the guidelines for the quake-resistance of nuclear power plants.
Even if additional quake-resistant reinforcements are made, it is difficult to ensure the safety of the reactor if restarted, experts said.

Since the nation's first commercial nuclear power plant began operations in 1966, this would be the first time for a national nuclear regulatory authority to disapprove the operation of a nuclear reactor because of an active fault under it.
The authority is expected to formally adopt the chairman's policy as its own shortly.

There was no reference made Monday by the panel or Tanaka to the No. 1 reactor building, which also sits atop the D-1 crush zone. In addition to the fault zone, the No. 1 reactor began operations more than 40 years ago, making it highly unlikely the authority will approve its restart, either.

Meanwhile, a spokesperson of Japan Atomic Power Co. (JAPC), the plant's operator, said: "We can hardly accept it [the conclusion]. We'll continue our surveys and prove our assertions with evidence," indicating JAPC's stance of refuting the authority's findings.

Yet it is deemed quite difficult to gather data that would overturn the authority's decision, making it likely the operator will have to scrap the reactor.

JAPC was established in 1957 as a power company solely engaged in nuclear power generation. It currently has three nuclear reactors--two at the Tsuruga plant and the Tokai No. 2 power station in Ibaraki Prefecture.

During the meeting, the panel led by NRA Acting Chairman Kunihiko Shimazaki and experts on earthquakes and active faults, discussed the topographic features and geological data, obtained at survey points on the premises, to judge whether the crush zone may move in the future.

As the person in charge of judging the safety of the nuclear power plant, Tanaka also attended the meeting.
Through their discussions, the experts agreed that:

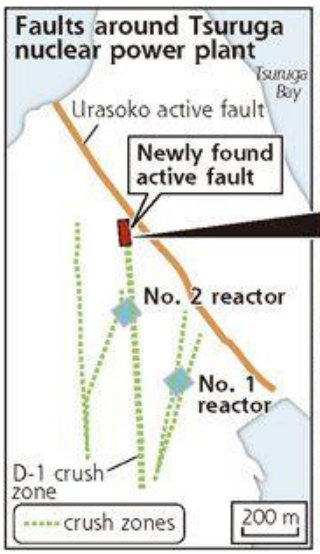
-- As surface material was excavated at the survey point, a new active fault was found, which is believed to have sometime within the past 120,000 to 130,000 years.

-- The crush zone directly beneath the No. 2 reactor building is highly likely to be linked with the newly found active fault.
-- If the nearby Urasoko active fault moves again, the crush zone is at risk of moving in tan

December 12, 2012

NRA's strict assessment errs on side of safety / Based on circumstantial evidence, experts agree fault under Tsuruga nuclear plant is likely active

Sho Funakoshi and Yusuke Tomiyama / Yomiuri Shimbun Staff Writers
http://www.yomiuri.co.jp/dy/national/T121211003624.htm



The fault believed by Nuclear Regulation Authority expert panel to be active

(Chart was created by adding explanations to NRA-provided material)

Events involving Tsuruga nuclear power plant

1970	Mar.	No. 1 reactor begins operating
1987	Feb.	No. 2 reactor begins operating
2008	Mar.	Japan Atomic Power Co. acknowledges Urasoko fault is an active fault
2011	Mar.	Crisis begins at Fukushima No. 1 nuclear power plant
	Apr.	Now-defunct Nuclear and Industrial Safety Agency orders reassessment of active faults at all nuclear power plants
2012	Apr.	At NISA's hearing session, experts point to the possibility that crush zone directly under No. 2 reactor is an active fault
	Dec. 1-2	Experts from Nuclear Regulation Authority conduct on-site inspections
	Dec. 10	NRA's expert panel concludes crush zone is highly likely to be an active fault

After a two-day on-site inspection and a two-hour discussion, the five Nuclear Regulation Authority panel experts were unanimous in their opinion.

"If there is data, experts' opinions will agree," Kunihiko Shimazaki, acting chairman of the NRA, said at a press conference. "It would be regrettable if people think we reached our decision easily."

The panel concluded Monday that the crush zone directly under the No. 2 reactor of the Tsuruga nuclear power plant of Japan Atomic Power Co. in Fukui Prefecture is highly likely to be an active fault.

Following the panel's assessment, the NRA is expected to decide shortly not to allow the restart of the idled reactor, clearly indicating that the country's nuclear regulatory policy has taken a strict stance to "stop reactors unless their safety is proven."

The decision will leave Japan Atomic Power Co. unable to expect the restart of all three of its nuclear reactors in the near future.

The Tsuruga plant is the country's only nuclear power plant with an active fault under its premises.

The active fault, called Urasoko fault, is only 250 meters east of a reactor building. This prompted experts and others to worry that the fault's movement could affect a crush zone directly under the reactor building, causing movement.
During the NRA experts' on-site inspection on Dec. 1 and 2, the group found stratum deformation at its drilling survey point near the Urasoko fault, prompting them to suspect an active fault.

Japan Atomic Power Co., which has argued the Urasoko fault is not related to the crush zone, insisted the newly discovered active zone was a "local stratum deformation" that would not affect the reactor.

But the NRA experts concluded that the active fault most likely constitutes part of the D-1 crush zone running directly below the No. 2 reactor, after analyzing stratum samples collected in the drilling survey.

"It's natural to think [the active zone] was induced to shift by the nearby Urasoko fault," said Hiroyuki Tsutsumi, associate professor at Kyoto University and one of the five panel members.

The panel thus concluded there is a possibility the Urasoko fault's movement may affect as far away as the area beneath the No. 2 nuclear reactor building.

Though the panel was unable to obtain any proof that directly links the Urasoko fault with the D-1 crush zone, it pointed to the possibility that the crush zone will move by stacking up pieces of circumstantial evidence.

The panel also extended the period used to define active faults.

Government antiquake guidelines for nuclear reactors define faults as active if movement was observed during the last 120,000 to 130,000 years, partly because it is easy to specify the age of stratum during that time frame.

But in an NRA meeting three days earlier, Shimazaki proposed making the standard stricter by extending the period to 400,000 years.

The panel made their decision about the newly discovered active fault based on their observation that the stratum moved between 100,000 and 200,000 years ago.

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'Not a 100% conclusion'

It is certainly difficult, however, to obtain clear proof to determine whether a crush zone is an active fault.
In sharp contrast to past nuclear regulation authorities, who mostly took a wait-and-see attitude, the NRA will adapt a tough stance of not allowing the restart of nuclear reactors if the presence of an active fault is highly suspected.
In other words, the NRA will move in a new direction by putting more focus on safety. Indeed, members of the expert panel used such expressions as "there is a possibility" and "it can be considered" in their meeting Monday.
"We're not necessarily 100 percent [sure about the conclusion]," said Koichiro Fujimoto, associate professor of Tokyo Gakugei University, in the meeting.

The NRA plans to conduct on-site inspections at Oi and Mihama nuclear power plants of Kansai Electric Power Co. in Fukui Prefecture, Higashidori nuclear power plant of Tohoku Electric Power Co. in Aomori Prefecture, Shika nuclear power plant of Hokuriku Electric Power Co. in Ishikawa Prefecture and the Monju fast-breeder reactor of Japan Atomic Energy Agency in Fukui Prefecture.

Observers noted that the NRA may be inclined to make tough assessments, owing to its increased focus on the safety of nuclear reactors.

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Govt to closely watch

Chief Cabinet Secretary Osamu Fujimura said the government will closely watch developments in response to NRA Chairman Shunichi Tanaka's statement that it would be difficult to restart the No. 2 reactor of the Tsuruga nuclear power plant.

"I'd like to decline to comment, as the issue is still being considered. We'll closely watch the situation," Fujimura said.

A question of common sense

December 12, 2012

EDITORIAL: Why flirt with disaster? Decommission Tsuruga nuclear reactor

http://ajw.asahi.com/article/views/editorial/AJ201212120026

Breaking away from the “safety myth” that surrounded nuclear energy, the Nuclear Regulation Authority (NRA) has changed the way Japan judges the safety of nuclear power plants.

The new industry watchdog said Dec. 10 there is a high possibility that a fault line running directly beneath a reactor at Japan Atomic Power Co.'s Tsuruga nuclear plant in Fukui Prefecture is active. "Under the current circumstances, there is no way we can carry out the safety assessments (that are required) for a restart (of the reactor)," NRA Chairman Shunichi Tanaka said.

This signals a major turning point in the nation's nuclear regulation administration.

The focus was whether the active Urasoko fault, which runs about 200 meters east of the reactor, could affect the building that houses the reactor.

Five experts said they clearly recognized that the fault situated directly beneath the No. 2 reactor building is linked to the active Urasoko fault and could move in tandem with it.

"The very fact that the active fault is running beneath the compound of a nuclear power plant is abnormal in itself," said one of the experts.

"The (possible) influences from the Urasoko fault are immeasurable," said another.

Their warnings expressed in a meeting show the high level of danger in the current situation at the Tsuruga nuclear power plant.

According to government guidelines, key facilities of nuclear power plants must not be constructed on active faults. If the No. 2 reactor cannot be operated, its decommissioning is inevitable.

Japan Atomic Power should take the NRA's judgment seriously and swiftly review its business plans on the safety of nuclear reactors and future management of the company.

As many as 160 fault lines run beneath the compound of the Tsuruga plant. Why was a nuclear power plant constructed in such a location in the first place?

When construction of the Tsuruga plant began in the 1960s, studies of faults were certainly not as advanced as they are now. However, we suspect that the people concerned brushed aside the geological conditions because of the safety myth that serious accidents would never occur at nuclear power plants in Japan.

Even when experts warned about the danger of possible active faults, the government allowed nuclear plants to continue operating. We must learn the lessons from the lax screenings of the Nuclear and Industrial Safety Agency, the predecessor of the NRA.

The NRA plans to conduct similar geological surveys at six other locations that may be above active faults. They include the compound of the Shika nuclear power plant operated by Hokuriku Electric Power Co. and the site of the Higashidori nuclear power plant operated by Tohoku Electric Power Co.

Electric power companies have maintained a stance that evidence must be 100-percent clear to label a fault as an active one. This stance is simply unacceptable.

In surveying the compound of the Tsuruga nuclear plant, Kunihiko Shimazaki, deputy chairman of the NRA, asked the experts to make purely scientific judgments without thinking about economic and other issues.

It is obviously common sense not to operate dangerous nuclear plants.

However, if the NRA continues to base its judgments on common sense, many other issues will emerge.

It is also necessary to drastically review the future plans of local governments that have depended on nuclear-related grants from the central government, including the Tsuruga city government.
--The Asahi Shimbun, Dec. 11

But will it?

December 14, 2012

Noda says Tsuruga reactor will be decommissioned if safety is at risk

http://mainichi.jp/english/english/newsselect/news/20121214p2g00m0dm029000c.html

TOKYO (Kyodo) -- Prime Minister Yoshihiko Noda said Thursday a nuclear reactor at Japan Atomic Power Co.'s Tsuruga Power Station will be decommissioned if the Nuclear Regulation Authority determines that safety is at risk at the reactor that is seen as likely to be sitting on an active quake fault.

"The government must respect a judgment by the NRA," Noda told on a night program on TV broadcaster TBS. "I believe if it doesn't go operational, no profits will be earned and it will be decommissioned on a judgment by the operator."

Asked about what action may be taken if the Tsuruga No. 2 reactor is not authorized to resume operating, NRA chairman Shunichi Tanaka told reporters Wednesday that, "We will not be making a judgment on decommissioning the reactor but would like to swiftly request any necessary safety measures be taken, if any."

Noda's remark is a stronger indication of the government's readiness to retire the reactor if necessary.

Experts presented a unanimous view at a meeting of NRA officials on Monday that the fault in question is likely to be active, raising the likelihood of the No. 2 reactor being placed out of service.

Ahead of the TV program, Noda criticized in an election campaign speech the former government led by the Liberal Democratic Party for allowing the construction of the No. 2 reactor.

"I wonder which government under what party permitted the establishment by leaving (geological) survey work solely in the hands of the (plant) operator," he said.

On the active fault, Noda said, "It became clear for the first time after an investigation by the Nuclear Regulation Authority with a high degree of independence."

"We are seeking to stop all nuclear power stations in the 2030s," said Noda, the president of the Democratic Party of Japan. "The LDP is for continuing nuclear power generation. There is a crucial difference" between the two.

Gov't will respect NRA's judgment, says Noda

December 14, 2012

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Restart?

December 19, 2012

LDP energy review may lead to N-plant restarts

http://www.yomiuri.co.jp/dy/business/T121218004205.htm

The Yomiuri Shimbun

Major energy policy issues and LDP's plans

Restart of nuclear power plants	Make a decision on each plant within three years
Nuclear policy in medium and long term	Establish a new stable supply structure within 10 years
Renewable energy and energy saving	Introduce and promote as much as possible for the next three years
Nuclear fuel cycle	Carefully assess future policy
Electricity system reform	Create a competitive environment in which consumers can choose electricity providers

With next summer's House of Councillors election in mind, the incoming Liberal Democratic Party administration is certain to carefully work out an energy strategy that could lead to the restart of nuclear power plants.

Without nuclear power generation there is a great possibility of a power shortage in summer.

LDP President Shinzo Abe constantly criticized the Democratic Party of Japan as irresponsible for pledging to end nuclear power generation.

The LDP, which leaves open the possibility of nuclear power plant use, scored an overwhelming victory in Sunday's election. Parties that argued for abandoning nuclear power, such as the DPJ and Nippon Mirai no To (Tomorrow Party of Japan), suffered major defeats.

However, the LDP's coalition partner New Komeito also included an election campaign pledge to abandon nuclear power generation as soon as possible.

Makoto Yagi, chairman of the Federation of Electric Power Companies of Japan, released a statement Monday saying the DPJ's strategy to halt use of nuclear power left utilities with problems that are extremely difficult to resolve.

Yagi, also president of Kansai Electric Power Co., said the federation hoped the new administration would review this policy.

A senior official of a government economic organization said, "The new administration will probably take considerable time to come up with a new energy policy" to avoid confusion within the administration over nuclear power policy, due to considerations related to the upper house election.

A subcommittee of the Economy, Trade and Industry Ministry's Advisory Committee for Energy and Natural Resources, which has been discussing the country's energy policy, will replace all of its members and make a fresh start, according to LDP sources.

Separately from medium- and long-term energy policies, the new administration has to consider whether to reactivate idled reactors.

Abe said political judgments would be made on whether to reactivate reactors after their safety has been confirmed.
But he needs to come up with concrete rules to allow suspended reactors to be reactivated--including the range of the government's responsibility and how to persuade local governments to understand that restarting reactors is necessary--by the end of this fiscal year.

If Abe fails to do this by then, when the Nuclear Regulation Authority will have completed an outline of safety standards for reactors, a power shortage next summer will likely become a reality.

Appointments of NRA staff members, including Chairman Shunichi Tanaka, were held up in the Diet due to opposition from some DPJ lawmakers. But this problem probably will be solved when the new administration takes over.
The LDP has not made clear its stance on electric power system reform.

METI's Expert Panel on Future Energy Policy is scheduled to compile measures for electricity system reform as early as next month, with complete liberalization of electric power retailing and separation of power producers and power transmitting and distributing companies as the main pillars.

Early restarts not on the cards

December 20, 2012

Early Japan reactor restarts unlikely despite LDP win

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201212200087

REUTERS

Hopes within an anxious business community that Japan's idle nuclear power stations would be rapidly restarted will almost certainly have to be placed on the backburner despite last weekend's landslide election victory by a pro-nuclear party.

Shares of nuclear operators surged after the Liberal Democratic Party (LDP), with a reputation for close links to the nuclear industry, was returned to power. The reasoning was it would respond quickly to industry demands to get reactors going more than 18 months after the Fukushima nuclear disaster.

Tokyo Electric Power Co., operator of the crippled Fukushima plant, climbed 53 percent. Kansai Electric Power Co., the most nuclear reliant of the utilities, is up almost 18 percent.

But restarts are likely to be a slow process, subject to rules still to be drafted by a new nuclear regulator and to wary public opinion, mobilized against the industry since the March 2011 earthquake and tsunami that led to meltdowns at Fukushima.

"(Their) hopes might be a little premature, to the extent that they assume their travails are over and income streams ready to go right back into the black," said Andrew DeWit, a professor at Tokyo's Rikkyo University who researches energy policy.

And that will also mean continued high bills for fuel imports to run conventional power plants.
The Nuclear Regulation Authority (NRA), set up with more independence after the disaster discredited its predecessor, is expected to draw up safety standards by July 2013. It will judge whether plants are safe to restart, but its head says elected officials must take the final decision.

"It is unlikely the LDP-led government will want to interfere at an early stage with the operation of the recently established independent NRA, the creation of which they supported," said Tom O'Sullivan, a Tokyo-based energy consultant.

During its years of almost uninterrupted rule before the Democratic Party of Japan (DPJ) won power in 2009, the LDP helped foster Japan's "nuclear village," a web of vested interests including utilities, bureaucrats and lawmakers who promoted atomic power and kept independent oversight minimal.

Now the party says it will decide gradually on restarting reactors deemed safe by the watchdog over the next three years and devise an optimal energy mix over 10 years.

The LDP's caution may be explained in part by its coalition partner New Komeito's call to phase out nuclear power. Komeito's support is crucial for the LDP to maintain the two-thirds majority it needs in parliament's Lower House to overcome a policy deadlock as it has no majority in the Upper House.

Media surveys have shown a majority of Japanese want to abandon atomic energy by 2030, if not sooner. The outgoing DPJ government promised to end reliance on an energy source that supplied about 30 percent of Japan's needs before Fukushima.

The NRA has also signaled it will take a tougher stance on nuclear stations situated over possible seismic fault lines and prevent risky plants from restarting.

UNRELENTING

But pressure from business interests will be unrelenting.

Both the Keidanren, Japan's biggest business lobby, and the Federation of Electric Power Companies, called on the new government this week to bring nuclear back into the energy mix.

"They have opposed the policy of phasing out nuclear power which they claim is significantly increasing electricity charges for industrial and domestic customers, jeopardizing the international competitiveness of Japanese industry," O'Sullivan said.

Fossil fuel imports have risen sharply since the Fukushima meltdowns, helping push the country into a trade deficit that increased to the largest in 10 months in November.

Utilities have mostly increased purchases of natural gas. Liquefied natural gas (LNG) imports rose 11.6 percent to almost 80 million tons, in the first 11 months of 2012, from a year earlier, according to Ministry of Finance data issued on Dec. 19.

That is equal to one third of global trade in LNG in 2011.

The Fukushima disaster, the worst nuclear accident in the world in a quarter century, prompted the gradual shutdown of all Japan's nuclear reactors until there were none left operating in May 2011.

The DPJ government's decision to restart two reactors last July to prevent possible summer power shortages galvanized the country's previously dormant anti-nuclear movement and sparked the biggest demonstrations in decades.

With no evidence subsequently that the two reactors were vital to meet demand, protesters still gather en masse every week outside the prime minister's office and parliament.

"Any restarts might inflame public opinion, particularly in the large urban centers and those prefectures that do not host nuclear power facilities," O'Sullivan said.

Both political considerations and safety issues will probably mean no early decision on restarting reactors even if the NRA declares them safe, J.P. Morgan analysts said this week.

"It is uncertain if there will be restarts prior to peak summer power demand, as media polls suggest that over half of the Japanese population favors phasing out nuclear power," they said in a research note.

"The impending Upper House election, which takes place in July 2013, may also encourage policymakers to put off decisions to a later date."

Bad news (for utilities)

December 21, 2012
Active fault decision could affect all nuclear facilities in Aomori Prefecture

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201212210079

THE ASAHI SHIMBUN

The new industry watchdog said faults under a nuclear plant in Aomori Prefecture are likely active, an assessment that could have far-reaching ramifications for the operators of the many nuclear facilities in the prefecture.

The judgment of a Nuclear Regulation Authority panel on Dec. 20 is expected to prompt further studies not only at Tohoku Electric Power Co.'s Higashidori plant, but also at other nuclear-related operations in the northern end of Honshu.

The web of fault lines that may be active could force electric power companies to further postpone plans to restart their reactors and enhance quake-resistance measures at their plants, further hammering their bottom lines.

"It is our shared understanding that (Tohoku Electric's) argument that they are not active faults is totally unacceptable," said Kunihiko Shimazaki, an NRA commissioner and head of the panel that studied the fault lines--called F-3 and F-9--on Dec. 13-14.

Four outside experts are on the panel.

Despite the panel's assessment, Tohoku Electric repeated its argument to reporters that the faults are not active.

The panel's decision is unlikely to result in the immediate decommissioning of the sole reactor at Tohoku Electric's plant in Higashidori village because the fault lines do not run directly beneath it. Under current safety guidelines, reactors cannot be built directly above active faults.

But the F-3 fault is located only about 400 meters west of the reactor building and stretches several kilometers. The F-9 fault runs parallel to the F-3.

Tohoku Electric will be forced to study how possible earthquakes and land slippage triggered by the two active faults would affect the plant, prolonging the period when it will be allowed to restart the reactor.

Depending on the results of the study, the company could be required to spend huge sums to reinforce the plant against earthquakes.

Tohoku Electric, much like other regional utilities, has already been saddled with rising fuel costs for its thermal plants since all reactors were shut down in Japan after the accident at the Fukushima No. 1 nuclear power plant last year.
The panel experts said other faults known to exist at the Higashidori plant could also be active.

Heitaro Kaneda, associate professor of earth sciences at Chiba University and a member of the NRA panel, said Tohoku Electric should be prepared for a temblor with a magnitude exceeding 7.0 and its focus directly below the plant.
Shimazaki noted the difficulty in predicting the impact of an earthquake and the scale of the slippage because of the proximity of the faults.

"We have no adequate measures" to figure out them, Shimazaki said.

Tohoku Electric operates three other reactors. Those at its Onagawa plant in Miyagi Prefecture were damaged by last year's Great East Japan Earthquake and tsunami that led to the triple meltdown at the Fukushima plant.

When Tohoku Electric applied to the central government for a permit to build the Higashidori reactor in 1996, it acknowledged signs of strata slippage resembling those caused by active faults.

But the utility insisted they were created by clay that swelled up after the infusion of underground water.

The central government granted the permit in 1998, and the reactor went online in 2005.

However, the Nuclear and Industrial Safety Agency, the predecessor of the NRA, ordered the utility to conduct additional studies after guidelines for the quake resistance of nuclear facilities were revised in 2006.

Other operators could be affected by the panel's assessment of the fault lines.

The F-3 fault extends into the grounds of Tokyo Electric Power Co.'s Higashidori nuclear plant, which is under construction to the north of Tohoku Electric's plant of the same name.

"A string of faults also go into (the site of) TEPCO," Shimazaki said at the panel meeting on Dec. 20.

Work to construct the No. 1 reactor at TEPCO's plant was suspended after the Great East Japan Earthquake. About 10 percent of the work has been completed.

TEPCO, operator of the crippled Fukushima plant, could be asked to re-evaluate the Higashidori plant's ability to withstand the impact of a major earthquake.

In Oma, a town west of Higashidori, Electric Power Development Co. (J-Power) has completed about 40 percent of the construction work for a one-reactor nuclear plant.

Geologists now warn that faults running below Oma plant's premises could be active.

TEPCO and J-Power, like Tohoku Electric, argued that the signs of active faults were simply caused by swollen clay.
The NRA is set to conduct an on-site inspection of the Oma plant, depending on the results of J-Power's studies.

Particularly worrisome is the continental shelf edge fault running north to south for about 80 kilometers off the Pacific coast of the Shimokita Peninsula in the prefecture.

If active, it could unleash an earthquake with a magnitude of 8.0 or more, putting at risk the many nuclear facilities concentrated in the peninsula, according to the experts.

In addition to the Higashidori plants and the Oma plant, the peninsula is home to the spent nuclear fuel recycling plant in Rokkasho village and a temporary storage facility for spent nuclear fuel under construction in Mutsu.

Some experts say the branches of the continental shelf edge fault extend beneath the grounds of the reprocessing facility.

Shunichi Tanaka, chairman of the NRA, has indicated that additional studies will be needed on the faults of the entire peninsula.

The NRA panel concluded earlier this month that a fault under Japan Atomic Power Co.'s Tsuruga plant in Fukui Prefecture is active, and that the plant's No. 2 reactor building likely sits directly above an active fault.

Safety first, really?

December 22, 2012

LDP likely to restart N-reactors

http://www.yomiuri.co.jp/dy/national/T121221004317.htm

The Yomiuri Shimbun

The Liberal Democratic Party and its likely coalition partner New Komeito will approve the restart of nuclear reactors as long as safety requirements are met, The Yomiuri Shimbun learned Friday.

The plan was revealed in the final draft of policy accords for formation of a coalition government that will be signed by LDP President Shinzo Abe and Komeito leader Natsuo Yamaguchi on Tuesday.

According to its draft statement on nuclear power and energy policy, "restarting will be based on the expert judgment of the Nuclear Regulation Authority, which pursues the safety-first principle in line with international standards."

The final draft reflects the LDP's campaign platform for Sunday's general election in which the party pledged it would aim to draw a conclusion on whether to approve restart of nuclear reactors within three years.

In its manifesto, Komeito pledged not to approve construction of new nuclear power stations. Taking this into consideration, the draft incorporated the wording of "reducing reliance on nuclear power generation as much as possible."

In addition to nuclear power and energy, the final draft lists policy accords on the following seven other items: reconstruction from last year's disasters and preventive measures; economic and pump-priming measures; comprehensive reform of social security and tax systems; revitalization of education; diplomacy and security; the Constitution; and administrative, political and government employee system reforms.

Regarding the Trans-Pacific Partnership free trade framework, the draft said it was possible that Japan would take part in the ongoing negotiations, saying that the country "will explore the best way of serving national interest."

In its campaign pledge, the LDP said it "opposes taking part in the talks as long as TPP is premised on abolishing tariffs without exceptions." In the final draft of its policy accords, however, the LDP seems to have changed its position.

"There is a possibility that TPP participation will be in Japan's national interest," a top LDP lawmaker said.
In connection with the comprehensive reform of social security and tax systems, the draft clearly states that the planned coalition government will surely carry out measures for low-income earners such as setting multiple tax rates when the rate for daily necessities is lowered.

Regarding stimulus and economic measures, the draft calls for implementing drastic monetary easing steps such as "setting a 2 percent inflation target" to lift Japan out of deflation.

New survey at Oi plant

December 28, 2012

Fault survey at Ohi plant may take months

http://www3.nhk.or.jp/daily/english/20121228_38.html

A senior official from Japan's Nuclear Regulation Authority has suggested surveys at the country's only online nuclear plant may take months before experts determine whether fissures at the facility are parts of an active fault or not.

Kunihiko Shimazaki, a commissioner from the regulatory body, made the announcement on Friday, after a 5 member team he is leading conducted an inspection at the Ohi plant in Fukui Prefecture on the Sea of Japan.

Shimazaki said the team plans to analyze what they have studied at the trench dug in the northern part of the plant's site, but he added a conclusion won't be easy to obtain.

He said the team needs to inspect another trench which the operator, Kansai Electric, plans to dig at a site closer to the reactor, as early as next February.

In a previous inspection in November, the team could not determine whether the fissures beneath the plant were parts of an active fault or traces of a landslide. So the team ordered the operator to double the length of the inspection trench to 100 meters.

Kansai Electric has been insisting the fissures are traces of a past landslide.

The expert team will continue the on-site inspection on Saturday.

The authority plans to recommend the halt of the 2 reactors that were restarted in July if it determines fissures running beneath the plant's important facilities are an active fault.

Second survey at Ohi nuclear plant
http://www3.nhk.or.jp/daily/english/20121228_19.html

Experts from Japan's nuclear regulatory body are conducting a second inspection at the country's only operating nuclear power plant, to determine whether fissures under the facility is an active fault.

The five-member Nuclear Regulation Authority team is inspecting a trench on Friday at the Ohi plant in Fukui Prefecture, on the Sea of Japan.

In an on-site inspection in November, the team was unable to determine whether or not fissures running beneath the plant were an active fault.

The team ordered the plant's operator, Kansai Electric, to double the length of the trench to 100 meters for further inspection.

The team will meet early next year to form an assessment based on the results of Friday's inspection.

Kansai Electric has been insisting that the fissures are caused by land slips and are not an active fault.

The plant's numbers 3 and 4 reactors resumed operation in July, the first to do so since the March disaster last year.

The regulatory body says it will ask the operator to shut down the plant if the fissures are confirmed to be an active fault. Government guidelines ban building key facilities in such areas.

The experts have already determined that fissures beneath two other nuclear plants are probably active faults.

Not ready to restart

February 2, 2013

NRA safety rules may keep reactors offline for years

http://www.japantimes.co.jp/news/2013/02/02/national/nra-safety-rules-may-keep-reactors-offline-for-years/#.UQwvr_L1tEs

Bloomberg, JIJI

The Nuclear Regulation Authority has approved an outline of safety standards for severe accidents at atomic power plants that may require years of reinforcement work for some reactors idled after the Fukushima disaster.

Nuclear plants will need to build secondary control centers at least 100 meters from reactor buildings to manage emergency cooling systems and radiation filter vents, according to the rules approved Thursday. They also stipulate tougher tsunami defenses.

Under the outline, however, plant operators are not required to have implemented all of the measures when they apply for rebooting their nuclear plants. For instance, operators just need to submit plans on the construction of secondary control centers, which may take some time to build, when applying to restart reactors.

Measures that must be immediately implemented are basically enough to prepare for severe accidents, said NRA Commissioner Toyoshi Fuketa.

The leniency, however, may spark speculation that the government set the exemption because it wants power firms to restart halted reactors as soon as possible.

It will take three to four years to finish all the necessary measures, Fuketa told a news conference. In addition, firing up a reactor that has been halted for a long time will pose a different safety concern, he said.

Utilities will need to secure transportable spare power sources and pumps in case their reactors lose ordinary power sources and reactor cooling functions.

Operators of boiling water reactors, like those that suffered core meltdowns at Tokyo Electric Power Co.'s Fukushima No. 1 plant, are required to immediately install venting facilities with filters that will be used to release radioactive steam to ease pressure inside reactors in an emergency.

Meanwhile, firms operating pressurized water reactors, used mainly in western Japan, are allowed to take time to install such equipment because such containers are large and it takes more time for the pressure inside to increase.

All but two of Japan's 50 reactors have been idled for safety assessments after the earthquake and tsunami of March 11, 2011, caused three meltdowns and radiation leaks at Fukushima No. 1. The NRA was set up after the crisis started to provide reviews independent of the industry ministry, which used to oversee the nuclear power sector.

The NRA will set the final standards by July after soliciting public opinions.

Earlier this week, another NRA panel led by Kunihiko Shimazaki, a seismologist and agency commissioner, approved rules for assessing earthquake and tsunami risks. Currently, power companies are required to assess geological faults using rock and earth samples from the last 120,000 to 130,000 years, or the Late Pleistocene era. The new rules require investigation of faults going back 400,000 years if studies of Late Pleistocene geology are inconclusive.

The NRA is investigating quake faults under nuclear plants owned by Kansai Electric Power Co., Tohoku Electric Power Co., Japan Atomic Power Co., Hokuriku Electric Power Co. and Japan Atomic Energy Agency. The widened definition may prompt the regulator to investigate faults under other atomic energy facilities, Murakami said.

On tsunami defenses, utilities must estimate the risks based on the latest scientific assessments, according to rules approved by the Shimazaki panel. Tsunami defenses including seawalls and watertight doors must be able to withstand the largest estimated waves, under the rules.

After the Fukushima disaster, it was revealed that Tepco's own research showed the No. 1 power plant could be hit by tsunami in excess of 10 meters, but its defensive seawall was only 5.6 meters high. The tsunami that wrecked the plant in March 2011 reached 13 meters.

With both safety standards, power companies will be required to take steps to prevent their reactors and reactor containers from being severely damaged even in case of a huge natural disaster or terrorist attack.

Utilities are braced for massive costs to take the required steps. Kyushu Electric Power Co. President Michiaki Uriu said the firm's costs are likely to reach tens of billions of yen. The additional costs are likely to be passed on to customers.

Bots to clean No. 1 plant

Kyodo

Tokyo Electric Power Co. will start using robots from late July to accelerate radiation mitigation work in the damaged buildings housing the Fukushima No. 1 plant's three crippled reactors.

Tepco said Thursday it needs workers to get into the buildings to conduct preliminary surveys to decommission the reactors, which contain melted fuel.

Under the plan, remote-controlled robots are to clean the interiors of reactor buildings 1 to 3 using high-pressure water and other means.

The robots are being used on a trial basis at the Fukushima No. 2 plant to check whether their abilities can be improved.

The government and Tepco plan to spend around 40 years scrapping the four reactor units that were severely damaged during the nuclear crisis, including the three that suffered core meltdowns, causing widespread fallout.

February 1, 2013

Agency drafts new safeguards for reactors that may delay restarts

http://ajw.asahi.com/article/0311disaster/recovery/AJ201302010085

THE ASAHI SHIMBUN

New standards being drafted by the Nuclear Regulation Authority (NRA) call for strict new safety measures that could delay the restart of idled reactors and place a heavy financial burden on operating companies for the cost of retrofitting plants.

The wide-ranging measures would deal with some of the failings encountered during the 2011 disaster at the Fukushima No. 1 nuclear plant, such as difficulty venting over-pressured reactors, a lack of back-up power sources, and a control room that eventually became unusable.

Broadly, the measures would require utilities to prepare each reactor for a serious accident arising from an earthquake or tsunami, as well as a fire, plane crash or terrorist attack.

The measures would become legally binding, whereas compliance with similar measures in the past was voluntary.

The new standards would apply to all of Japan's 50 functional reactors, 48 of which have remained idle since 2012. **Those reactors that fail to meet the new requirements would be ineligible, in principle, for restarts.**

Implementing all new measures could require several years of work, **so a grace period is envisaged to allow operators to resume power generation before they have completed all retrofitting work.**

But people familiar with the plans said such exceptions would be granted only for certain items of equipment, suggesting significant delays in restarting reactors would nevertheless be likely.

The standards envisage a scenario like that of 2011, when a double-whammy quake and tsunami previously billed as improbable struck northeastern Japan.

To ensure continued electricity supply to the cooling systems of reactors, the plan would mandate installation of multiple power sources adjacent to each reactor. Plant operators would need to be in a position to deploy several fire trucks and power-supply vehicles at each reactor building. And the generators, pumps and storage tanks of the cooling systems would need to be located on high ground to guard against the risk from flooding.

To guard against the release of radioactive materials in an accident, filtered venting equipment would need to be installed at reactor cores so that operators can lower the pressure inside without blasting particles into the atmosphere.

At each plant, operating companies would need to construct buildings capable of withstanding an earthquake, tsunami or radioactive contamination to serve as an emergency disaster response center.

The new standards also call for additional mechanisms to cool the reactor core in the event that the central control room is destroyed by an event such as an airplane crash. One measure would mandate the construction of a second, back-up control room off-site. Another would require the replacement of vulnerable electric cables at the plant with flame-resistant ones.

LONG DELAY

The new safety standards will be combined with separate proposals compiled Jan. 29 by a panel of experts acting under the NRA to prepare for an earthquake or tsunami. Officials would now open the proposals to consultation and aim to adopt them formally in July.

Once the standards become law, the agency will receive applications from electric power companies for reactor restarts and will inspect the safety measures at each site.

The new standards could prove to be especially burdensome for operators of boiling water reactors, such as those at the Fukushima No. 1 plant. Such reactors have a particularly small containment vessel, meaning they are vulnerable to a rapid rise in internal pressure in the event of a meltdown.

For that reason, the new standards call for the installation of two separate mechanisms to vent pressure through a system fitted with a filter to catch escaping radioactive materials.

Sources said the agency will require that at least one such venting equipment be already in place when electric power companies submit requests for permission to resume the reactor's operation.

The NRA brought up the question of requiring two independent mechanisms during consultations with representatives of electric power companies. They responded by saying such redundancy was unnecessary, but the agency over-ruled them.

Of Japan's 50 nuclear reactors, 26 are boiling water reactors and none so far possesses filtered venting equipment of the kind the rules would require.

Hokuriku Electric Power Co. and Chugoku Electric Power Co. have announced plans to fit such devices at their Shika and Shimane plants, respectively, but the timetable for installation foresees completion in fiscal 2015. An official with Chubu Electric Power Co. said there is a lag of two to three years between deciding to invest in such equipment and its actual installation.

It is likely that Japan's boiling water reactors will remain idle for some time yet if the agency decides to mandate such equipment when the new safety standards formally take effect in July. One of the NRA commissioners, Toyoshi Fuketa, said he did not think operators of such reactors would be submitting applications to resume operations in July.

By contrast, a pressurized water reactor has a larger containment vessel and therefore a less urgent need to ease the contents in the event of an accident. Such reactors would likely receive a grace period for the installation of filtered venting equipment.

A decision has yet to be made on whether a grace period will be granted for implementing other required measures, such as creating quake-resistant emergency response centers and secondary, off-site reactor control rooms.

Only seven nuclear plants currently possess buildings that could be used as the former. Those that don't could find that constructing a center comprises the costliest part of the new requirements, approaching the cost of building up seawalls to protect against tsunami waves.

Kansai Electric Power Co. has estimated it would need to spend 285 billion yen ($3.1 billion) in medium- to long-term safety measures for the 11 reactors at its three nuclear plants. Chubu Electric has said it would need to spend about 150 billion yen on anti-tsunami measures alone at its Hamaoka plant.

And because some nuclear plants have separately been identified as sitting on or near active faults, only a few reactors operated by Shikoku Electric Power Co. and Kyushu Electric Power Co. are expected to file applications to resume operations in July.

HEAVY COST

The new safety standards would place a heavy financial burden on electric power companies because it may cost several tens of billions of yen to make even one reactor comply.

"It could mean that some electric power companies will face excess liabilities as early as next year," said an executive at a financial institution with loans in the sector.

Although five electric power companies operate boiling water reactors, the two utilities that will be especially hard-hit by the new standards are Tokyo Electric Power Co., the operator of the Fukushima No. 1 plant, and Tohoku Electric Power Co., which has been recording large losses ever since the disaster.

TEPCO's corporate recovery plan includes the envisaged resumption of power generation at the seven reactors at its Kashiwazaki-Kariwa plant in Niigata Prefecture from April 2013, a move which it believes will return the company to profitability in fiscal 2013.

However, work to install filtered venting equipment has begun only at one of the plant's reactors. Any delay would force the utility to revise its recovery plan.

It may consider pushing up the prices for electricity it sells to users but would likely face huge resistance. It could also prompt some customers to argue that the company should instead be placed under legal bankruptcy protection.

The outlook for Tohoku Electric is equally bleak.

Serving the region hit hardest by the quake and tsunami, the power company has sustained huge losses since 2011. It has said it will try to cope by raising household electric rates by 10 percent this summer.

But it may now need to consider an even greater price hike to meet the cost of reactor upgrades, further burdening local disaster victims as they try to rebuild their lives and the local economy.

TOUGH DECISION FOR ABE

During questioning in the Diet on Jan. 31, Prime Minister Shinzo Abe spoke of his government's readiness to do everything necessary to improve nuclear safety. He also suggested it would allow those reactors that meet the new standards to restart.

"We will make every effort to ensure an energy supply so there are no problems in the daily lives of the people and for the economy," Abe said.

But recognizing the need to retain public confidence, the Abe administration intends to respect whatever decisions are made by the NRA.

People close to Abe have said any decision on resumption of operations could only come after the adoption of the new safety standards.

However, the Abe administration could face a dilemma if the new safety standards significantly raise the bar for reactor restarts.

Some within the ruling Liberal Democratic Party have spoken of the need to pressure the NRA.

"It should be overseen by a Lower House special committee responsible for nuclear energy," said one participant at a Jan. 29 meeting of LDP executives.

Pressure of the opposing kind continues to be applied by the weekly Friday night anti-nuclear protests outside the prime minister's official residence.

And if the electricity supply reaches capacity this summer despite efforts to conserve energy, the Abe administration may find itself in the position of having to make a political decision about resuming operations at nuclear reactors.

"We will consider various alternatives from now on, as we prepare for the summer," said Chief Cabinet Secretary Yoshihide Suga at a Jan. 31 news conference.

THE ASAHI SHIMBUN

Time to restart, says industry

March 30, 2013

Abe's advisory council calls for early restart of nuclear reactors

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201303300054

By TOMOYA FUJITA/ Staff Writer

Private-sector members in Prime Minister Shinzo Abe's economic growth council have submitted a proposal calling for the early restart of idled nuclear reactors despite continued public resistance.

The proposal was compiled by an Industrial Competitiveness Council subcommittee and submitted to the council at a meeting on March 29.

The council is currently discussing Abe's growth strategy, and the subcommittee, led by Yasuhiro Sato, president of Mizuho Financial Group Inc., has been tasked with tackling issues in the electric power industry.

The proposal outlines measures that will be described in the government's growth strategy, including the promotion of renewable energy, such as wind power, and higher-efficiency of thermal power generation, as well as the separation of electricity transmission from generation.

But the proposal seems to strongly favor industries seeking reactor restarts, despite widespread calls among the public for the government to be cautious due to the Fukushima No. 1 nuclear power plant disaster.

"The government should restart nuclear reactors as early as possible and maintain nuclear power generation as a national policy so that it accounts for a certain ratio of the energy supply in Japan," said committee member Sadayuki Sakakibara, chairman of Toray Industries Inc.

According to the subcommittee, nuclear power plants are needed to fill the role of providing cheap, reliable energy.

However, some of the private-sector members have expressed opposition to the suggestion, emphasizing instead the need to separate the electricity transmission business from major electric power companies.

"The government must be cautious in restarting nuclear reactors," said Takeshi Niinami, president of Lawson Inc., after the March 29 meeting.

Heizo Takenaka, a professor of economics at Keio University, added: "The government should take a cautious stance in relation to the restart of nuclear reactors. Rather than the issue of the restart, the government should first resolve the problem of high (operating) costs of electric power companies."

During the subcommittee meeting, Takenaka insisted that the government should first tackle the separation issue. However, his assertion was described only as an "individual opinion" in the outline of proposals.

The proposal noted that such a separation is expected to promote competition and help to make the electricity bills cheaper. But in a show of further consideration for the industry, it also said that the costs of making the separation requires "certain attention and measures."

Hiroshi Mikitani, chairman and president of Rakuten Inc., said, "What is important is to produce competition (among companies) based on the viewpoints of the people."

In the March 29 meeting, industry minister Toshimitsu Motegi said, "The government plans to steadily implement the separation of the electricity transmission business from major electric power companies."

However, discussions on the issue did not progress.
Abe says he plans to make the separation of electricity generation and transmission a key policy in his growth strategy. But the Industrial Competitiveness Council apparently regards the restart of idled nuclear reactors as the key feature in the growth strategy

High and costly hurdles to restart

April 10, 2013

New NRA rules impose costly roadblocks to restart idle reactors

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201304110062

By JIN NISHIKAWA/ Staff Writer

For the next several years at least, Japan will probably have very limited ability to generate electricity through nuclear power.
This is because the vast majority of the nation's idle nuclear reactors are unlikely to resume operations anytime soon due to proposed new regulation standards that set high and costly hurdles.

On April 10, the Nuclear Regulation Authority released its proposal for new regulation standards that are expected to go into effect in July.

For electric power companies to resume operations at nuclear plants, their reactors will have to meet the new standards and pass an NRA appraisal.

Although some of the new standards have a grace period, some of the measures that will be required could take years for the utilities to install. That means a majority of the 48 reactors that are currently offline will not likely resume operations over the next few years.

One measure included in the new standards, which is based on lessons from the 2011 reactor meltdowns at the Fukushima No. 1 nuclear power plant, is the requirement for installing venting equipment with a filter attached for boiling water reactors like the ones at the Fukushima plant. The lack of such equipment led to the release of large volumes of radioactive materials during the Fukushima nuclear disaster.

However, the installation of such equipment normally takes several years. That means operations will not likely be resumed in the near future at the 26 boiling water reactors operated by Tohoku Electric Power

Co., Tokyo Electric Power Co., Chubu Electric Power Co., Hokuriku Electric Power Co., Chugoku Electric Power Co. and Japan Atomic Power Co.

Another obstacle for resuming operations is the construction of coastal levees to prevent tsunami from swamping a nuclear reactor. The tsunami that hit the Fukushima No. 1 plant on March 11, 2011, caused a loss of electric power sources that resulted in meltdowns at three reactors.

Again, however, construction of such levees often takes several years.

Another problem facing some reactors is the presence of active faults at the site. Central government officials plan to study active faults that may lie within the grounds of the Shika nuclear plant operated by Hokuriku Electric and the Mihama nuclear plant operated by Kansai Electric Power Co. Those studies will also delay the resumption of operations at those plants.

Candidates for early resumption of operations are reactors that do not use the boiling water system for generation. These include the No. 3 reactor at the Ikata nuclear plant operated by Shikoku Electric Power Co. and the No. 1 and No. 2 reactors of the Sendai nuclear plant in Kagoshima Prefecture operated by Kyushu Electric Power Co.

The operators of those reactors are expected to submit applications with the central government to resume operations in July after the new standards go into effect.

The only reactors now in operation--the No. 3 and No. 4 reactors at the Oi nuclear plant--will be allowed to operate until September, when they will face another periodic inspection, before facing an appraisal of whether the new standards are being met.

Based on the lessons from the Fukushima nuclear crisis, each reactor will be required to have several possible electric power sources to prevent a severe accident caused by a failure to cool the reactor.

Although plant operators will also be required to install emergency control rooms that are capable of remote-controlled cooling of reactor cores, they will be given a five-year grace period because of the time needed to construct such facilities.

A major problem facing some of the older reactors in meeting the new standards will be installing flame-retardant electric cables inside reactor buildings and other areas of the plants as a precaution against fires.

Excluding the Fukushima No. 1 and No. 2 plants, 12 of the 14 reactors that have been in operation for more than 30 years have not installed such flame-retardant cables.

While some electric power companies have tried to get around the provision by painting cables with materials to prevent the spreading of fires, the new standards call for a high level of flame-resistance that may force the utilities to replace all of the cables. Experts said replacing all of the cables would be a major technological challenge.

The strict new standards will likely mean that some electric power companies may decide to decommission older reactors rather than spend huge amounts of money to upgrade them.

Stricter standards regarding active faults will also be a burden for the utilities. The companies will have to expand their studies about the existence of active faults 400,000 years into the past.

Under the stricter interpretation, that may mean the reactor buildings of the No. 1 and No. 2 reactors at the Kashiwazaki-Kariwa nuclear plant in Niigata Prefecture could lie directly above an active fault.

The utilities have criticized the stricter standards, as well as the manner in which the central government will determine if an active fault exists, because the companies will not be able to resume operations at a reactor if an active fault is found to lie directly below the reactor building.

Can Kepco restart Takahama?

Kepco mulls Takahama plant restart
Kyodo
Apr 28, 2013

http://www.japantimes.co.jp/news/2013/04/28/national/kepco-mulls-takahama-plant-restart/#.UXzvqsoR2vM

OSAKA – Kansai Electric Power Co. could apply for government permission in July to restart reactors 3 and 4 at its Takahama nuclear plant in Fukui Prefecture, sources said Saturday.

The utility is eyeing a resumption of operations at the plant after confirming whether it is in line with the Nuclear Regulation Authority's new safety requirements that will take effect in July, the sources said.

Kepco operates the Oi nuclear power plant, also in Fukui, which boasts the only two operational reactors nationwide after safety fears arising from the 2011 Fukushima meltdowns disaster led to the suspension of all atomic energy generation.

According to the sources, the company considers it essential to also fire up the two Takahama reactors to secure an additional stable supply of electricity. But even if Kepco obtains state approval to restart the Takahama facility, on the Sea of Japan coast, it will still have to win consent from the local community, making a resumption of operations uncertain.

Kyushu Electric Power Co. may also ask for government permission around the same time to reactivate the Sendai nuclear power station in Kagoshima Prefecture, while Shikoku Electric Power Co. could seek approval to restart the Ikata atomic plant in Ehime Prefecture.

The NRA's examination process may take longer if these two utilities also apply for a resumption of nuclear operations, the sources said.

In a bid to meet the watchdog's new requirements, Kepco is taking measures to enhance the safety of the Takahama reactors, including the construction of additional tsunami barriers. The utility's president, Makoto Yagi, has repeatedly said that once these safety measures are confirmed, Kepco intends to ask for permission to bring reactors 3 and 4 back online.

The company has already factored in the reactors' reactivation while calculating a hike of household electricity rates in its Kansai service area.

Autumn restart

Minister indicates autumn restarts of nuclear reactors

April 24, 2013
THE ASAHI SHIMBUN
http://ajw.asahi.com/article/0311disaster/fukushima/AJ201304240061

Industry minister Toshimitsu Motegi on April 23 said an idled nuclear reactor could be restarted as early as autumn, the first time a Cabinet member has mentioned a timetable for bringing at least one of the nation's 48 suspended reactors back online.

On a BS Japan Corp. TV program, Motegi was asked about the earliest possible date for the restart of nuclear reactors.
"I think it will probably be in autumn," he replied.

Currently, 48 of the nation's 50 nuclear reactors are idled, a consequence of the accident at the Fukushima No. 1 nuclear power plant following the Great East Japan Earthquake and tsunami on March 11, 2011.

Only the Nuclear Regulation Authority, an independent nuclear industry watchdog, can decide whether an idled reactor can be restarted. Motegi's statement could affect the NRA's decision on restarts, as the agency prepares to put in place new safety standards on earthquake and tsunami preparedness for nuclear plants.

"The world's strictest regulation standards, drawn up by the independent NRA, will be completed on July 18," Motegi said.
Following the NRA's inspections based on the new standards, an autumn restart of a reactor could be expected, he said.
When asked whether the government can obtain the understanding of residents living near reactors, Motegi said, "We are making an effort to do so."

The Abe Cabinet has previously said the NRA will complete examinations of all reactors within three years, and the government will allow restarts from those reactors that are confirmed to be safe. However, no specific goal for the restarts has been given.

JAIF on nuke restart

01.05.2013_No111 / News in Brief

JAIF Chairman Calls For Early Decision On Reactor Restarts http://www.nucnet.org/all-the-news/2013/05/01/jaif-chairman-calls-for-early-decision-on-reactor-restarts

1 May (NucNet): Japan still needs nuclear energy as a power source and an "appropriate political judgment" must be made as soon as possible on the restart of the country's reactors, most of which remain offline after the March 2011 Fukushima-Daiichi accident, the chairman of the Japan Atomic Industrial Forum (JAIF) has said.

In his opening address to the 46th JAIF annual conference in Tokyo, Takashi Imai stressed the importance of restarting plants whose safety has been confirmed. He said they need to be restarted not just because of the immediate need for energy, but also to maintain a stable energy supply and ensure energy security.

Mr Imai said it was Japan's responsibility to share the experience and information from the Fukushima-Daiichi accident and contribute to improving nuclear safety.

He emphasised that the expansion of nuclear energy overseas would continue to be part of Japan's growth strategy.

Referring to new nuclear safety standards due to be issued by Japan's Nuclear Regulation Authority (NRA), Mr Imai said it was important to maintain "total transparency" and "hear the opinions of nuclear operators and domestic and overseas experts" with the aim of implementing true, effective regulation.

On the restoration and reconstruction of the area around the plant, Mr Imai said wisdom should be collected from all corners of the world in the application of "human, capital and material resources" to solve the matter at hand.

He noted the nuclear industry's support for the creation of an international R&D centre in Fukushima for decommissioning technology and said that Japan, as a whole, needed to better understand the effects of radiation.

In March 2013, Japan's prime minister told parliament that idled nuclear reactors will be restarted if it is proven safe to do so.

Shinzo Abe said he would work with the NRA to establish a new safety culture to strengthen the safety of the country's nuclear plants in the wake of Fukushima-Daiichi.

Only two of Japan's 50 commercial reactors have restarted since the Fukushima-Daiichi accident – Ohi-3 and Ohi-4.

Ohi-3 resumed electricity generation on 5 July 2012 after an extended outage, ending a 60-day period without any of Japan's 50 reactors online.

Confusion reigns as deadline nears

May 9, 2013

Confusion prevails as decision deadline approaches on Tsuruga nuke plant

http://mainichi.jp/english/english/newsselect/news/20130509p2a00m0na007000c.html

Nuclear Regulation Authority (NRA) Chairman Shunichi Tanaka stated during a regular press conference on May 8 that there is no need to rush toward reaching a final conclusion on whether there is an active fault line running directly underneath the Tsuruga nuclear power plant in Fukui Prefecture.

The comments revealed the possibility that the decision may be postponed until sometime after July, when procedures for restarting the reactor are set to begin.

Following numerous questions from reporters regarding the intent of his comments, however, Tanaka backtracked from his earlier position, releasing a statement indicating that "a consensus among NRA members with respect to the issue would be reached without delay."

If the NRA concludes that the fault line is indeed active, the decommissioning of reactor No. 2 will likely ensue, along with administration problems for the Japan Atomic Power Co. (JAPC).

JAPC has indicated that it will undertake all measures at its disposal to deal with the matter, including the possibility of taking legal action against the government.

The comments by Tanaka have exposed the **confusion existing with regard to this matter as the deadline approaches for making a final decision.**

An inspection team comprised of influential individuals from the regulatory panel released a draft report in January stating that there was a "high possibility that the fault line is active." This position is not expected to change with respect to a follow-up report due to be compiled at a meeting scheduled for May 15. The NRA will render a conclusion based upon the report.

JAPC has requested that the final decision be held off until the results are released from an additional study that is scheduled to be completed by the end of June.

Tanaka stated during a meeting of the inspection team members held last December, "Under present conditions, (the No. 2 reactor) cannot be analyzed as safe" -- thereby indicating that the restart was not likely to be approved. He later clarified on May 8, however, that he "may have spoken too strongly" with regard to the matter.

Hamaoka : We don't want it, say 8 mayors

May 14, 2013

Mayors of municipalities near idled Hamaoka nuke plant oppose reactivation

http://mainichi.jp/english/english/newsselect/news/20130514p2a00m0na012000c.html

SHIZUOKA -- The mayors of eight Shizuoka Prefecture municipalities around the idled Hamaoka Nuclear Power Plant have voiced opposition to the reactivation of the power station at the current stage, a Mainichi Shimbun survey shows.

Some of the mayors demanded that Chubu Electric Power Co. establish the methods of disposing of spent nuclear fuel as a precondition for the resumption of operations at the plant in Omaezaki. The survey results show that it is becoming increasingly difficult to restart the nuclear power station.

"We'll do our best to enhance the safety of the plant and reassure the local community and the public as a whole," an official of the utility said, commenting on the results of the poll.

The Mainichi Shimbun conducted the survey as two years have passed since the power plant was stopped on May 14, 2011, at the urging of the national government following the outbreak of the Fukushima nuclear crisis. The Mainichi sent a questionnaire on the issue to Shizuoka Gov. Heita Kawakatsu and the mayors of 11 municipalities, all or part of which fall under the so-called urgent protective action planning zone within a radius of 30 kilometers from the nuclear plant.

The mayors of Makinohara, Kikugawa, Kakegawa, Fukuroi, Iwata, Fujieda, Yoshida and Mori said they cannot agree to reactivation of the power plant under the current conditions. Four of them, including Makinohara Mayor Shigeki Nishihara, replied that they would oppose resumption of operations at the Hamaoka plant even if the national government confirmed its safety.

Nishihara went on to demand that the plant be permanently shut down. "The power station is situated in an area where the epicenter of the Tokai quake is expected to be located. There is a large population and industrial facilities are concentrated around the plant," Nishihara said.

The mayors of Kikugawa, Fukuroi, Iwata and Fujieda as well as Shizuoka Gov. Kawakatsu demanded that a method for the disposal of spent nuclear fuel be firmly established as a precondition for the resumption of operations at the plant.

Shigeo Ishihara, mayor of Omaezaki that hosts the plant, stopped short of clarifying his stance toward reactivation of the plant, while pointing to the need for nuclear plants.

"It's premature to talk about whether the plant should be reactivated as the national government hasn't worked out safety standards yet," he answered. "Nuclear power is necessary because fuel costs have risen and little progress has been made on the practical use of renewable energy."

Shizuoka Gov. Kawakatsu said he will hold a prefectural referendum on the pros and cons of resuming operations at the power station if he is re-elected in the June gubernatorial race

Close Tsuruga for good?

Panel to conclude Tsuruga nuclear reactor sits above active fault

http://mainichi.jp/english/english/newsselect/news/20130515p2g00m0dm008000c.html

TOKYO (Kyodo) -- A panel under the Nuclear Regulation Authority is set to finalize a report Wednesday saying that a geologic fault running beneath a reactor in western Japan is active, raising the possibility of the unit's permanent shutdown.

The move is expected to lead NRA commissioners to decide that the No. 2 unit of Japan Atomic Power Co.'s Tsuruga plant does not meet the conditions for undergoing a safety assessment that the country's reactors need to clear to resume operations in the wake of the 2011 Fukushima Daiichi complex disaster.

Japan Atomic Power will still have a chance to seek a review of the panel's judgment if it can provide new findings, but it is doubtful that the company can present convincing data disproving the activity of the fault in question.

In quake-prone Japan, nuclear power plant operators are not allowed to build reactors and other facilities with important safety functions directly above faults that could move in the future.

The panel, consisting of NRA commissioner Kunihiko Shimazaki and four academics from outside, had agreed at its first gathering in December after a field survey that the No. 2 reactor is likely to be sitting above an active fault.

But it spent five more months on further discussions amid criticism from Japan Atomic Power and some ruling Liberal Democratic Party lawmakers that the panel had not sufficiently listened to the arguments of the plant operator.

Japan Atomic Power officials have called on the panel to wait until June for more data to come up, but Shimazaki said during the panel's previous meeting in April that an assessment at the present moment will be compiled at the next meeting scheduled for Wednesday.

Based on a large-scale trench excavation investigation conducted at the two-unit nuclear complex in Fukui Prefecture, the panel is expected to conclude that a zone of crushed rock called D-1, running beneath the No. 2 reactor, is an active fault.

The D-1 is feared to move together with a confirmed major active fault called Urazoko, which is located only about 200-300 meters away from the No. 1 and No. 2 reactor buildings.

Japan has been reviewing the activity of fracture zones existing beneath nuclear facilities following the Fukushima crisis, which was triggered by a huge earthquake and tsunami on March 11, 2011. The Tsuruga plant is one of the six facilities the NRA has decided to inspect from that aspect.

The panel's envisioned assessment, meanwhile, is expected to add pressure to the financial standing of Japan Atomic Power, which is unable to sell electricity to its major shareholders such as Tokyo Electric Power Co. and Kansai Electric Power Co. because all of its three reactors are now offline.

Restarting Japan Atomic Power's two other reactors -- the No. 1 unit at the Tsuruga plant and one reactor at the Tokai No. 2 plant in Ibaraki Prefecture -- is also unlikely to be easy due to the oldness of the facility and due to local opposition.

The company is currently surviving on such revenues as basic fees from major utilities that have contracts to receive electricity, but the utilities are also struggling amid increasing fuel costs for thermal power generation to make up for the loss of nuclear power.

Of the 50 commercial reactors in Japan, only two operated by Kansai Electric are online.

Panel to conclude reactor sits on active fault
http://www3.nhk.or.jp/nhkworld/english/news/20130515_07.html

An expert panel at Japan's Nuclear Regulation Authority is to conclude that one of the country's nuclear reactors sits on an active fault.

The panel is to release a final report on its 6-month probe into the Number 2 reactor at the Tsuruga nuclear power plant in Fukui Prefecture, central Japan.

The panel said in its draft report in January that the fault may be active.

The plant operator, Japan Atomic Power Company, has presented data and photos to disprove that the fault is active. But the panel rejected the evidence as unconvincing.

The government's guidelines ban plant operators from building reactors right above active faults due to concerns about damage from earthquakes.

If the plant operator cannot show data that overturns the panel's argument, the Number 2 reactor could be scrapped. It is currently offline for safety inspections.

The operator says it will conclude its own survey into the fault by June. The panel says it may review the report if the operator comes up with new findings.

The panel's probes into suspected active faults cover 6 nuclear power stations. Tsuruga is the first for which a final report will be released.

The Nuclear Regulation Authority plans to decide what to do with the Tsuruga reactor as early as next week.

Floating alternative

May 17, 2013

World's 1st floating hybrid power generation system set to test in fall

THE ASAHI SHIMBUN
http://ajw.asahi.com/article/economy/technology/AJ201305170066

Taking advantage of continuous sea breezes and the ocean currents below, the world's first floating hybrid power-generation system, to be installed off the coast of Karatsu, Saga Prefecture, will be tested in autumn.

Saga Prefecture and MODEC Inc., the system developer, made the announcement on May 16.

Leading offshore technology company MODEC specializes in floating oil and gas production and storage facilities. Making use of its expertise of facilities floating on the ocean, the company developed a new hybrid power generation system that generates electricity both via a windmill as well as a water wheel circulating the water under the sea by tidal currents.

The new system, Savonius Keel and Wind Turbine Darrieus, dubbed SKWID, utilizes a long vertical wind turbine, designed to capture twice as much wind as compared to land-based wind turbines of the same diameter, resulting in the delivery of twice as much power.

The water wheel rotates at the speed of tidal currents so as not to harm the marine ecosystem.

Tsuruga

May 23, 2013

Decision a step closer to dooming reactor restart

NRA backs Tsuruga active fault finding

http://www.japantimes.co.jp/news/2013/05/23/national/nra-backs-tsuruga-active-fault-finding/#.UZ0KYEpsFEs

Kyodo

The Nuclear Regulation Authority on Wednesday accepted an assessment that reactor 2 at the Tsuruga nuclear plant in Fukui Prefecture is sitting on an active fault, increasing the likelihood that the unit can never be restarted.

"We have received a report from a panel of experts that said there is an active fault. . . . I think there is a need to accept the conclusion sincerely," NRA Chairman Shunichi Tanaka told a meeting attended by other commissioners to discuss the panel's conclusion.

It is the first time regulatory authorities have acknowledged that an existing reactor is located on a fault that is feared might shift. The judgment may leave plant operator Japan Atomic Power Co. with no option but to scrap reactor 2.

The NRA also wants Japan Atomic Power to study how the spent-fuel pool inside the No. 2 reactor building would be affected in the event the fault moves.

Most of Japan's nuclear reactors are currently offline because of the Fukushima No. 1 complex disaster that started in 2011, and they are required to undergo the NRA's safety assessment process to check whether they satisfy the new regulatory requirements to be introduced in July before they can resume operations.

The NRA, however, is unlikely to go ahead with a safety review for reactor 2 of the two-unit Tsuruga plant, given the panel's assessment, if Japan Atomic Power submits an application.

The panel, consisting of NRA Commissioner Kunihiko Shimazaki and four outside experts concluded last week that a zone of rock fragments called D-1, running directly beneath reactor 2, is an active fault, rejecting Japan Atomic Power's objections.

The panel also said the D-1 fault could move along with a confirmed major active fault called Urazoko that is located about 200-300 meters from the reactor 1 and 2 buildings, and may affect facilities located above.

Nuclear plant operators are not permitted to build or operate reactors and other important safety facilities directly above active faults — currently defined as those that have moved in the last 120,000 to 130,000 years.

Japan Atomic Power, however, is still conducting its own investigation at the plant in a bid to overturn the panel's assessment, while the company's president, Yasuo Hamada, said last week the firm may eventually have to consider taking the issue to court.

Major utilities holding a stake in Japan Atomic Power are closely watching how the issue unfolds, fearing that the company may fall into negative net worth if it has to scrap reactor 2 because of a shortage of decommissioning funds and loss in asset value.

The company has set aside money for future decommissioning costs on the assumption that reactor 2 will operate for 40 years, but it has been commercially operating for only 26 years.

Restarting Japan Atomic Power's two other reactors is also unlikely to be easy, with reactor 1 at the Tsuruga plant aging and a reactor at the Tokai No. 2 plant in Ibaraki Prefecture facing local opposition.

Japan Atomic Power is currently surviving on revenues such as basic fees from major utilities that have contracts to receive electricity.

But the utilities may not be able to offer support forever because they are also struggling amid increased fuel costs for thermal power generation to make up for the loss of nuclear power.

1,705 fuel assemblies lie in Tsuruga

May 27, 2013

End of the line for Tsuruga reactor

http://www.japantimes.co.jp/opinion/2013/05/28/editorials/end-of-the-line-for-tsuruga-reactor/#.UaOrUNhBpg4

The Nuclear Regulation Authority on May 22 accepted its five-member expert panel's report that the D-1 fracture zone of pebbles and sediment running beneath the No. 2 reactor at Japan Atomic Power Co.'s Tsuruga nuclear power plant in Fukui Prefecture is an active fault.

JAPC has long contended that the zone is not an active fault. But given the NRA's position, it will likely have no other choice but to give up on restarting the reactor and to decommission it.

The NRA has not only refuted the company's contention but also demonstrated that the safety check done by the now-defunct Nuclear and Industrial Safety Agency of the trade and industry ministry was shoddy. The NRA's conclusion has shown that it will give priority to nuclear power plant safety over profitability and will not approve nuclear power plant operations if there is even the slightest chance of danger.

The NRA faithfully followed the lesson from the Fukushima nuclear catastrophe: that even the smallest possibility of an accident must be eliminated. It should maintain this position even in the face of pressure from the government and the power industry. The power industry should learn from the Fukushima disaster and not ignore any potential dangers however small.

NRA Chairman Shunichi Tanaka said his organization will not carry out a safety review of the reactor in question for licensing because safety standards ban the construction of important nuclear-related facilities above an active fault.

Although JAPC is strongly opposing the NRA's conclusion, it should be remembered that both it and the Nuclear and Industrial Safety Agency in the past failed to recognize the danger from the Urazoko fault, an active fault lying 200 to 300 meters from the Nos. 1 and 2 reactors of the Tsuruga plant.

The NRA concluded that the D-1 fracture zone running beneath the No. 2 reactor should be considered an active fault because it cannot be proven that the zone has not moved in the past 130,000 years and pointed to the possibility that it will move with the Urazoko fault, thus affecting facilities constructed above the zone.

The NRA panel is now carrying out geological studies at six nuclear power plants. The government should allocate enough funds and personnel to ensure the NRA can rapidly yet thoroughly carry out its studies. The government also should work out necessary measures to help accelerate the decommissioning of the No. 2 reactor, including securing a storage site for its radioactive waste. Similar preparations may be needed for other reactors facing the same fate.

Even though the Tsuruga reactor contains no nuclear fuel, **1,705 fuel assemblies are stored onsite in a fuel pool.** If the pool is damaged by a quake, the fuel assemblies could rupture and emit radioactive substances. This shows that even a nuclear power plant kept offline can pose dangers, and is all the more reason why the government should adopt a policy to end Japan's reliance on nuclear power generation as soon as possible

Utilities will apply for restart

May 27, 2013

KEPCO to apply for resumption of 2 reactors

http://www3.nhk.or.jp/nhkworld/english/news/20130527_33.html

A Japanese nuclear power plant operator says it will ask for permission to restart 2 of its reactors once the government introduces new safety guidelines in July.

The president of Kansai Electric Power Company, Makoto Yagi, on Monday said his firm intends to apply for permission to restart the Number 3 and 4 reactors at the Takahama plant in Fukui Prefecture.

KEPCO is seeking the resumption as soon as possible as it has already implemented an electricity price hike on the basis of future earnings from the nuclear reactors.

Yagi said the operator is also preparing to apply for permission to restart other plants.

But the Nuclear Regulation Authority says that some of KEPCO's nuclear power stations still have to be checked to see if they have active faults beneath their sites before it can start screening them for the new guidelines.

The majority of Japan's nuclear reactors have been shut down in the wake of the accident at the Fukushima Daiichi nuclear power plant.

May 27, 2013 - Updated 13:00 UTC

Nuclear operators seeking authorization to restart

http://www3.nhk.or.jp/nhkworld/english/news/20130528_05.html

Four Japanese nuclear plant operators have said they will apply to restart reactors once the government introduces new safety guidelines in July.

NHK interviewed personnel on Monday from 10 utilities across the country.

Officials at Kansai Electric Power Company and Kyushu Electric Power Company each said they plan to apply to restart 2 reactors.

Shikoku Electric Power Company personnel said they will ask to put one reactor online. Hokkaido Electric Power Company officials said they aim to restart 3.

All the reactors are pressurized-water reactors, distinct from the boiling-water type used at the defunct Fukushima Daiichi plant.

New safety regulations will be implemented by July 18th. Operators will be required to fulfill precautions against accidents and natural disasters.

Examiners from the Nuclear Regulation Authority will then check applications before granting authorization.

Plant operators are still calculating elements like the potential height of tsunami and risks of volcanic eruptions.

Most of Japan's nuclear reactors have been shut down since the March 2011 earthquake and tsunami disrupted the Fukushima Daiichi plant.

Not ready to give up

May 30, 2013

4 utilities to apply for early screening for restart of reactors

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201305300059

THE ASAHI SHIMBUN

Four electric power companies are expected to apply to the Nuclear Regulation Authority in July for screening to restart eight idle reactors, sources said May 29.

The four utilities are Hokkaido Electric Power Co., Kansai Electric Power Co., Shikoku Electric Power Co. and Kyushu Electric Power Co.

The four will apply at the earliest possible opportunity after the NRA stipulates new regulation standards on nuclear power generation by July 18.

Tokyo Electric Power Co. is also making preparations to apply as soon as possible.

Based on the new regulation standards, the NRA will check safety measures and other items at nuclear power plants, and subsequently determine whether it will allow the restarts.

The eight reactors involved in the applications are the Nos. 1, 2 and 3 reactors at Hokkaido Electric Power's Tomari nuclear power plant; the Nos. 3 and 4 reactors at Kansai Electric's Takahama nuclear power plant in Fukui Prefecture; the No. 3 reactor at Shikoku Electric's Ikata nuclear power plant in Ehime Prefecture; and the Nos. 1 and 2 reactors at Kyushu Electric's Sendai nuclear power plant in Kagoshima Prefecture.

They are all pressurized water reactors. The stricken Fukushima No. 1 nuclear power plant, operated by TEPCO, used boiling water reactors.

Because the containment vessels of pressurized water reactors are large, the new regulation standards are expected to grant those reactors a moratorium on the installment of filter-attached vent equipment, which prevents radioactive materials from leaking to the outside. That will allow the four electric power companies to apply for restarts immediately after the new regulation standards are stipulated.

The Fukushima nuclear disaster in 2011 led to the shutdown of all the nation's reactors, forcing operators to rely on thermal power generation.

So if a conventional nuclear reactor with an output capacity of about 1 gigawatt is restarted, its operator can reduce monthly thermal power fuel costs by 8 billion yen to 20 billion yen ($80 million to $200 million).

The electric power companies have cited huge fuel costs as a reason for seeking restarts as early as possible.

"Safety measures (to meet the new regulation standards) will be completed (at the Ikata No. 3 reactor) by the end of June," said Akira Chiba, president of Shikoku Electric. "If the new standards are enforced, we will make the application (for the restart of the reactor) as soon as possible."

TEPCO plans to complete safety measures at some of the seven reactors at its Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture this summer and apply for restarts.

But Niigata's governor, Hirohiko Izumida, has said that he will not discuss the restart of the reactors until the cause of the accident at the Fukushima nuclear plant and recurrence prevention measures are made clear.

The NRA said applying early for restarts will not necessarily expedite the process because the number of NRA staff members who can be engaged in screening for restarts is limited: They can check only three reactors simultaneously.
"Screening for each reactor is expected to require at least six months," said NRA chairman Shunichi Tanaka.

Even if a reactor passes NRA screening, consent for the restart is required from local governments that are hosting the nuclear power plant.

As for Tohoku Electric Power Co., Chubu Electric Power Co., Hokuriku Electric Power Co., Chugoku Electric Power Co. and the Japan Atomic Power Co., they will face difficulties making applications for restarts in the near future.

This is because it will take time for them to install safety measures, such as vent equipment and the construction of sea walls. The NRA is also currently evaluating faults running below the compounds of the utilities' nuclear power plants to determine if they are active.

Currently, there are 50 nuclear reactors in Japan. Of them, only the Nos. 3 and 4 reactors at Kansai Electric's Oi nuclear power plant in Fukui Prefecture are in operation.

Restart & Abenomics

June 6, 2013

Momentum builds for LDP to push for nuclear reactor reactivation to back 'Abenomics'

http://mainichi.jp/english/english/newsselect/news/20130606p2a00m0na012000c.html

Momentum is building quickly for the ruling Liberal Democratic Party (LDP) to press for reactivating nuclear reactors that were shut down following the outbreak of the nuclear crisis at the Fukushima No. 1 Nuclear Power Plant in a move to throw its weight behind Prime Minister Shinzo Abe's economic policy mix, dubbed "Abenomics."

In its draft "growth strategy," the government says it will "utilize nuclear reactors whose safety has been confirmed." A majority of lawmakers within the LDP have voiced support for measures to place priority on stable energy supply in a bid to prop up "Abenomics." On the backdrop of Abe's penchant for reactivation of nuclear reactors and mounting concerns among local governments hosting nuclear plants over the cooling of their local economies, momentum is building quickly for the LDP to seek reactivation of nuclear reactors.

"The Nuclear Regulation Authority (NRA) has been making demands one after another, but this legislators' group needs to discuss whether such demands are necessary from a scientific viewpoint," Hiroyuki Hosoda, executive acting secretary general of the LDP, told a meeting on June 5 of the LDP legislators' group that advocates for the promotion of a stable power supply.

The LDP legislators' group was launched with about 90 members on May 14. It is a core group that pushes for reactivation of nuclear reactors. It is comprised of many veteran lawmakers from those prefectures that host nuclear power stations, including Hosoda from the Shimane No. 1 district and former LDP Vice President Tadamori Oshima from the Aomori No. 3 district.

During the ordinary Diet session last year, the LDP, which was in the opposition camp at the time, criticized the then ruling Democratic Party of Japan (DPJ) for its handling of the Fukushima nuclear disaster and took the lead in debate in favor of establishing a nuclear regulatory body with a high degree of independence. In its election manifesto for last year's House of Representatives election, the LDP said, "We will place top priority on the NRA's decisions and decide on whether to reactivate nuclear reactors within three years." Although LDP lawmakers are deeply dissatisfied with the NRA over its refusal to soften its harsh stance toward power companies, they would have to respect new regulatory standards due to take effect in July.

On the other hand, the LDP is concerned about the likelihood that it will take a long time to reactivate nuclear reactors after applications are filed as the NRA is likely to evaluate the applications very carefully.

Tsuyoshi Takagi, LDP lower house lawmaker, became increasingly frustrated and said, "It is unfortunate if no decision is made and reactors remain abandoned." The LDP, therefore, plans to press the government to improve the NRA's way of evaluating applications for reactivation of nuclear reactors before the current Diet session ends on June 26.

The LDP has come increasingly forward to press for reactivation of nuclear reactors as it said in its draft election promises for the upcoming House of Councillors election that "the government will take responsibility for reactivating nuclear reactors" while taking heed of its manifesto for last year's lower house election.

On the government's draft "growth strategy," a senior member of the LDP legislators' group expressed its intention to press the government even harder through the LDP Policy Research Council to reactivate nuclear reactors, saying, "There are only a few references to reactivation of nuclear reactors. The issue must be placed in a firm position."

"Ill-timed and unwise" restart

June 5, 2013

EDITORIAL: Abe's growth strategy misses the big picture by reverting to nuclear energy

http://ajw.asahi.com/article/views/editorial/AJ201306050052

The Shinzo Abe administration reportedly has its mind set on encouraging the “effective use of nuclear power generation” in the economic growth strategy it will decide on June 14. That plan complies with the wishes of the electric power industry and the business community in general to restart their nuclear reactors.

The idea is ill-timed and unwise, and we urged the administration to drop it. Reviving the nation’s reliance on nuclear energy could nip newly emerging energy-related businesses in the bud.

The government, of course, should be concerned about the immediate economic consequences of power shortages and the higher costs to be incurred by relying more on thermal power generation. We are fully aware that politicians are responsible for preventing undesirable consequences.

However, an economic growth strategy is meant to provide a “new direction” to the Japanese economy over the medium to long term.

In fact, the economic growth strategy is expected to include energy policies such as promoting the introduction of high-efficiency thermal power generation and the development of floating wind turbines and energy-saving “smart communities.”

More than two years after the Fukushima nuclear disaster, some businesses are finally beginning to venture into these new fields. And surely, the government's economic growth strategy should focus on supporting those newcomers that are braving such odds as uncertain profitability and insufficient infrastructure.

If the government now make its intention clear to revert to the use of nuclear energy, it will only help to preserve the traditional power industry and raise the bar for new energy businesses. This runs counter to the government's power supply reform plans that aim to end regional monopolies by major utilities and encourage deregulation and free competition.

And more than anything, it contradicts the Abe administration's stated policy of "reducing the nation's dependence on nuclear power generation as much as possible."

Fukushima's problems are still far from resolved. The entire world is watching how Japan will deal with this dilemma. The government would be missing the big picture by going along only with the parties that want to quickly resume nuclear power generation.

Back in the 1970s, Honda Motor Co. had a poor reputation in the U.S. market. But the automaker took the introduction of America's stringent emission regulations as the cue for developing eco-friendly, high fuel-efficiency engines. The innovation laid the foundations for its present-day success.

History shows that bold ideas are born and technological leaps occur in times of great difficulty.

We believe Japan's superior technology and human resources will shine most brightly if the country decides that the road to growth lies in doing away with nuclear power generation.

Even within the government's Industrial Competitiveness Council, which is discussing the economic growth strategy, some members from the private sector are reportedly voicing caution against any hasty reversion to the traditional reliance on nuclear energy.

There is still time before the Abe administration finalizes its economic growth strategy. We want it to be of a nature that will give us hope for the future.

--The Asahi Shimbun, June 1

OK... but only if Oi No.1 and No.2 are not restarted

June 12, 2013

Safety measures to delay restarts of 2 Oi nuclear reactors

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201306120042

THE ASAHI SHIMBUN

Revised plans to build an emergency response center for the only two nuclear reactors running in Japan will delay the restarts of two other reactors at the power station, the plant's operator said.

Kansai Electric Power Co. said it will set up the makeshift response center at the Oi nuclear plant in Fukui Prefecture to deal with potential accidents at the currently online No. 3 and No. 4 reactors.

But the emergency center will be located next to the central control room--a key safety facility--for the now-idle No. 1 and No. 2 reactors. Under the instructions of the Nuclear Regulation Authority, these reactors will likely remain offline until the first half of fiscal 2015, when construction of the permanent center is complete.

Kansai Electric presented the plan to the NRA on June 11 in a meeting in Tokyo to discuss whether the No. 3 and No. 4 reactors meet new safety regulation standards that will take effect in July.

Under the new standards, emergency response centers for nuclear reactors must be housed in seismically isolated buildings. The Oi plant's current emergency response center fails to meet those standards.

Kansai Electric plans to build a quake-proof control center building at the Oi plant, but it needs a temporary facility to house the emergency center in the meantime.

The utility initially proposed housing the emergency center in a conference hall next to the central control room for the No. 3 and No. 4 reactors. But the NRA said the location does not qualify as a base for dealing with potential problems at the No. 3 and No. 4 reactors.

That led Kansai Electric to propose the use of the conference hall next to the central control room for the No. 1 and No. 2 reactors. The NRA has given its basic endorsement to the plan on condition that the No. 1 and No. 2 reactors remain idled.

If no key safety problems are found, the No. 3 and No. 4 reactors will continue to run until they are shut down for regular inspections in September.

They will have to pass safety screenings based on the new regulation standards if they are to be reactivated.

Push to restart MOX facilities

June 15, 2013
Utilities seek resumption of plutonium-thermal power generation

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201306150055

THE ASAHI SHIMBUN

Two utilities in western Japan will seek permission to restart reactors for plutonium-thermal power generation, a key part of a program touted by the government but plagued by safety concerns and local opposition.

Kansai Electric Power Co. plans to apply for restarts of its No. 3 and No. 4 reactors at the Takahama nuclear plant in Fukui Prefecture while Shikoku Electric Power Co. is eyeing a restart of the No. 3 reactor at the Ikata nuclear plant in Ehime Prefecture.

The requests will be made in July in their applications to restart idle nuclear reactors. The Nuclear Regulation Authority's new safety standards for reactors will take effect in the same month.

The "pluthermal" process consumes mixed-oxide fuel, which contains plutonium extracted from spent nuclear fuel, to generate power.

Kansai Electric is currently running the only two of Japan's 50 nuclear reactors that are online—the No. 3 and No. 4 reactors at the Oi nuclear plant, also in Fukui Prefecture.

The two reactors are expected to go offline in September for regular inspections. The utility says these reactors already meet the new safety standards, and it will apply to resume their operations.

A new shipment of processed mixed-oxide fuel is expected to arrive at the Takahama plant from France later this month.

"Our application will be one that takes account of the use of mixed-oxide fuel," Makoto Yagi, president of Kansai Electric, said at a June 14 news conference, although he did not elaborate on whether his company would actually resume the plutonium-thermal process. "We will make a decision based on the understanding of the local communities."

Shikoku Electric said the plutonium-thermal process was active at the No. 3 reactor at the Ikata plant before it was shut down in April 2011.

"We did generate power (with the plutonium-thermal process) for 14 months," a Shikoku Electric representative said. "Safety remains our foremost priority."

However, some experts doubt the safety of the plutonium-thermal process, saying the use of mixed-oxide fuel reduces the effectiveness of control rods that suppress fission in nuclear reactors.

The NRA is expected to examine the appropriateness of safety measures to deal with potential accidents during the use of mixed-oxide fuel.

Behind the expected requests of Kansai Electric and Shikoku Electric is a surplus of plutonium reserves from Japan's stalled nuclear fuel cycle policy.

As a key part of the nuclear fuel cycle project, the plutonium-thermal process was supposed to have been implemented at 16 to 18 nuclear reactors across Japan.

But opposition by communities hosting nuclear reactors has allowed actual operations at only four reactors--the No. 3 reactor at Takahama; the No. 3 reactor at Ikata; the No. 3 reactor at the Fukushima No. 1 nuclear plant; and the No. 3 reactor at the Genkai nuclear plant in Saga Prefecture.

The March 2011 meltdowns at the Fukushima No. 1 nuclear plant further strengthened the opposition of host communities.

In addition, some existing nuclear reactors are expected to be labeled unsafe and inoperable after the new regulation standards are applied.

Observers said utilities are eager to continue with the plutonium-thermal process, even if doing so would fall far short of attaining the initial goals of the project.

Although uncertainties surround the fuel cycle project, especially after the Fukushima nuclear accident, the central government has maintained its initial stated goal of reprocessing, or extracting plutonium from, all of Japan's spent nuclear fuel. But Japan is now stuck with growing stockpiles of plutonium with the reactors offline.

The international community discourages nations from possessing excess plutonium for fear it could be used to build nuclear weapons.

The Japan Atomic Energy Commission said utilities and other entities in the country possess about 45 tons of plutonium reserves both in Japan and abroad, including products from reprocessing overseas. That figure is prominently large for a nation that does not possess nuclear weapons.

(Toshio Kawada contributed to this article.)

What's "Pluthermal"?

http://www.greenaction-japan.org/modules/english0/index.php?id=5

What is "Pluthermal" ?

"Pluthermal" is a Japanese word which combines two English words, "plutonium" and "thermal". Pluthermal refers to the utilization of 'plutonium' fuel in commercial ('thermal') nuclear power plants. The fuel is commonly referred to as plutonium uranium mixed oxide fuel, or MOX fuel. Japanese government policy calls for electric utilities to use MOX fuel in 16-18 nuclear power plants by the year 2010.

Japan's pluthermal program was originally scheduled to get under way by the end of 1999. However the falsification of quality control data for Japanese MOX fuel by the British fuel manufacturer BNFL in December 1999, a referendum in Kariwa village in Niigata Prefecture held in May 2001, and an on-going energy policy review by the Fukushima Prefecture government have prevented MOX fuel from being loaded at any of the nuclear power plants thus far.

Why have a Pluthermal Program?

A decade ago, the pluthermal program was called an interim program, a 'bridge' to consume plutonium until fast breeder reactors were developed for full-scale plutonium utilization. However, since the 1995 accident at the prototype fast breeder reactor Monju, Japan's fast-breeder reactor development program has come to a standstill, and there are no concrete plans to build a commercial fast-breeder reactor in sight.

Over the last several years the government and electric utilities have argued that the pluthermal program is a method of recycling precious resources. They claim that it is in Japan's best interest to extract the uranium and plutonium contained in spent nuclear fuel rather than directly disposing of it as some countries do. The argument used is that Japan is an energy poor country which needs to conserve uranium resources and use plutonium for energy security purposes.

Recently promoters of the pluthermal program have begun to argue that the program is also necessary in order to reduce the amount of surplus plutonium accumulated as a result of overseas reprocessing.

Since mid- 2001, the Japanese government and electric utilities have put forward yet another argument for the pluthermal program. They claim that without the pluthermal program Japanese nuclear power plants would be unable to continue to produce power. The government and electric utilities are threatening residents who live near nuclear power plants and the general public by telling them that opposing the pluthermal program will force reactor shutdowns because without this program spent nuclear fuel will not be able to be sent to the Rokkasho Reprocessing Plant.

Status of MOX fuel utilization

Reactor	Prefecture	Intended Start-up Date	Reason for delay	Kansai Electric
Takahama Unit 4	Fukui	Dec.99	BNFL falsified quality control data	Tokyo Electric
Fukushima Daiichi Unit 3	Fukushima	Dec.99	governor objection and energy policy review	Tokyo Electric
Kashiwazaki-Kariwa Unit 3	Niigata	Feb.00	citizens object to MOX fuel use through a local referendum	**Utility**

In all three prefectures scheduled to use MOX fuel (see above), there is considerable opposition to the use of the fuel. However, in spite of this wide-spread opposition, the utilities and the government continue to promote the program without the consent of the local residents.

What is Wrong with the Pluthermal Program?

The use of MOX fuel increases the risk and severity of a nuclear accident. When using MOX fuel, the control rods' capacity to function is reduced and power output is less stable and harder to control. The Japanese government claims that there has been many years of MOX fuel utilization experience in Europe, but fails to inform the Japanese public that experience with MOX fuel is minimal when compared to uranium fuel. Importantly, the government fails to inform the public that the scale of MOX fuel use in Japan will be unprecedented. There will be a higher concentration of plutonium in the fuel, a higher burn-up rate ---experimentation has shown that there are serious safety concerns with high burn-ups, and no reactor adaptations such as increasing the number of control rods.

Does Japan really need the Pluthermal Program?

Although the government and utilities claim that the pluthermal program would recoup precious resources and is therefore necessary for securing Japan's energy supply, the actual quantity of uranium saved would be negligible, and the cost of fabricating and shipping MOX fuel is far greater that uranium fuel.

As for addressing the problem of the surplus Japanese plutonium in Europe, it would make much more sense to immobilize it rather than burn it as MOX fuel while reprocessing even greater quantities of plutonium from the spent nuclear fuel.

The real need for the Pluthermal Program

Then why have the Pluthermal Program? Although plutonium is a major liability for electric utilities, the pluthermal program remains in place because at present reprocessing facilities are the only place for Japanese electric utilities to send their spent nuclear fuel. Failing to carry out the pluthermal program would imply that there is no need for plutonium, thereby making the Rokkasho Reprocessing Plant now being constructed in Aomori Prefecture unnecessary.

This would then leave the utilities with no place to send their spent nuclear fuel. If this were to happen, some of the reactors at nuclear power plant sites would have to be shut down since there would be no space to store the used fuel coming out of them.

Clearly, reprocessing and the pluthermal program are little more than a makeshift solution for Japan's nuclear waste disposal problems.

Kashiwazaki - Restart or not restart?

June 17, 2013

TEPCO mulls putting off application to restart Kashiwazaki-Kariwa nuke plant

http://mainichi.jp/english/english/newsselect/news/20130617p2a00m0na013000c.html

Tokyo Electric Power Co. (TEPCO) is mulling putting off its application for safety screening of the Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture until a plan to restart the plant gains local approval, it has been learned.

TEPCO started considering the postponement of its application with the Nuclear Regulation Authority (NRA) on June 17, despite the utility's earlier plans to file the application for safety equipment screening even without approval from Niigata Prefecture. With the implementation of the new regulatory standards for nuclear plant safety set for early July, multiple power companies are expected to file screening applications with the NRA for resumption of their nuclear plants.

While TEPCO's turnaround is apparently aimed at avoiding fueling prefectural opposition through a hasty decision, the utility -- the operator of the stricken Fukushima No. 1 Nuclear Power Plant -- is highly likely to miss out on a chance to join the first batch of applicants for NRA screenings, which possibly include Kansai Electric Power Co. and Shikoku Electric Power Co.

For a power company to restart a nuclear plant, it needs to gain approval from local municipalities based on their safety accord after passing NRA screening on whether the facility conforms to the new standards. Previously, TEPCO had considered applying for safety screening right after the July implementation of the new standards while gaining local approval concurrently. Foundation work has already been under way to install filtered vent systems at the plant's No. 1 and No. 7 reactors -- a necessary step to restart the facility.

Niigata Gov. Hirohiko Izumida, however, has voiced opposition to the plan, saying, "Verifications of the Fukushima No. 1 nuclear plant disaster should come first." On June 12, the governor insisted that TEPCO needs to gain prior approval from the prefecture and other entities to install the vent systems, saying, "Even though (filtered) vents are intended to reduce radioactive material emissions, they are inherently designed to emit such materials outside. There's no way the utility can win our trust without explaining how it is going to operate them."

Under the new standards, utilities can apply for safety screenings even if vent systems are not installed in time, as long as they are planning to install them. However, the Niigata Prefectural Government is certain to fiercely oppose such applications. If that is the case, a plan to restart the Kashiwazaki-Kariwa complex would further be delayed, prompting TEPCO to procrastinate its application with the NRA until it is expected to gain prior approval from the prefecture.

In its rehabilitation plan, TEPCO had envisaged improving its earnings by reactivating the Kashiwazaki-Kariwa plant as early as the start of fiscal 2013. Now that the utility is uncertain when to apply for safety screenings, its promise to financial institutions to turn itself profitable this fiscal year may need to be reviewed. While TEPCO raised electricity rates in September last year, the utility is likely to be forced to decide whether to further raise the rates to improve its earnings.

Since there is a limited capacity to NRA's screenings, a delay in applying for safety screenings means a further delay in restarting a nuclear plant.

June 17, 2013(Mainichi Japan)

Tomari, Oi &Takahama, Ikata, Genkai, Sendai

June 18, 2013

Nuclear plants to seek restart under new guideline

http://www3.nhk.or.jp/nhkworld/english/news/20130618_29.html

Six nuclear power plants will apply for restart under new safety guidelines to be adopted by the country's nuclear regulators on Wednesday.

The Nuclear Regulation Authority is expected to implement a new set of rules that oblige power companies to put in place measures to deal with serious accidents. Until now, such measures had been deemed voluntary.

Utilities will also be asked to draw up safety scenarios for bigger earthquakes and higher tsunami.

NHK has learned through interviews with 10 Japanese power companies that 6 nuclear plants are preparing to apply for resumption of operation as soon as the new guidelines go into effect on July 8th. The plants are Tomari in Hokkaido, Ohi and Takahama in Fukui Prefecture, Ikata in Ehime Prefecture, Genkai in Saga Prefecture and Sendai in Kagoshima Prefecture.

All 6 have pressurized water reactors, a relatively new type of reactor. The stricken Fukushima Daiichi plant uses older boiling water reactors.

The nuclear regulatory body has said screening of applications will take about 6 months. Reactor restarts would also require a go-ahead from local communities.
Jun. 18, 2013 - Updated 07:43 UTC

Six this morning... 12 tonight

June 20, 2013

Utilities to apply to restart 12 reactors at 6 nuclear plants

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201306200069

THE ASAHI SHIMBUN

Four utilities are planning to apply for permission to restart 12 reactors at six nuclear power plants across Japan as soon as a set of new safety requirements, approved June 19 by the Nuclear Regulation Authority, enter into force on July 8.

Ten of the 12 reactors are idle. The other two are running, but are expected to go offline for regular inspections in September.

With the Nuclear Regulation Authority expected to need about six months for screening the restart applications, the first of their kind, it appears unlikely any of the reactors will be brought back online by the end of this year.

The applications are being prepared for reactivating the No. 1, No. 2 and No. 3 reactors at Hokkaido Electric Power Co.'s Tomari nuclear plant; the No. 3 and No. 4 reactors at Kansai Electric Power Co.'s Oi nuclear plant in Fukui Prefecture; the No. 3 and No. 4 reactors at Kansai Electric's Takahama nuclear plant, also in Fukui Prefecture; the No. 3 reactor at Shikoku Electric Power Co.'s Ikata nuclear plant in Ehime Prefecture; the No. 3 and No. 4 reactors at Kyushu Electric Power Co.'s Genkai nuclear plant in Saga Prefecture; and the No. 1 and No. 2 reactors at Kyushu Electric's Sendai nuclear plant in Kagoshima Prefecture.

They are all pressurized water reactors, different in type from the crippled boiling water reactors at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant. Pressurized water reactors have been granted a five-year grace period for installing filtered venting equipment for suppressing the discharge of radioactive substances during a severe accident.
They are all relatively new, being in service for less than 30 years, which makes it easier for them to meet the revised safety requirements.

Some experts have argued that a geological fault line running across the premises of the Oi plant may be active. The debate could protract the safety screenings for the No. 3 and No. 4 reactors at Oi, which are the only two of Japan's 50 nuclear reactors that are currently up and running.

Once the two Oi reactors go offline in September, there will be no active nuclear reactors in Japan, as was the case between May through July 2012. That was the first time since 1970 that such a situation had occurred.

Kyushu Electric could delay the restart applications for the No. 3 and No. 4 reactors at Genkai, where retrofitting work is expected to last through September. Observers say the No. 3 reactor at Ikata faces the fewest technical hurdles to a restart of all 12 reactors being considered for reactivation.

Leaders of local governments that host reactors being considered for early restarts have hailed the official endorsement of the reinforced safety requirements.

"Rigorous safety standards have been set on the basis of up-to-date knowledge and the lessons learned from the Fukushima nuclear disaster," said Kazuhiko Yamashita, mayor of Ikata, where the Ikata nuclear plant is located.
"We are one step higher on a flight of steps to a restart," said Hideo Iwakiri, mayor of Satsumasendai, home to the Sendai nuclear plant.

But critics have said the new safety requirements are not enough.

"I can hardly believe lessons were learned from the Fukushima nuclear disaster," said Hirohiko Izumida, governor of Niigata Prefecture, which hosts Tokyo Electric's Kashiwazaki-Kariwa nuclear plant. He pointed out the new regulation standards do not clearly define who should make decisions to deal with a potential nuclear accident, such as whether to pump in seawater to cool down an overheating reactor.

"The central government has to make up for the shortcomings, including by amending laws and regulations," Izumida added.

The Citizens' Commission on Nuclear Energy, which organizes researchers and civil advocacy groups, submitted a 10-item emergency recommendation to the Cabinet Office and the Nuclear Regulation Authority on June 19.

"The new regulations have been pushed through under political pressure, and are questionable in so many points," said Harutoshi Funabashi, a Hosei University sociology professor who chairs the organization.
(Ryuta Koike and Jin Nishikawa contributed to this article.)

Are PWR safer?

June 20, 2013

Utilities set to apply for screening of pressurized-water reactors under new safety rules

http://mainichi.jp/english/english/newsselect/news/20130620p2a00m0na012000c.html

The Nuclear Regulation Authority announced on June 19 its new nuclear reactor safety requirements, which are aimed at averting disasters like that which hit the Fukushima No. 1 Nuclear Power Plant.

The NRA will begin accepting applications for permission to reactivate idled nuclear reactors on July 8, when the new regulations take effect after receiving Cabinet approval. Based on the results of the Mainichi's inquiries into 10 power companies nationwide, four utilities are expected to submit applications for a total of 12 reactors at six nuclear power stations by the end of July.

Numerous pressurized-water reactors (PWRs) mostly in western Japan are a different type than those which existed at the troubled Fukushima No. a plant. Because utilities will be given a longer time under the new regulations to implement some of the required safety measures for PWRs than for other types of reactors, more applications will likely be filed from power firms in western Japan than in eastern Japan. In addition to the new regulations, the 40-year operational limit for all nuclear reactors nationwide will in principle take effect simultaneously. Therefore, the overall process to drop aging reactors will gain momentum.

The 12 nuclear reactors for which the four utilities are expected to apply for the NRA safety screening are as follows: reactors Nos. 1 to 3 at the Tomari Nuclear Power Plant in Hokkaido (Hokkaido Electric Power Co); reactors Nos. 3 and 4 at the Takahama Nuclear Power Plant, and reactors Nos. 3 and 4 at the Oi Nuclear Power Plant in Fukui Prefecture (Kansai Electric Power Co.); the No. 3 reactor at the Ikata Nuclear Power Plant in Ehime Prefecture (Shikoku Electric Power Co.); reactors Nos. 3 and 4 at the Genkai Nuclear Power Plant in Saga Prefecture, and reactors Nos. 1 and 2 at the Sendai Nuclear Power Plant in Kagoshima Prefecture (Kyushu Electric Power Co.). All of the reactors are PWRs that had been in operation for less than 30 years. There are a total of 24 PWRs in the country, mainly in western Japan. Under the new regulations, power companies are given five years to equip their PWRs with filtered venting systems designed to prevent the outflow of radioactive substances into the atmosphere.

There are 26 boiling water reactors (BWRs) in the country that are the same type as those of the troubled Fukushima reactors. The cubic content of the BWR's containment vessel is smaller than that of the PWR, and it could plunge into a critical situation quickly due to increased pressure in the vessel. Therefore, no grace period is given under the new regulations to equip BWRs with filtered venting systems. Tohoku Electric said it was not sure when and whether it would be able to apply for safety screening for BWR reactors at its Higashidori Nuclear Power Plant in Aomori Prefecture and its Onagawa Nuclear Power Plant in Miyagi Prefecture.

Tokyo Electric, Hokuriku Electric, Chubu Electric, Chugoku Electric and Japan Atomic Power Co. (JAPC) all said that it was too early to say when they could apply for the safety screening. It costs billions of yen to install a filtered venting system, and with the exception of the No. 2 reactor at JAPC's Tsuruga Nuclear Power Plant, all of their reactors are BWRs. Clearly, the types of reactors will affect the outcomes of safety screenings.

The NRA will set up three teams within its secretariat to conduct the screenings. If the regulators determine that the reactors meet the new safety requirements, the government will decide whether to reactivate them after securing the consent of concerned local municipalities. The new regulations will also oblige power companies to take measures to deal with severe accidents. Previously, such measures had only to be undertaken as "voluntary efforts." The new regulations will also require utilities to set up "specific safety facilities" to be used to cool down reactors by remote control in case of disaster.

The new regulations will forbid power firms from setting up key facilities such as reactor buildings directly above active faults. The regulations will ask operators of nuclear power plants to conduct surveys, if necessary, regarding whether faults have moved during the past 400,000 years -- as opposed to the past stipulation of 120,000- 130,000 years. In addition, power firms will be required to beef up measures against fires, including the replacement of flammable cables that are often seen in aging reactors. A 40-

year operational limit for all nuclear reactors will also be introduced, and extension of this period will require a widened scope of inspections.

"Electric power companies will likely emphasize cost-effectiveness, and make capital investments in younger nuclear reactors with larger power output," commented Takuya Hattori, president of the Japan Atomic Industrial Forum Inc. (JAIF).

NRA Chairman Shunichi Tanaka said during a news conference on June 19, "There will be clashes (between the NRA and power companies) over the screening outcomes."

Restart asap

June 26, 2013

9 utilities want to restart idled reactors as soon as possible

http://ajw.asahi.com/article/economy/business/AJ201306260059

THE ASAHI SHIMBUN

Nine regional electric power companies said on June 26 that they want to restart the operations of their idled nuclear reactors at the earliest possible date

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The companies, which include Tokyo Electric Power Co., operator of the crippled Fukushima No. 1 nuclear power plant, declared their “pro-nuclear” stances in their annual shareholders’ meetings.

Of the nation's 10 regional utilities, Okinawa Electric Power Co. is the only one that does not operate a nuclear reactor.

“It is vital to continue to use nuclear power as an important source of electricity after thoroughly taking safety measures,” said Akihisa Mizuno, president of Chubu Electric Power Co., based in Nagoya.

The comment signals Chubu Electric's intent to seek the resumption of operations of reactors at its Hamaoka nuclear power plant in Shizuoka Prefecture.

Currently, 48 of the nation's 50 nuclear reactors are offline as a consequence of the accident at the Fukushima No. 1 nuclear power plant following the March 11, 2011, Great East Japan Earthquake and tsunami. The only two reactors currently operating are Kansai Electric Power Co.'s No. 3 and No. 4 at the Oi nuclear power plant in Fukui Prefecture.

Of the nine utilities with nuclear power plants, four plan to apply to the Nuclear Regulation Authority to restart 12 nuclear reactors soon after new stricter safety standards take effect on July 8.

The four are Kansai Electric, Hokkaido Electric Power Co., Shikoku Electric Power Co. and Kyushu Electric Power Co.

"It is essential that we restart operations of the Tomari nuclear power plant to stabilize our management and supply electricity in a stable manner," said Hokkaido Electric President Katsuhiko Kawai.

Pluthermal spells problems for Japan

June 28, 2013

ANALYSIS: Negatives abound for Japan's 'pluthermal' power generation plans

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201306280076

THE ASAHI SHIMBUN

It doesn't appear Japan's troubled plutonium-thermal (pluthermal) power generation program is going to see the light at the end of the tunnel anytime soon.

The utilities are being forced to continue using the pluthermal process because it constitutes a key component of Japan's nuclear fuel recycling program.

Past problems have delayed the reprocessing of spent nuclear fuel, and some utilities face the possibility of having to halt their nuclear plant operations, even if they are allowed to restart idled reactors, because they simply have no place to store the spent fuel.

In addition, the utilities have poured trillions of yen into the nuclear fuel recycling program with little to show for it.

The problem of where to store spent nuclear fuel has major ramifications for not only the electric power companies.

A total of 14,200 tons of spent fuel were being kept at storage pools at nuclear plants around Japan as of the end of September 2011. That figure represents about 70 percent of the total capacity of the storage pools.

As a stopgap measure, the government decided on a less-than-desirable process called pluthermal, which uses mixed-oxide fuel or MOX (plutonium extracted from spent fuel), to generate electricity in conventional light water reactors.

A key to Japan's future storage plans has always been the spent nuclear fuel reprocessing plant in Rokkasho, Aomori Prefecture. But the government never envisioned the problems that have plagued the facility.

Under initial plans, Japan Nuclear Fuel Ltd. was to have completed construction of the reprocessing plant in 1997. However, a total of 19 test runs have failed, and the facility has not been completed.

Nearly 3,000 tons of spent fuel is already being stored at Rokkasho, which is close to capacity. Once that reprocessing plant begins operations though, it's expected to be able to handle 800 tons of spent fuel annually, freeing up more storage space.

Until then, electric power companies are scrambling to find alternatives for their spent nuclear fuel, including the construction of intermediate storage facilities. On June 26, Kansai Electric Power Co. established a project team to study the feasibility of constructing such a facility.

MOX fuel is problematic in other ways. Kansai Electric accepted a shipment of the fuel on June 27 for use in a pluthermal reactor at its Takahama nuclear power plant in Fukui Prefecture.

But even if the pluthermal reactor is allowed to resume operations, Kansai Electric faces another potential headache, which is what to do with the spent MOX fuel. MOX fuel generates large amounts of heat, creating handling problems.

The plutonium that results from the processing of MOX fuel also presents another dilemma: the production of nuclear weapons.

An ever-increasing stockpile of the nuclear fuel could raise eyebrows in a world already concerned over nuclear proliferation and the production of weapons of mass destruction

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Japan currently has 44.3 tons of plutonium in storage at home and abroad.

Another problem is that the accident at the Fukushima No. 1 nuclear power plant in March 2011 following the Great East Japan Earthquake and tsunami turned public opinion sharply against nuclear power, meaning a continuation of the pluthermal generation process will likely face many difficulties.

Long before that disaster, the government plan was to extract plutonium from spent nuclear fuel using a fast-breeder reactor. All that went up in smoke, though, after sodium leaked from the Monju prototype reactor in 1995.

Financing is also a concern. The pluthermal program has been nothing but an economic nightmare for the utilities.
Not only have the utilities poured trillions of yen into the nuclear fuel recycling program, the cost of MOX fuel is between seven to eight times more expensive than the uranium fuel normally used in nuclear reactors.

A major reason is spent fuel has to be shipped to France for reprocessing before it is shipped back to Japan as MOX fuel.

According to trade statistics compiled by the Finance Ministry, **each fuel assembly transported to the nuclear plant in Takahama in 2010 costs 880 million yen ($9 million).**

The justification until now for paying the higher prices has been to maintain the nation's nuclear fuel recycling program.
The nine electric power companies that operate nuclear plants and Japan Atomic Power Co. have set aside funds for use in reprocessing spent fuel once the plant begins operations, in addition to paying for tests at the facility.

By March 2012, a total of 3.6 trillion yen had been paid to the Radioactive Waste Management Funding and Research Center for the reserve that will be used once operations begin at the Rokkasho facility.

The power companies have also made advance payments to Japan Nuclear Fuel for future reprocessing as a means of propping up that company.

So far, a total of 1.1 trillion yen has been paid. The total cost to the 10 companies comes to 6.6 trillion yen.

What remains clear, is that even if the Rokkasho facility begins operations, it will not be cost-effective.

The Federation of Electric Power Companies of Japan in 2003 estimated a total of 19 trillion yen would be needed over a 40-year period for the reprocessing program there.

However, that covers the reprocessing of MOX fuel of an amount equivalent to uranium fuel worth 900 billion yen. The major reason for the price discrepancy is only 1 percent of plutonium can be extracted from spent nuclear fuel to create MOX fuel.

But as is usually the case, in the end, it will be consumers who will bear the huge costs that have resulted from the massive problems plaguing Japan's nuclear industry in the form of higher electric bills.

(This article was compiled from reports by Toshio Kawada, Rintaro Sakurai, Shin Matsuura and Mari Fujisaki.)

see also :

June 27, 2013

Japan unlikely to use MOX fuel in nuclear reactors

http://mainichi.jp/english/english/newsselect/news/20130627p2a00m0na014000c.html

TEPCO wants to restart Kashiwazaki Kariwa

03.07.2013_No167 / News in Brief

Tepco To Apply For Restart Of Kashiwazaki Kariwa Units 'As Soon As Possible'

Plant Operation
http://www.nucnet.org/all-the-news/2013/07/03/tepco-to-apply-for-restart-of-kashiwazaki-kariwa-units-as-soon-as-possible

3 July (NucNet): Tokyo Electric Power Company (Tepco) has announced that it will apply for the restart of units 6 and 7 at the seven-unit Kashiwazaki Kariwa nuclear plant "as soon as possible".
Japan's nuclear regulator announced new safety guidelines last month that will have to be met before any reactors can be restarted. The guidelines come into effect on 8 July and applications for restarts will begin to be accepted on the same day.

In a statement, Tepco said it has been implementing new safety measures based on the lessons learned from the March 2011 accident at the Fukushima-Daiichi nuclear plant.

Tepco will also consult on the restart of the units with Niigata prefecture, where the Kashiwazaki Kariwa plant is located, some 220 kilometres northeast of Tokyo.

Tepco said it wants to continue communication with Niigata prefecture and local districts to ensure that the population develops a nuclear safety culture and understands the enhancement measures being carried out for nuclear plants.

Units 6 and 7 at the plant are both 1,315-megawatt boiling water reactors. Unit 6 began commercial operation in November 1996 and Unit 7 in July 1997.

In May 2012, Tepco announced that it would return to profit in 2013 if it was allowed to bring the Kashiwazaki Kariwa plant back online. It suffered a 685.3 billion yen (6.9 billion US dollars, 5.3 billion euros) loss in 2012.

In March 2013, Japan's prime minister Shinzo Abe said nuclear reactors will be restarted only if it is proven safe to do so.

Japan has 50 commercial nuclear reactors, only two of which, Ohi-3 and Ohi-4, have been restarted since the Fukushima-Daiichi accident.

In July 2007, Kashiwazaki Kariwa was struck by an earthquake that led to the automatic, safe shutdown of units 3, 4 and 7. Units 1, 5 and 6 were already shut down at the time of the earthquake for periodic inspections.

4 utilities (10 reactors) apply for restart

July 5, 2013

4 utilities to file for procedures to restart some reactors

http://mainichi.jp/english/english/newsselect/news/20130705p2g00m0dm072000c.html

TOKYO (Kyodo) -- Four utilities said Friday they will apply to the Nuclear Regulation Authority to have 10 of their reactors confirmed safe enough to restart operations, when new nuclear regulations take effect on Monday.

Hokkaido Electric Power Co. said it will make the application for the Nos. 1 to 3 reactors at the Tomari nuclear power plant, while Kansai Electric Power Co. will apply for a safety examination of the Nos. 3 and 4 reactors at its Oi complex and the Nos. 3 and 4 reactors of the Takahama complex, both in Fukui Prefecture.

Shikoku Electric Power Co. has also applied for an assessment of the No. 3 reactor at the Ikata complex in Ehime Prefecture.

Kyushu Electric Power Co. made the first step toward the application for the Nos. 1 and 2 reactors at the Sendai plant in Kagoshima Prefecture, and said it may also file with the NRA to restart the Nos. 3 and 4 idled reactors at the Genkai plant in Saga Prefecture on July 12, utility officials said.

The NRA is set to check the safety of reactors in accordance with new regulations after accepting applications from Monday.

The authority asked utilities to inform them by 3 p.m. Friday if they were going to apply on Monday so it could avoid a rush of applications from those eager to restart their reactors.

Following the NRA's safety checks, the government will make a final decision on whether the reactors can restart.

TEPCO's plan to restart "deplorable"

July 5, 2013

Irrational reactor restart plan

http://www.japantimes.co.jp/opinion/2013/07/05/editorials/irrational-reactor-restart-plan/#.UdhsKKxSb9k

Tokyo Electric Power Co. said Tuesday that it will ask the Nuclear Regulation Authority to examine the Nos. 6 and 7 reactors at its Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture for a possible restarting under the NRA’s new safety regulations that will take effect Monday.

Tepco's reactor restart plan is deplorable because it comes at a time when it is making scant progress in its efforts to safely shutter its stricken Fukushima No. 1 nuclear power plant, clean up contaminated areas, compensate victims and determine the causes of the crisis.

Given that Tepco's gross mismanagement of the Fukushima crisis, people are questioning whether Tepco is qualified to operate a nuclear power plant. In the past months, Fukushima No. 1 has suffered a series of contaminated water leaks, and 150,000 people from Fukushima Prefecture are still forced to live away from their homes because their communities remain contaminated.

Tepco executives must realize that they have done nothing to regain people's trust, but they do not seem to care. They did not even have the courtesy to give Niigata Prefecture Gov. Hirohiko Izumida advance notice about the restart plan. His criticism of their actions is most understandable.

Tepco is basically employing blackmail tactics in filing its request with the NRA. It effectively asserts that if the reactors are not restarted, it will have no choice but to further raise electricity fees. Tepco suffered a net loss of ¥685.2 billion in the business year that ended March 31. It is reported that operating one reactor will improve its income and expenditure balance by ¥100 billion a year. But the decision to restart the reactors appears to be short-sighted.

The safety measures that are required under the new regulations will be costly to implement. Since the two reactors at the Kashiwazaki-Kariwa plant are boiling light water reactors — the same type as the Fukushima No. 1 reactors — the safety regulations are more severe than those for pressurized light water reactors. They include the immediate installation of filters to remove radioactive substances when such substances are vented from reactor cores in an emergency.

It is also suspected that a geological fault under a reactor building in the Kashiwazaki-Kariwa plant is active. If the NRA determines that it is active and then calls for the decommissioning of the plant's reactors, Tepco will have wasted a huge sum on safety upgrades. Even if the plant passes the NRA's safety examination, Tepco's expenditures for the disposal of accumulated spent nuclear fuel will increase, and the power company is also facing rising costs associated with the cleanup of the stricken Fukushima plant, decontamination efforts and compensation.

The experience in Europe shows that it is cheaper and less risky to operate numerous small-scale renewable electricity sources spread across a country rather than a small number of large nuclear power plants. Since the Kashiwazaki-Kariwa plant has seven reactors, one accident could shut down the entire plant. Tepco has no financial means to cope with a new nuclear disaster. Its reactor restart plan is irrational both economically and socially.

Winning local understanding - Has TEPCO forgotten?

July 6, 2013

Editorial: TEPCO must not automatically assume that its nuclear reactors can be restarted

http://mainichi.jp/english/english/perspectives/news/20130706p2a00m0na008000c.html

Tokyo Electric Power Co. (TEPCO) President Naomi Hirose failed to impress Niigata Gov. Hirohiko Izumida during their July 5 meeting in connection with the utility's bid to restart reactors at the Kashiwazaki-Kariwa Nuclear Power Plant in Niigata Prefecture.

The cold response comes as no surprise, as the utility acted rudely by failing to provide an explanation to locals before announcing that it would file for a safety assessment from the Nuclear Regulation Authority (NRA) to restart the reactors.
TEPCO is hurrying to start the reactors again because its business plans have come to an impasse. The government bears heavy responsibility for this situation, as it allowed the power company to adopt an unreasonable business plan built on the premise of putting the reactors back into use.

TEPCO seeks a safety assessment of the No. 6 and 7 reactors at the seven-reactor Kashiwazaki-Kariwa plant -- a necessary step in ensuring that they meet new safety regulations. Even if the company were to force through a safety assessment application without prior approval from the prefecture, however, it would still need to obtain approval from local bodies to restart the reactors. By going over local officials' heads with its latest announcement, TEPCO has only ended up raising the hurdle to restart the reactors.

In the past, Hirose had reiterated that the power company would work on the premise of winning local understanding. TEPCO's dire financial situation, however, resulted in its announcing over the heads of locals that it would seek the safety assessments. Last fiscal year, the power company registered a pretax loss for the second year in a row -- a result of increased fuel costs for the thermal power plants that it has fired up to compensate for suspending operations at its nuclear plants. The company's losses do not include the compensation that TEPCO must pay for the disaster that befell its Fukushima No. 1 nuclear plant.

Last year, TEPCO raised electricity prices on the assumption that the company's nuclear reactors would be fired up in succession beginning this fiscal year. If that assumption crumbles, and TEPCO registers a loss for the third consecutive business year, then banks could sever their loans to the utility. TEPCO

believes that to return to the black without further increasing electricity rates, it has no option but to reactivate its nuclear reactors.

The four main power companies in the Hokkaido, Kansai, Shikoku and Kyushu regions plan to seek safety assessments for 12 nuclear reactors. Considering the screening capacity of the NRA, reactor assessments are likely to be delayed for a year or more among those companies that fail to make it into the first round of screening. Under such circumstances, it would be no easy task to produce a business plan that could convince banks to keep lending them money.

The boiling water reactors at the Kashiwazaki-Kariwa Nuclear Power Plant are the same type as those at the crisis-hit Fukushima No. 1 Nuclear Power Plant. Furthermore, a geological fault lies directly beneath the plant in Niigata Prefecture. Meanwhile, the Fukushima nuclear disaster has not been brought to a conclusion, and the probe into the cause of the accident is incomplete. TEPCO should know full well that restarting its reactors under such conditions is a difficult task. If TEPCO's aim were simply to portray itself as putting in its "best effort" while knowing the difficulties involved in restarting the reactors, it would be trampling on its relationship of trust with the prefectures. Such a stance is impermissible.

There is no option for TEPCO other than that of drawing up a new business plan that does not lean on the assumption of restarting its reactors. Of course, efforts to further streamline its operations and procure less expensive fuel are necessary. But if TEPCO still cannot survive after all this, it must consider passing its financial burden on to consumers through an increase in electricity prices.

These issues cannot be avoided when aiming for a society that does not rely on nuclear power, as they are tied up with the financial burden that residents must shoulder. The government needs to clarify the role of nuclear power in its energy policy, and aim to win understanding from the Japanese public.

TEPCO forced to delay application for restart

July 6, 2013

Governor’s opposition forces TEPCO to delay restart application

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201307060063

THE ASAHI SHIMBUN

Tokyo Electric Power Co. has been forced to postpone an application for restarting two reactors in Niigata Prefecture due to staunch opposition from the prefectural governor.

TEPCO President Naomi Hirose on July 5 sought to gain support from Governor Hirohiko Izumida for plans to restart the No. 6 and No. 7 reactors at the Kashiwazaki-Kariwa nuclear power plant.

TEPCO had hoped to file an application with the Nuclear Regulation Authority as early as July 8, when new nuclear safety standards take effect.

Izumida refused to approve the plans and criticized TEPCO for making a decision on July 2 to apply for restarting the reactors without offering any explanation to the local community.

Emerging from the 30-minute meeting at the prefectural government office, Hirose told reporters he wants to meet Izumida again to state his case.

Hirose said after he briefed a senior official of the industry ministry about his meeting with Izumida on the evening of July 5 that the setback will make it difficult to file an application on July 8.

"We have entered a thorny path," a senior TEPCO official said. "We may not be able to bring the reactors back online."

At the Kashiwazaki-Kariwa plant, TEPCO is installing filtered venting equipment, which is required under the new safety standards, to release steam from reactor containment vessels in the event of a severe accident.

Izumida told Hirose that TEPCO needs to obtain prior approval for the installation from the local community based on a nuclear safety agreement between TEPCO and the prefecture and two other local governments that host the nuclear plant.

All seven reactors at the plant, which straddles Kashiwazaki city and Kariwa village, have remained offline since March 2012, a year after TEPCO's Fukushima No. 1 nuclear power plant was crippled by the Great East Japan Earthquake and tsunami.

TEPCO, which posted 780 billion yen ($7.78 billion) in combined pretax losses over the past two years, plans to return to the black in the current fiscal year by restarting reactors at the Kashiwazaki-Kariwa plant.

When Izumida said TEPCO is putting profit ahead of safety, a red-faced Hirose said the utility needs to avoid a third consecutive loss.

Izumida emphasized that TEPCO should not file an application without prior approval from the local community.

Hirose said TEPCO plans to consult with the local community after filing an application.

"We think it is possible for the prefecture's technical committee to conduct its checks in parallel with the NRA's safety screening," Hirose said.

But Izumida disagreed. Doing things that way, he said, does not constitute prior approval.

"Only by keeping a promise and not telling a lie can you stand at the starting line," he said.

Hirose also met separately with Kashiwazaki Mayor Hiroshi Aida and Kariwa Mayor Hiroo Shinada on July 5.

While Izumida refused to accept a written request for prior understanding on the installation of filtered venting equipment, both Aida and Shinada had no problem doing so.

Aida and Shinada were later asked to comment on the meeting between Hirose and Izumida.

Aida said he expects TEPCO to take steps so that a relationship of trust will not be damaged, while Shinada questioned Izumida's refusal to accept documents from Hirose.

The nation's 50 nuclear reactors, except for two in Fukui Prefecture, remained offline after the Fukushima nuclear disaster.

Hokkaido Electric Power Co., Kansai Electric Power Co., Shikoku Electric Power Co. and Kyushu Electric Power Co. will apply on July 8 for restarting 10 reactors at five plants, NRA officials said July 5.

Kyushu Electric said it plans to file an application for two additional reactors on July 12.

TEPCO fears that the reactivation of reactors at the Kashiwazaki-Kariwa plant will be substantially delayed if an application is not submitted early.

The pro-nuclear Abe administration was backing TEPCO's plans for restarts.

In its growth strategy adopted in June, the central government said it will make efforts to win the understanding and cooperation of local communities for restarting reactors whose safety has been confirmed by the NRA.

When TEPCO decided at a board meeting on July 2 to apply for restarting the two reactors, industry minister Toshimitsu Motegi said the central government would "come to the fore" to persuade the local community.

A senior ministry official said TEPCO had no choice but to seek restarts because it cannot expect to return to the black soon without restarting the reactors.

If TEPCO incurs a third consecutive loss, banks could suspend additional loans.

"TEPCO needed to show to banks that it is doing whatever it can," the official said.

In Kashiwazaki, the economy has stalled since all the reactors stopped operating at the nuclear plant in March 2012.

"We want the plant to get restarted if it is safe," said the president of an electrical installation contractor, which inspects water meters at the plant. "In the first step, we want an application to be made for safety screening to be carried out."

The number of employees at subcontractors working for the plant fell from 5,448 in March 2012 to 3,829 in June.

A taxi driver in his 50s, who was waiting for a customer in front of the JR Kashiwazaki Station, said he hopes an early restart, noting that, "Business stopped when all the reactors stopped."

But the chief of a neighborhood association in the Shiiya district of Kashiwazaki, 5 kilometers from the plant, is opposed to a restart.

"The local economy is important, but the nuclear plant can threaten our lives," he said.

The 69-year-old said he is concerned what would happen if a geological fault near the plant moves and a large earthquake occurs.

Four utilities, 10 reactors

Four utilities apply for safety examinations of 10 reactors

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201307080099

By JIN NISHIKAWA/ Staff Writer

Four electric power companies applied for safety examinations of 10 reactors on July 8, the day tougher standards took effect to prevent a recurrence of the 2011 Fukushima nuclear crisis.

The new safety rules, imposed by the Nuclear Regulation Authority, are intended to protect reactors from damage caused by natural disasters in this earthquake-prone nation.

The NRA will set up three teams consisting of about 80 members in total for the safety examinations. Each examination, which will include interviews with employees and on-the-spot checks, is expected to take at least about six months to complete.

Utilities can restart reactors that pass the examination if they obtain consent from local governments and approval from the central government.

Shikoku Electric Power Co. and Kansai Electric Power Co. applied for examinations for three reactors that will be used in plutonium-thermal (pluthermal) power generation, which burns mixed oxide (MOX) fuel containing plutonium extracted from spent nuclear fuel.

The new safety rules fall under the Nuclear Reactor Regulation Law and were drafted after the earthquake and tsunami on March 11, 2011, caused the triple meltdown at the Fukushima No. 1 nuclear plant and shattered government assurances that Japanese nuclear plants were safe from natural disasters.

If the NRA concludes that a reactor does not meet the standards, it can order the electric power company to improve certain equipment or continue to suspend the operations.

The NRA introduced the “backfit” system, in which utilities are required to improve or renew existing equipment to meet the latest standards.

The new standards require utilities to install a filtered system to curb emissions of radioactive materials to the outside environment when venting is needed to reduce pressure within a reactor.

The standards also call for the establishment of quake-resistant buildings that can be used as emergency headquarters if a nuclear accident occurs.

The new standards also urge companies to upgrade their measures to deal with tsunami and earthquakes, as well as to minimize damage from terrorist attacks using aircraft.

The NRA as of July 8 also limits the operations of a reactor to 40 years in principle.

A utility wanting to operate a reactor for more than 40 years must not only meet the new standards, but also must inspect in detail possible deterioration at the facility.

Since repair work and upgrades for aging reactors could prove expensive, electric power companies may decide to decommission them instead.

Of Japan’s 50 nuclear reactors, only two are currently online.

The pluthermal reactors that will undergo the examinations are the No. 3 reactor at Shikoku Electric’s Ikata plant in Ehime Prefecture and the Nos. 3 and 4 reactors at Kansai Electric’s Takahama plant in Fukui Prefecture.

The seven other reactors are: the Nos. 1 to 3 reactors at the Tomari nuclear power plant, operated by Hokkaido Electric Power Co.; the Nos. 3 and 4 reactors at Kansai Electric’s Oi nuclear power plant in Fukui Prefecture; and the Nos. 1 and 2 reactors at the Sendai nuclear power plant in Kagoshima Prefecture, operated by Kyushu Electric Power Co.

4 power companies apply to restart reactors

http://www3.nhk.or.jp/nhkworld/english/news/20130708_24.html

New nuclear safety regulations for Japan's power utilities came into effect on Monday. Four utilities have filed applications to the Nuclear Regulation Authority to restart 10 nuclear reactors.

Plant operators are now legally required to take steps to prevent accidents like the one at Tokyo Electric Power Company's Fukushima Daiichi plant in 2011.

The new regulations also require operators to be prepared for more powerful earthquakes and tsunami.

All of Japan's nuclear reactors were halted after the accident at Fukushima. Only 2 has been restarted.

The power companies must conform to the new rules to bring their reactors back online.

Four utilities have filed applications to restart 10 reactors at 5 plants. They are, the Tomari plant run by Hokkaido Electric Power Company, Kansai Electric's Ohi and Takahama plants, Shikoku Electric's Ikata plant, and Kyushu Electric's Sendai plant.

NRA officials say it will take at least 6 months to process an application for each plant.

Operators must also obtain the consent of local communities to restart the reactors.

Kyushu Electric is also expected to apply on Friday to restart the reactors at its Genkai plant.

Tokyo Electric Power Company is still facing opposition from the government of Niigata Prefecture to resume operations at its Kashiwazaki-Kariwa plant.
Jul. 8, 2013 - Updated 02:58 UTC

Japan moving even closer to restart

July 7, 2013

Japan set to restart reactors after nuclear crisis

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201307070025

THE ASSOCIATED PRESS

Japan is moving a step closer to restarting nuclear reactors as utilities are set to ask for safety inspections at their idled reactors, the clearest sign of Japan's return to nuclear energy nearly two and a half years after the Fukushima disaster.
With all but two of its 50 reactors off line since the crisis, Japan has been without nuclear energy that once supplied about a third of its power.
Four of nine Japanese nuclear plant operators--supplying the regions of Hokkaido, Kansai, Shikoku and Kyushu--will apply for safety inspections by the Nuclear Regulation Authority for a total of 10 reactors at five plants on July 8, when new safety requirements take effect.
Kyushu Electric Power Co. is expected to apply for two more reactors at another plant later in the week.
The new standards are stricter than in the past and for the first time compulsory, and only reactors that pass the inspections will be allowed to reopen--possibly early next year.

Each inspection could take several months, according to the watchdog, plus obtaining local consent may take another few weeks.

Critics say the rules have loopholes, including grace periods for some safety equipment.

Hit by soaring gas and oil costs to run conventional power generation plants to make up for the shortfall, Japanese utility companies have desperately sought to put their reactors back online.

Nearly all the utilities owning nuclear power plants reported huge losses last fiscal year due to higher costs for fuel imports.

Hokkaido Electric Power Co., for example, said it has been hit with additional daily fuel costs of 600 million yen ($6 million) to make up for three idled reactors. Nuclear operators have already requested rate hikes or plan to do so.

Prime Minister Shinzo Abe, who took office in December, scrapped a phase-out plan set by the previous government. Resumption of nuclear power plants is part of his ruling party's campaign platform in parliamentary elections in two weeks.

The new requirements specify for the first time that plants must take steps to guard against radiation leaks in the case of severe accidents, install emergency command centers and enact anti-terrorist measures.

Operators are required to upgrade protection for tsunamis and earthquakes, as well as tornadoes and aviation accidents.

Safety was previously left up to the operators, relying on their self-interest in protecting their own investments as an incentive for implementing adequate measures.

Tokyo Electric Power Co. came under fire for underestimating the risk of a tsunami and building a seawall that was less than half the height of the wave that hit the Fukushima No. 1 plant on March 11, 2011, knocking out power and cooling systems, which led to meltdowns in three of its reactors. About 160,000 evacuees still cannot return to their homes.

“We decided to apply because we're confident about the safety measures we've taken,” said Shota Okada, a spokesman at Hokkaido Electric Power Co., filing for the triple-reactor Tomari plant. “We'll do everything to accommodate a smooth inspection process.”

Hokkaido Electric hopes to restart them in time for the long, cold winter on the northern main island, said company president Katsuhiko Kawai recently.

Critics say the requirements still have loopholes that make things easier for operators, including a five-year grace period--given to reactors known as PWRs, that come with larger containment chambers considered less likely to suffer from pressure buildup than ones like those ravaged at Fukushima--for installing some mandated new equipment and a full-fledged command center.

This means about half of the 48 reactors that are PWRs, or pressurized water reactors, could operate without the safety features up to five years.

All 10 reactors set for inspections are PWRs, and filtered vents and command centers are reportedly still under way at many of them.

Opponents say the approvals are aimed at resuming reactor operations, although nearby communities lag in enacting needed emergency and evacuation procedures.

All set for restart?

Japan reopens application procedures for rebooting idled nuclear reactors

Kyodo

http://www.japantimes.co.jp/news/2013/07/08/national/japan-reopens-application-procedures-for-rebooting-idled-nuclear-reactors/#.UdqNhaxSb9k

Japan on Monday reopened procedures to allow idled reactors to be brought back online, putting in place new nuclear regulations that reflect the lessons learned from the 2011 Fukushima No. 1 meltdown disaster.

While power utilities are expected to rush to file applications with the Nuclear Regulation Authority for safety assessments on a total of 10 reactors, none will be restarted anytime soon, because it may take around six months for each safety-screening process to finish.

Facing what the NRA calls the world's toughest level of nuclear regulations, utilities may also opt to give up efforts to restart some of the country's 50 commercial reactors and scrap them instead of investing in costly safety measures.

Four regional utilities filed applications Monday morning for the restart of 10 reactors at five nuclear power plants, in Hokkaido, Fukui, Ehime, and Kagoshima prefectures.

Tokyo Electric Power Co. has also expressed its intention to request an NRA safety review for two reactors at its seven-reactor Kashiwazaki-Kariwa complex in Niigata Prefecture, but local opposition has made it difficult for the utility to apply Monday.

Among those applying for restarts, reactors that could precede others include unit 3 at Shikoku Electric Power Co.'s Ikata plant in Ehime Prefecture, which has been found not to have geologic faults that need to be checked and has already prepared a newly required seismic-isolated emergency response center.

Reactors must also have a venting system with filters that can reduce the amount of radioactive substances when pressure needs to be released from reactor containers during emergencies, but pressurized water reactors like unit 3 at the Ikata plant are given a five-year moratorium to meet the requirement.

But prospects appear bleak for aging units that will not only have to satisfy the new regulations but also undergo special inspections to continue to operate beyond 40 years.

The existence of active faults running beneath atomic plants could also be a critical factor that will result in the permanent shutdown of reactors.

The NRA has already acknowledged that reactor 2 at Japan Atomic Power Co.'s Tsuruga plant in Fukui Prefecture sits above a fault where movement cannot be ruled out in the last 120,000 to 130,000 years — a situation not allowed in the quake-prone country.

Japan entered a period of no nuclear power generation in May last year, but the government agreed two reactors at Kansai Electric Power Co.'s Oi plant to address power shortage concerns in the summer in western Japan.

No other reactors have resumed operation since, while the NRA was launched in September to replace the previous, discredited nuclear regulator and to devise the new reactor safety regimen.

After the NRA confirms that a reactor satisfies the new regulations, the operator will seek the consent of the host communities to restart them.

Prime Minister Shinzo Abe's government has made clear it will push for the restart of reactors that are deemed safe and has also vowed to play a part in winning local-level cooperation.

See also :

Japan restarts procedures to reboot idled nuclear reactors

http://mainichi.jp/english/english/newsselect/news/20130708p2g00m0dm029000c.html

TOKYO (Kyodo) -- Japan restarted procedures Monday to allow idled nuclear reactors to be brought back online, putting in place new nuclear regulations that reflect the lessons learned from the 2011 Fukushima Daiichi complex disaster.[…]

LDP "in a rush" to restart

July 8, 2013

Ruling LDP in a rush to restart nuclear reactors

http://mainichi.jp/english/english/newsselect/news/20130708p2a00m0na015000c.html

Prime Minister Shinzo Abe signaled his readiness to restart idled nuclear power reactors during a TV appearance on July 7 but leaders of other parties were cautious about the plan in the run-up to the House of Councillors election on July 21.

Abe, also president of the ruling Liberal Democratic Party (LDP), said his government is responsible for providing affordable and stable energy, referring to the implementation from July 8 of new nuclear standards by the Nuclear Regulation Authority in the aftermath of the disaster at the Fukushima No. 1 Nuclear Power Plant.

"We will not restart nuclear reactors unless they meet the (new) standards. Safety comes first," Abe said during a special election program on public broadcaster NHK. But he also said Japan is running a deficit of 3 trillion yen because it depends on other countries for most energy sources, suggesting his government will rush to restart idled nuclear reactors.

The premier also said Japan possesses the most advanced nuclear power technology and is receiving inquiries from other countries about importing the technology. He added that Japan should share its high level of nuclear power safety with other countries.

Abe is in a rush to restart nuclear reactors because atomic power will affect his "Abenomics" economic policy mix. The Japanese business community is worried about a spike in electricity bills due to the suspension of operations at most nuclear power plants after the Fukushima disaster triggered by the 2011 Great East Japan Earthquake and tsunami.

Abe's government believes it has to bring back idled nuclear reactors online to produce results from its growth strategy.
But other parties are cautious because Japanese voters are extremely concerned about restarting nuclear reactors.

Natsuo Yamaguchi, leader of New Komeito, the LDP's coalition partner, said on the same NHK program that the government has to carefully make a judgment on restarting nuclear reactors after checking if it can win understanding from the public and municipalities hosting nuclear power plants.

Winning public understanding about building new nuclear power plants is not feasible, Yamaguchi said, adding Japan will be devoid of nuclear reactors according to regulations for decommissioning them after

40 years, in sharp contrast to Abe's remarks that his government would reduce its dependence on nuclear power.

Opposition parties are focusing their criticism against the LDP on its nuclear power policy.

Banri Kaieda, leader of the main opposition Democratic Party of Japan (DPJ), said Japan can only make a full-fledged commitment to the development of natural energy by setting a zero-nuclear power objective. Your Party chief Yoshimi Watanabe emphasized that nuclear power is a costly and risky source of electricity. Tadashi Hirono, deputy chief of the People's Life Party, said his party would strive to end nuclear generation in 10 years.

Kazuo Shii, chairman of the Japanese Communist Party (JCP), blasted the new nuclear standards as a plot to restart nuclear reactors and said they are out of the question. Mizuho Fukushima, leader of the Social Democratic Party (SDP), also criticized the new standards, saying measures against earthquakes are insufficient. Toru Hashimoto, co-leader of the Japan Restoration Party and Osaka mayor, said nuclear safety regulations will get tougher and nuclear reactors will die out.

In a stump speech in Tokyo's Shinjuku Ward, Kuniko Tanioka, leader of Green Wind, criticized the Abe government for trying to restart nuclear reactors and abandoning victims of the Fukushima nuclear disaster.

Five Nuclear Plants Apply for Restart

July 8, 2013

http://www3.nhk.or.jp/nhkworld/newsline/201307081505.html
NHK Video

Five nuclear plants apply for restart : Tomari - Ohi -Takahama - Ikata - Sendai

but will the utilities address the process seriously?

A bright sign? But for whom?

July 8, 2013

NRA starts accepting applications for reactor restarts

Kyodo

http://www.japantimes.co.jp/news/2013/07/08/national/japan-reopens-application-procedures-for-rebooting-idled-nuclear-reactors/#.UdsxgqxSb9k

Japan on Monday restarted the procedures for allowing idled reactors to be brought back online, putting in place new safety regulations that reflect the lessons learned from the 2011 Fukushima No. 1 meltdown disaster.

Power utilities rushed to the Nuclear Regulation Authority to apply for safety assessments on 10 reactors in hopes of cutting their fuel costs, which have soared since the loss of atomic power forced them to revert to thermal power generation.

But none of the reactors is likely to be restarted anytime soon because it could take at least six months for each assessment to finish.

Facing what the NRA calls the world's toughest level of nuclear regulations, utilities may also opt to give up efforts to restart some of the other 50 commercial reactors and scrap them instead of investing in costly safety upgrades.

Four regional utilities filed Monday morning to restart the 10 reactors, which are situated at five nuclear power plants in Hokkaido, Fukui, Ehime and Kagoshima prefectures.

Tokyo Electric Power Co. has expressed plans to request an NRA safety review for two reactors at its giant seven-reactor Kashiwazaki-Kariwa complex in Niigata Prefecture, but local opposition made it difficult for the utility to apply Monday.

Under the new standards, utilities will for the first time be obliged to install specific countermeasures for major contingencies ranging from core meltdowns to tsunami — the direct cause of the Fukushima crisis.

Among those applying for restarts, reactors that could precede others include unit 3 at Shikoku Electric Power Co.'s Ikata plant in Ehime Prefecture, which has been found not to have geologic faults that need to be checked and has already prepared a newly required seismic-isolated emergency response center.

Reactors must also have a venting system with filters that can reduce the amount of radioactive substances when pressure needs to be vented from reactor containers during emergencies, but

pressurized water reactors like unit 3 at the Ikata plant are given a five-year moratorium to meet the requirement.

"We believe the reactor satisfies the state's standards," an official from Shikoku Electric Power told reporters after submitting an application to the NRA, at the same time calling on regulators to conduct a "scientific, rational and efficient" safety assessment.

But prospects appear bleak for aging units that will not only have to satisfy the new regulations but also undergo special inspections to continue to operate beyond 40 years.

The existence of active faults running beneath atomic plants could also be a critical factor that will result in the permanent shutdown of reactors.

Some residents living near nuclear power plants have expressed hope about the economic benefits when they come back online, while others are wary about the dangers.

Masumi Shibuta, 54, who runs an inn often used by workers at Hokkaido Electric Power Co.'s Tomari plant, was relieved at the start of the process for reactivating the complex, saying, "Finally, we are starting to see a bright sign."
But Hideko Hayashi, 81, who is now an evacuee after fleeing the town of Futaba where the Fukushima No. 1 plant is located, said, "No matter how strict the standards may be, an accident could occur. Having standards for restarting reactors is outrageous."

Restart, restart

July 12, 2013
Utility applies to restart 2 reactors
http://www3.nhk.or.jp/nhkworld/english/news/20130712_27.html

Kyushu Electric Power Company has filed an application to restart 2 reactors in western Japan under new nuclear safety regulations.

The utility handed in papers for 2 reactors of its Genkai plant in Saga Prefecture to the Nuclear Regulation Authority on Friday.

The step brought the number of reactors under NRA review to 12, at 6 plants.

Applications for the 10 other reactors were made on Monday, when the new, stricter regulations took effect to prevent accidents like the 2011 Fukushima disaster.

All of Japan's nuclear reactors went offline after the crisis. Two have been restarted.

Kyushu Electric's application says the utility will need more than 2 and a half years to build a full-fledged emergency control room at the Genkai plant.

The new regulations require that such facilities deal with severe accidents, earthquakes or tsunamis. The utility plans to build a temporary facility by September.

The firm also raised its expected tsunami height by 1 meter, to 3 meters. But it says no new levee is needed because the plant is 11 meters above sea level.

Saga Prefecture Governor Yasushi Furukawa says he wants thorough safety checks by the NRA. But he also stresses that the central government should clarify the procedure for allowing restarts after screenings.

The NRA is to start screenings by 3 teams next Tuesday. Work on the Genkai plant is to start later.

Meanwhile, Tokyo Electric Power Company, the operator of the damaged Fukushima plant, has said it will apply to restart 2 reactors at its Kashiwazaki-Kariwa plant in Niigata Prefecture at an early date.

But the utility has yet to reveal the exact date amid opposition by the prefecture.

Japan Atomic Power to seek restart at all reactors

THE ASAHI SHIMBUN
http://ajw.asahi.com/article/0311disaster/fukushima/AJ201307120056

Japan Atomic Power Co. aims to resume operations at all three of its nuclear reactors in order to avoid bankruptcy.
But getting those reactors back online will mean overcoming a mountain of issues: an active fault under a reactor, another aging reactor, and virulent local opposition to any restart of the third reactor.
On July 11, Yasuo Hamada, the company president, held a news conference at which he indicated applications would be submitted with government agencies seeking the resumption of operations at the No. 1 and 2 reactors at the Tsuruga nuclear power plant in Fukui Prefecture and the Tokai No. 2 nuclear power plant in Ibaraki Prefecture.
In May, the Nuclear Regulation Authority released a report by an expert panel that said an active fault ran directly under the No. 2 reactor building at Tsuruga. Japan Atomic Power on July 11 submitted its own report challenging the finding.
While Hamada stopped short of specifying when applications for the resumption of operations would be submitted, he said the company would seek to restart all three reactors.

The No. 1 reactor at Tsuruga went into service more than 40 years ago, and there is strong opposition in the local community toward reactivating the Tokai No. 2 plant. Under new safety standards for nuclear reactors, operations can only be extended beyond 40 years after passing a special inspection.

The Nuclear Regulation Authority has ordered Japan Atomic Power to submit a report by the end of July on the effects on the spent nuclear fuel at the Tsuruga plant if there were to be movement along the active fault.

Hamada said the company would submit a formal objection under the terms of the administrative appeals law.

The alternative, decommissioning the reactors, would decrease the asset value of the reactor facilities and nuclear fuel to zero, creating a tremendous financial burden that would lead to the collapse of the company.

That devaluation would have to be processed as a loss along with the shortage in the reserve for decommissioning expenses that would normally be accumulated over the course of at least 40 years.

Total estimated losses from decommissioning all three reactors would likely come to 260 billion yen ($2.6 billion).

But as the company only has net assets of about 160 billion yen, it would face excess liabilities if it has to decommission the reactors.

Unless the Nuclear Regulation Authority revises its conclusion about the active fault under the No. 2 reactor building at the Tsuruga plant, there would appear to be little chance of it resuming operations.

Given this state of affairs, an application for a resumption of operations would merely serve as a delaying tactic. If the application were to be rejected, the company would likely submit an administrative lawsuit seeking to overturn that decision. While the courts were looking into the case, the company would be able to buy time before making a decision about decommissioning.

The company has had electric power companies guarantee huge loans that it receives, meaning that those entities would be severely affected should Japan Atomic Power go into bankruptcy.

Another factor at play is the central government, which has not pushed forward with discussions on the possibility of measures such as subsidies being used for decommissioning. This inaction has resulted in little pressure being placed on the electric power companies and Japan Atomic Power to consider decommissioning their reactors.

Meanwhile, Japan Atomic Power on July 11 opened up the Tsuruga plant to reporters to illustrate its contention that no active fault runs directly under the No. 2 reactor building.

One contention made by company officials is that movement along the fault was smaller the closer the fault was to the reactor building. One official claimed that a new study found that the active fault disappeared before directly reaching under the building.

Another new contention made by the company was the existence of volcanic ash that shows the active fault was in an active period earlier than between 120,000 and 130,000 years ago.

Although the Nuclear Regulation Authority would have to carry out an evaluation should Japan Atomic Power submit an application for a resumption of operations, the likelihood that it would approve a restart is very low without a complete revision of its previous position that an active fault runs under the No. 2 reactor building.

For their part, local communities have expressed their concerns about the reactors operated by Japan Atomic Power.

On July 11, Tokai Mayor Tatsuya Murakami said: "President Hamada has never visited the village to personally explain what the company is considering. I cannot find any intention on his part to try to gain the understanding of the local community."

In mid-June, Japan Atomic Power began work at the Tokai No. 2 plant to install venting equipment with filters as well as begin construction of a coastal levee. Village officials protested the move because no explanation was given beforehand. They suspected the move was made with an eye toward eventual resumption of operations.

In the meantime, Tsuruga Mayor Kazuharu Kawase directed his criticism toward the Nuclear Regulation Authority.

He called for another evaluation of the active fault under the Tsuruga plant and asked that a wider range of experts be included in the panel when considering whether an active fault actually existed.

Japan Atomic Power co.defiant

July 12, 2013

Operator bullish over Tsuruga reactor restart despite active fault row

http://mainichi.jp/english/english/newsselect/news/20130712p2a00m0na006000c.html

The operator of the Tsuruga nuclear power plant in Fukui Prefecture has defended its denial of any active faults running beneath the facility's No. 2 reactor, saying the company is going to prepare for reactor reactivation.

Yasuo Hamada, president of the Japan Atomic Power Co. (JAPC), stated during a press conference on July 11, "If they scrutinize our report for deliberations, they can fully understand (that there are no active faults)," referring to a survey report the company has filed with the Nuclear Regulation Authority (NRA).

The JAPC report denies the existence of active faults underneath the No. 2 reactor, despite the NRA's conclusion on May 22 that the fault running right beneath the No. 2 reactor is active. If the NRA does not overturn its decision, the reactor is likely to be decommissioned.

"We will prepare for reactivating the reactors," Hamada nevertheless stated in defiance of the NRA decision, pledging to restart the Tsuruga plant's No. 1 and No. 2 reactors as well as the No. 1 reactor at the Tokai No. 2 power plant in Ibaraki Prefecture.

Behind the company's tough stance lies the fact that the firm is dedicated to nuclear power generation and whether to restart the reactors is a make-or-break issue for its management. Because the company has received "basic fees" for equipment maintenance and other costs from five major power companies including Tokyo Electric Power Co. (TEPCO) during the suspension of the reactors, and four utilities including Kansai Electric Power Co. and Chubu Electric Power Co. have supported JAPC through debt guarantee and other measures, JAPC reportedly faces no financial problems this fiscal year. However, if the reactors remain suspended, utilities could stop funding JAPC after the next fiscal year, leaving the company financially-strapped.

While it remains to be seen if the NRA could overturn its decision that the fault running under the No. 2 reactor is active in compliance with the JAPC report, the other two reactors run by the company are also fraught with challenges before being restarted.

The No. 1 reactor at the Tsuruga nuclear plant is aging, with 43 years having passed since the start of its commercial operation. Under the new regulatory standards that came into effect earlier this month, special inspections are required for running nuclear reactors that are over 40 years old, making it more costly for JAPC to take safety measures for the No. 1 reactor. The Tokai No. 2 plant's reactor is 34 years old and faces strong opposition from local residents against reactivation. Hamada avoided clarifying when his company is going to apply for the safety screening of the reactors.

With no prospects for restarting many idled reactors, an expert panel to the Ministry of Economy, Trade and Industry has started reviewing an accounting system aimed at leveling the financial burdens from decommissioning reactors, in anticipation of a situation in which reactors are scrapped one after another.

Makoto Yagi, chairman of the Federation of Electric Power Companies of Japan, said, "If the Tsuruga plant's No. 2 reactor is to be decommissioned, it is because of a policy change. The costs for decommissioning the reactor should be discussed with the government," suggesting that the central government be called upon to share the financial burden

More applications for restart

July 13, 2013

Kyushu Electric applies to restart two more reactors

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201307130060

By JIN NISHIKAWA/ Staff Writer

Kyushu Electric Power Co. submitted applications to the Nuclear Regulation Authority on July 12 to reactivate the No. 3 and No. 4 reactors at the Genkai nuclear power plant in Saga Prefecture.

The utility also submitted applications for the No. 1 and No. 2 reactors at the Sendai nuclear plant in Kagoshima Prefecture on July 8.

Three other electric power companies that day applied to restart eight reactors at four nuclear power plants.

According to Kyushu Electric's latest application, the quake-resistant building that would be used as emergency headquarters if a nuclear accident occurs will be completed in fiscal 2015. Until then, a temporary facility, which will be readied by September, will be used for that function.

The utility also revised its expectations for the largest tsunami that could possibly hit. Since such a tsunami would fall below the height of the plant site, no coastal levee will be required.

The No. 3 reactor will be used in plutonium-thermal (pluthermal) power generation, which burns mixed oxide (MOX) fuel containing plutonium extracted from spent nuclear fuel. The reactor had used such fuel before the March 2011 accident at the Fukushima No. 1 nuclear power plant.

Of the 12 reactors that have had applications submitted, the two at Genkai have comparatively fewer issues to deal with since there are no active faults within the plant site and the risk of tsunami is low.

The Genkai reactors, therefore, are considered among those that have progressed the most in implementing safety measures, along with the No. 3 reactor at the Ikata nuclear power plant in Ehime Prefecture operated by Shikoku Electric Power Co.

A key issue in resuming operations at the Genkai reactors will be obtaining the consent of local governments.

The Nuclear Regulation Authority on July 16 will begin its evaluation of the applications submitted for the 10 reactors on July 8. Although the evaluation of the applications for the Genkai reactors will begin later, those reactors will be considered part of the first group of reactors seeking to resume operations.

Kyushu Electric files for safety checks on 2 more reactors

http://mainichi.jp/english/english/newsselect/news/20130713p2g00m0dm024000c.html

TOKYO (Kyodo) -- Kyushu Electric Power Co. on Friday filed for state safety assessments on two more reactors, raising the number of units in Japan seeking to restart operation to 12 after the new safety requirements were introduced earlier this week.

Power utilities are hurrying to file for safety reviews by the Nuclear Regulation Authority as they want to restart reactors that have remained idled due to concerns over the use of nuclear power in the wake of the 2011 Fukushima Daiichi complex disaster.

Kyushu Electric Power filed applications Friday for the Nos. 3 and 4 reactors at the Genkai nuclear power station in Saga Prefecture. It has already taken the same procedures for the Nos. 1 and 2 reactors at the Sendai plant in Kagoshima Prefecture.

Reactors applying for resumption of their operations have so far all been pressurized water reactors, which are different from the type of reactors that suffered core meltdowns at Tokyo Electric Power Co.'s Fukushima Daiichi plant.

Under the new safety regulations, reactors must have a venting system with filters that can reduce the amount of radioactive substances when pressure needs to be released from reactor containers during emergencies. The installation of the system involves major refurbishment.

But pressurized water reactors have been given a five-year moratorium to meet the requirement, enabling utilities to more swiftly file for the restart of this type of reactor.

Of the 50 commercial reactors in Japan, all but two are currently offline. To resume operation, reactors will have to be checked by the NRA to see whether they satisfy the new safety criteria.

The new requirements for the first time oblige utilities to put in place specific countermeasures against possible severe accidents like reactor core meltdowns, as well as against huge tsunami -- the direct cause of the Fukushima crisis.

Monju survey

July 18, 2013

Nuclear experts in 2nd day of Monju fault survey

http://www3.nhk.or.jp/nhkworld/english/news/20130718_20.html

Japan's nuclear regulators on Thursday continued their geological survey at the site of a fast-breeder reactor on the Sea of Japan coast. They are trying to find out if there are any active faults that pose safety risks.

Nuclear Regulation Authority Commissioner Kunihiko Shimazaki and 3 other experts began their 2-day survey at the prototype Monju reactor in Fukui on Wednesday.

Thursday's survey focused on a linear fissure found in an off-site area southeast of the reactor. Some experts suspect the fissure to be part of an active fault.

Researchers also inspected the coastal area north of the reactor to see if any similar fissures exist, which would suggest an extension of the fissure in question.

After Wednesday's survey, the experts asked the reactor's operator, the Japan Atomic Energy Agency, to survey a wider area for possible faults.

The operator agreed and decided to carry out additional surveys to find out whether the fissure extends into the sea.
Jul. 18, 2013 - Updated 05:14 UTC

Regulators inspecting fault under Monju reactor
http://www3.nhk.or.jp/nhkworld/english/news/20130717_12.html
Japan's nuclear regulator is checking the country's 6 nuclear power plants built over faults.

On Wednesday, experts launched a 2-day examination of faults at the prototype Monju fast breeder reactor in Fukui Prefecture.

The team comprises Nuclear Regulation Authority commissioner Kunihiko Shimazaki and 3 other experts.

The reactor compound is over 8 faults. One is under the reactor. Experts say shifts could occur if an active fault about 500 meters west of the site moves in an earthquake.

The team was first briefed on locations of the faults by officials of the reactor's operator, the Japan Atomic Energy Agency.

They then saw where part of the active fault appears in the ground, and scraped the soil to get a clear view.

The government does not allow building of key reactor facilities above active faults.

If the fault under the reactor were determined to be at risk of moving with the active fault, the reactor would no longer be operable.

In the afternoon, the team was to visit a point where an extended section of the fault beneath the reactor can be observed.

Jul. 17, 2013 - Updated 04:55 UTC

Panel starts investigation on geologic faults at Monju reactor site
http://mainichi.jp/english/english/newsselect/news/20130717p2g00m0dm062000c.html

TOKYO (Kyodo) -- A team of experts appointed by the Nuclear Regulation Authority started a two-day investigation Wednesday on the activity of some geologic faults running beneath the Monju prototype fast-breeder reactor in Fukui Prefecture.

The Japan Atomic Energy Agency's Monju reactor is the fourth location visited by an NRA-led team to check whether shattered zones, or zones of crushed rock, at the site could move in the future and undermine the safety of the facility.

In quake-prone Japan, nuclear reactors are not allowed to be located directly above active faults. The Monju reactor sits above eight small shattered zones, which may move together with an active fault running about 500 meters west of the facility.

The Monju reactor has effectively been banned from operation in the meantime because of the operator's lax safety management. If the shattered zones are acknowledged to be active faults, it will be highly difficult to resume operation.

Japan has already spent over 1 trillion yen on the Monju project, hoping the facility would play a key role in the country's spent fuel recycling policy.

But the reactor has remained largely offline since it first achieved criticality in 1994, due to a sodium coolant leak and subsequent problems.

The investigation team is led by NRA commissioner Kunihiko Shimazaki and four other experts recommended by academic circles. One of the outside experts will not participate in the two-day field survey and will visit the site later.

Among the four nuclear facilities that have accepted NRA investigation teams, the NRA has reached a conclusion that the No. 2 unit at Japan Atomic Power Co. Tsuruga nuclear plant is located above an active fault. But the operator has argued against the assessment, which could leave the company with no option but to scrap the reactor.

See also :

Panel probes Monju geologic faults

http://www.japantimes.co.jp/news/2013/07/17/national/panel-probes-monju-geologic-faults/#.Uea7IW1U2vM

Kyodo

- Jul 17, 2013

A team of experts appointed by the Nuclear Regulation Authority started a two-day investigation Wednesday on the activity of geologic faults running beneath the Monju prototype fast-breeder reactor in Fukui Prefecture….

NRA screening

July 16, 2013

Nuclear regulator begins screening applications

http://www3.nhk.or.jp/nhkworld/english/news/20130716_23.html

Japan's nuclear regulator has begun screening applications from power companies to restart nuclear reactors.

This is the regulator's first meeting since Japan's new nuclear safety standards went into effect last week.

Officials of the Nuclear Regulation Authority met with representatives of Kyushu Electric Power and Hokkaido Electric Power on Tuesday.

Kyushu Electric explained the safety measures that it has put in place as part of its bid to restart the No. 1 and 2 reactors at its Sendai plant in Kagoshima Prefecture.

The utility briefed regulators about the level of earthquakes and tsunamis it has prepared for, and said it plans to build a temporary facility to serve as a command center for an emergency task force in the case of an accident.

Nuclear regulators pointed out areas that the inspections focus on and said they need to confirm the chain of command at the emergency task force and the number of workers the temporary facility can hold.

They also noted that in the event of a volcanic eruption, up to 15 centimeters of ash could accumulate, so they will have to see if the utility's measures are in line with the new safety standards.

So far, 4 utilities have submitted applications to restart reactors at 6 plants. Representatives from Shikoku Electric and Kansai Electric are scheduled to present their safety measures later in the day.

Inspection delayed at Tomari plant

July 24, 2013

Tomari reactor checks suspended

JIJI

The Nuclear Regulation Authority will suspend safety checks for two nuclear reactors run by Hokkaido Electric Power Co. because the utility's applications were far from adequate.

Hokkaido Electric is "clearly unprepared" for checks to be carried out on reactors 1 and 2 at its Tomari nuclear power station in Hokkaido, NRA Commissioner Toyoshi Fuketa said Tuesday.

The checks will go ahead when the firm submits additional materials, the NRA said.

An official from Hokkaido Electric said the decision is unfortunate, adding that the utility will file revised applications for the reactors as soon as possible.

The NRA said Hokkaido Electric submitted analysis results showing how the reactor cooling water systems would cope in a severe nuclear catastrophe based on data from another type of cooling system.

It also said the power company failed to adequately explain whether the two reactors meet new safety standards. It told the company to withdraw its applications or file revised ones.

The NRA plans to continue screening the Tomari reactor 3. But Fuketa said the authority sees a lack of preparation.
Hokkaido Electric is one of four companies that applied for NRA checks on July 8, when new nuclear safety standards came into effect.

As for safety check applications for other reactors, the NRA said it will not screen those for reactors 3 and 4 at Kansai Electric Power Co.'s Oi power plant in Fukui Prefecture until the authority knows the results of the ongoing fault research there. It will not take up reactors 3 and 4 at Kepco's Takahama plant in the same prefecture at the next screening session due to the operator's poor understanding of the underground structure of the plant site.

Regulators to hold open session on Tsuruga reactor

http://www3.nhk.or.jp/nhkworld/english/news/20130724_15.html

Japan's nuclear regulators plan to hold an open-door meeting to discuss the results of an additional survey by a nuclear power plant operator. The results run counter to their assessment that one of its reactors sits on an active fault.

The Nuclear Regulation Authority determined in May that an active fault runs under the Number 2 reactor of the Tsuruga nuclear plant in Fukui Prefecture.

The reactor may have to be scrapped because the government bans building nuclear reactors on or above active faults.

But earlier this month, plant operator Japan Atomic Power Company submitted the results of an additional survey that show the reactor does not sit on an active fault.
The company asked the authority to discuss the issue again.

At a meeting on Wednesday, the authority decided to hold an open session to hear the company's explanation and discuss what to do with the new results based on views of experts, if necessary.

Commissioner Kunihiko Shimazaki said they will examine whether the results require them to take new steps. The regulatory body says it may review its decision if it obtains any new knowledge.

The nuclear regulator also decided to reject Japan Atomic Power Company's request that it withdraw an order to report what would happen to more than 1,700 units of fuel rods at the plant if an active fault moves.

The order says the operator should outline preventive measures.
The authority says it is hard to imagine that the order would seriously damage the company.

First four

July 25, 2013

4 nuclear reactors on restart screening

http://www3.nhk.or.jp/nhkworld/english/news/20130725_46.html

Japan's nuclear regulators have chosen the first group of 4 reactors for a review of severe accident measures. The move is a step toward restarting the facilities.

On Thursday, Nuclear Regulation Authority officials conducted a hearing with the operators of the Tomari plant in Hokkaido, the Ikata plant in Ehime, and the Sendai plant in Kagoshima.

The plants' 4 reactors are prioritized for the review.

The operators explained new measures to prevent damage to nuclear fuel in case of a total blackout, like the one that occurred at the Fukushima Daiichi plant in 2011.

The utilities also provided an analysis on the effectiveness of the proposed measures.

The regulators quizzed them on the details of the procedures. They also asked about the number of workers onsite to deal with any accident, and their roles.

Operators have submitted applications to restart another 8 reactors.

At the Genkai plant in Saga, the NRA asked preliminary questions on active faults at the site and the plant's preparedness for an emergency.

But the NRA put on hold screenings of the remaining 6 reactors, saying they are not ready for inspection.
Jul. 25, 2013 - Updated 17:04 UTC _____

Nuke plant workers and eye examinations

July 27, 2013

Hundreds of nuke plant workers missed crucial eye exams

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201307270048

By TOSHIO TADA/ Staff Writer

Despite a higher risk of developing cataracts, nearly 40 percent of Tokyo Electric Power Co. employees who worked in the Fukushima No. 1 nuclear power plant after the 2011 disaster have not undergone annual eye examinations required by the government.
Of the 647 employees required to undergo the examination in fiscal 2012, 247 people, or 38.2 percent, failed to do, sources said July 26. Exposure to radiation can increase the risk of developing cataracts.
The overall figure would be sharply higher if subcontractors' employees who also did not undergo the examinations are added, the sources said.
The health ministry is still trying to determine the total number of workers who have not had the mandatory inspections. It plans to announce the figure shortly.
In October 2011, seven months after the onset of the nuclear accident at the Fukushima plant, the ministry stipulated guidelines on health management for about 20,000 people who were engaged in emergency work at the stricken plant.
According to the guidelines, if a person is exposed to radiation exceeding 50 millisieverts, the individual must receive an eye examination once a year. If the exposure exceeds 100 millisieverts, an annual cancer screening is required.
According to TEPCO, 647 of its employees were required to receive eye examinations in fiscal 2012, but only 400 did so. It said 146 TEPCO employees were required to receive cancer screenings, and all but two had them.

The failure of many employees to have eye examinations reflects TEPCO's tardiness in explaining the risk of developing cataracts from exposure to radiation.
"We will make sure that all employees who are required to receive eye examinations do so," a TEPCO official said.
TEPCO said it does not know if employees of its subcontractors are receiving eye examinations.
Many of those subcontractors are small companies that do not have sufficient safety management systems. In addition, many of their workers were temporary help who are no longer employed with the subcontractors.
Thus, it seems likely that the ratio of workers hired by subcontractors who did not receive eye examinations is higher than that of TEPCO employees.
In October 2011, the health ministry announced that it will compile a database by gathering the results of examinations from TEPCO and subcontractors. When it checked data sent to the ministry from those companies, however, it found as many as 8,000 cases in which names or birth dates of workers were incorrect. Because of that, the database has yet to be compiled.
"Many unexpected errors were found in the data," a ministry official said, adding, "We have set up offices to receive individual consultations from workers."

Ohi to be shut mid-September

August 1, 2013

Ohi plant to shut 9/15; no reactors online
http://www3.nhk.or.jp/nhkworld/english/news/20130801_35.html

The operator of the Ohi nuclear plant in central Japan has started the process of shutting down the nation's 2 operating reactors.

Officials at Kansai Electric Power Company on Thursday applied to the Nuclear Regulation Authority to halt the plant's No. 3 reactor on September 2nd for regular inspections. They also plan to stop the No. 4 reactor of their plant in Fukui Prefecture on September 15th.

That would put all nuclear reactors in Japan offline for the first time in 14 months.

Officials from four utilities have applied to the authority for safety screening. They hope to restart 12 reactors at 6 nuclear plants, including Ohi.
But there are no clear indications of when that can happen.
Aug. 1, 2013 - Updated 09:55 UTC

July 31, 2013

Ohi to be shut down 9/15, turning Japan no-nuke
http://www3.nhk.or.jp/nhkworld/english/news/20130801_03.html

Japan's 2 remaining nuclear reactors still in operation will be shut down for regular inspections next month.

Kansai Electric Power Company is set to submit to regulators on Thursday an application to shut down the Number 3 reactor at the Ohi plant in Fukui Prefecture. The company says it will stop the reactor on September 2nd for a regular maintenance check.

The Number 4 reactor will be halted 2 weeks later. The move will bring all reactors in Japan offline for the first time in 14 months.

Four utilities have asked the Nuclear Regulation Authority to restart 12 reactors in 6 power plants. Their applications are currently being screened.

But no clear prospects for restarting any of the reactors have emerged.

Niigata governor still not convinced

August 6, 2013

Tepco gets partial local approval to apply for reactor checks

http://www.japantimes.co.jp/news/2013/08/06/national/tepco-gets-partial-local-approval-to-apply-for-reactor-checks/#.UgEfWqxSab0

Kyodo

Tokyo Electric Power Co. said Tuesday it has won backing from two municipal governments to apply for a safety assessment of its idled nuclear reactors in Niigata Prefecture.

But Tepco has not yet gained approval from Niigata Gov. Hirohiko Izumida and it remains uncertain when the utility will be able to apply for the assessment, which is a necessary step in restarting the reactors at the Kashiwazaki-Kariwa plant.

The facility is the world's largest nuclear power station. It is in the city of Kashiwazaki and the village of Kariwa.

Kashiwazaki Mayor Hiroshi Aida indicated his approval Tuesday for the assessment, telling a news conference that whether to file applications is "up to the plant operator."

Kariwa Mayor Hiroo Shinada has already expressed its intention to give Tepco the go-ahead.

But Gov. Izumida has been reluctant to allow the utility to apply for the safety checks, citing insufficient investigation into the March 2011 nuclear crisis at the Fukushima No. 1 complex and other reasons.

"I want to meet the governor" for another round of talks, following discussions in July, before applying for the assessment, Tepco President Naomi Hirose told reporters after informing the head of the Natural Resources and Energy Agency of the latest development.

Tepco wants to reactivate its reactors at the Kashiwazaki-Kariwa plant to cut fuel costs for thermal power generation to make up for the halt of its other nuclear power plants.

To resume operation of offline reactors, utilities have to seek confirmation from the Nuclear Regulation Authority regarding whether their facilities satisfy new safety requirements introduced in July.

Other utilities have already applied for the inspection of some of their reactors, but Tepco's application would be more controversial because it is the operator of the crippled Fukushima No. 1 complex.

No restart before Ohi shutdown -TEPCO's profits

August 13, 2013

No restarts before shutdown

Oi reactor halt Sept. 15 to see all plants idled

Kyodo

http://www.japantimes.co.jp/news/2013/08/13/national/oi-reactor-halt-sept-15-to-see-all-plants-idled/#.UgpCdaxSab0

TSURUGA, FUKUI PREF. – Two reactors will go offline for routine checks on Sept. 15, the first time the nation will be without electricity generated by nuclear power in more than a year, government sources said.

It will be the second time that all of the nation's 50 commercial reactors are offline at the same time since the 2011 Fukushima No. 1 plant disaster started, sparking public fears about the safety of nuclear power.

The two reactors currently online are units 3 and 4 at Kansai Electric Power Co.'s Oi plant in Fukui Prefecture. The utility has reported to the Nuclear Regulation Authority that the checks for reactor 3 unit will start Sept. 2, and plans to report that checks for unit 4 unit will commence Sept. 15.

Nuclear reactors are required to undergo inspections every 13 months. Utilities have to file applications with authorities a month ahead of time.

Last year, Japan was without nuclear power for the first time in more than 40 years amid the Fukushima nuclear crisis,triggered by a huge earthquake and tsunami on March 11, 2011.

After about two months, the government allowed the restart of the two reactors at the Oi plant to address possible power shortages in the summer in western Japan.

No other reactors have been brought back online since, but Japan is now moving closer to restarting some units as procedures to check their safety based on a set of new regulations commenced in July.

The safety evaluation of the reactors, however, may take around six months, meaning Japan will see nuclear power generation drop to zero again after the two Oi plant reactors are taken offline.

Before the nuclear crisis, nuclear power supplied around 30 percent of Japan's total electricity.

Tepco to turn profit?

kyodo

Tokyo Electric Power Co. expects to log a pretax profit of about ¥34 billion in the fiscal year through next March if it can restart its idled reactors in January, sources close to the utility and its lenders said Tuesday.

Tepco, which is struggling with the heavy costs of the 2011 Fukushima nuclear disaster, is trying hard to turn a profit in fiscal 2013 because it is a condition for the utility to continue to receive bank loans.

According to an estimate Tepco presented to its lenders, the condition will be satisfied if the Kashiwazaki-Kariwa plant in Niigata Prefecture resumes operation in January, because returning to atomic power will help the utility reduce fuel costs for thermal power generation.

But the prospects on when Tepco can restart the plant are unclear, with Niigata Gov. Hirohiko Izumida opposed to the firm's plan to apply for state safety evaluation of two reactors at the seven-reactor facility.

The estimate also showed that, even if no reactors are brought back online, Tepco could still post a pretax profit of ¥60 billion if it resorts to an 8.5 percent electricity rate hike in January.

Restart Takahama reactors? No way.

August 15, 2013

Revised tsunami projection dashes hopes of early Takahama reactor restarts

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201308150054

By RYUTA KOIKE/ Staff Writer

A revised estimate of maximum tsunami heights means additional measures are needed at the Takahama nuclear power plant in Fukui Prefecture before the go-ahead can be given to restart the plant's idled reactors.

Kansai Electric Power Co., the plant's operator, had projected the maximum tsunami height at 2.6 meters when it applied on July 8 to restart the Takahama plant's No. 3 and No. 4 reactors. The Nuclear Regulation Authority, however, ordered Kansai Electric to make plans based on the Fukui prefectural government's projection that a 3.7-meter wave could inundate the facility.

Kansai Electric later presented new simulation results to an NRA meeting that monitors compliance to industry safety standards. The utility said its simulations showed a tsunami could reach as high as 50 centimeters above the height of the plant site, which lies at an elevation of 3.5 meters.

Some facilities, including a pump chamber adjacent to the No. 3 and No. 4 reactor buildings, could be swamped, Kansai Electric said Aug. 14.

The NRA's new standards do not allow key nuclear plant facilities to be inundated. Kansai Electric's previous worst-case scenario predicted no flooding, and the utility volunteered to build a 6-meter-high seawall and a levee along a water intake channel for completion by March 2015 and March 2016, respectively.

The current NRA safety standards, which were upgraded to incorporate lessons learned from the 2011 Fukushima nuclear disaster, took effect on July 8.

In response to the latest review of projected worst-case tsunami scenarios, Kansai Electric said it will build an additional levee to surround key facilities that are under threat of flooding.

The utility said it has yet to determine the final details on how it plans to proceed or the completion date for the additional work.

"We hope to present details on our plan at the earliest date possible to an NRA screening meeting as soon as we have determined them," a Kansai Electric official said.

Start again, under the circumstances?

August 29, 2013

Fukushima spill snags reactor restart quest

Hosts appear split despite nation's inability to quickly solve water crisis

by Eric Johnston
Staff Writer
http://www.japantimes.co.jp/news/2013/08/29/national/fukushima-spill-snags-reactor-restart-quest/#.UiBEr39Sb9k

OSAKA – The Fukushima No. 1 power plant's continued pollution of the Pacific is fueling growing domestic and international concern about radiation hazards, clouding plans by utilities and the government to quickly restart a dozen reactors.

The Nuclear Regulation Authority's decision to raise the severity assessment of a tank leak Wednesday to level 3 ("serious incident") on the International Nuclear and Radiological Event scale comes over a month after Tokyo Electric Power Co. admitted radioactive groundwater under crippled Fukushima No. 1 power plant is flowing to the Pacific Ocean, and six weeks after applications were filed to restart reactors in Hokkaido, Fukui, Ehime, Saga, and Fukui prefectures under new safety standards.

But there is something of an east-west divide among regional governments as to the wisdom of restarting the reactors. On Wednesday, Fukushima Gov. Yuhei Sato called on Prime Minister Shinzo Abe's government to declare a national state of emergency over the water leaks.

"Under the recognition that this is a declared national emergency, the government should respond in a concerted effort, and with a sense of urgency," Sato told Minister of Economy, Trade, and Industry Toshimitsu Motegi.

In Niigata Prefecture, home to Tepco's giant seven-reactor Kashiwazaki-Kariwa complex, plans to apply for restarting two of the reactors ran into problems even before the most recent water leak, when the governor signaled he was opposed.

"Now is not the time to talk about restarting the reactors, because the investigation into the causes of the Fukushima accident is not finished" Niigata Gov. Hirohiko Izumida warned last week.

In western Japan, the political rhetoric is different.

In Fukui Prefecture, which has 13 commercial reactors, the local townships hosting them, as well as Gov. Issei Nishikawa, are continuing to lobby hard to get them up and running again. Nishikawa has been especially critical of the way the NRA examined the prefecture's plants.

"For no logical reason, the NRA has delayed plant safety inspections" on the new safety standards, Nishikawa said.
The staunchly pro-nuclear Fukui governor has met with senior Abe administration officials twice since June. He called on the government to create a separate body to monitor the operations of the NRA and to make recommendations for improving its operations.

In a passage that came almost verbatim from previous statements by Kansai Electric Power Co., he also asked that a new body of experts be hired to come to a "fair and impartial" scientific conclusion about the fault lines under Fukui's reactors, which were judged active in the case of the Tsuruga plant's reactor 2.

In June, reactors 3 and 4 at Kepco's Oi power plant — currently the only two online in Japan — were allowed to continue operating until they have to halt for regular inspections in September, after the NRA said there were no immediate safety problems.

In Saga Prefecture, Kyushu Electric Power Co. is pushing to restart the reactors 3 and 4 at the Genkai power plant. But the Fukushima water leak has magnified the concerns of local fisherman, and about 20 members of a fisherman's union in neighboring Nagasaki Prefecture last week agreed to protest the effort.

Local opposition, however, isn't as strong as it is in other parts of the country, and there is speculation among anti-nuclear groups that the Genkai reactors will be the first restarted under the new safety guidelines.

In Ikata, Ehime Prefecture, where Shikoku Electric Power Co. officials are moving forward with plans to start the Ikata plant's reactor 3, company officials went door to door earlier this week visiting homeowners and small businesses to explain the safety policy for the plant, also encountering little opposition.

But the questions of if, when and where reactors should be restarted is likely to rely not only on local politics, but also available personnel.

Earlier this month, the NRA took out a help-wanted ad in a utility industry newspaper, seeking 20 people with experience working in nuclear power to help judge whether reactors targeted for restarts meet its new safety standards, which took effect in July.

At present, about 80 people are employed in such work. The NRA wants the new employees to begin in October. Given the amount of work and the number of applications, doubts remain about whether even 100 additional inspectors would speed up the process.

All out soon

September 15, 2013

All nuclear reactors in Japan to be halted
http://www3.nhk.or.jp/nhkworld/english/news/20130915_11.html

The only nuclear reactor in Japan that is generating power will go offline soon for regular inspections.

Kansai Electric Power Company will begin lowering the output of the Number 4 reactor at Ohi nuclear power plant in central Japan on Sunday evening.

The reactor will stop generating electricity late at night, and will come to a halt early Monday morning.

When that happens, all 50 nuclear reactors in Japan will be offline for the first time in about 14 months.

After the nuclear accident at the Fukushima Daiichi plant in 2011, all of the country's reactors went offline for safety inspections.

Two reactors at the Ohi plant restarted operation last year.

Utilities have asked the Nuclear Regulation Authority for approval to restart 12 reactors at 6 power plants.

The regulators began safety assessments in July. They say the process takes about 6 months. Local municipalities must also give approval before reactors can restart.

None of the reactors appear likely to resume operations in the near future.
Sep. 15, 2013 - Updated 00:03 UTC

Last reactor out

September 15, 2013
Japan halts last nuclear reactor

http://www3.nhk.or.jp/nhkworld/english/news/20130916_05.html

The only nuclear reactor in Japan that was generating electricity was halted on early Monday morning.

Kansai Electric Power Company is the operator of Ohi nuclear power plant in central Japan. It began lowering the output of the Number 4 reactor on Sunday evening.

The reactor stopped generating electricity Sunday night and was halted at about 1:30 AM on Monday Japan time. This means all 50 of the country's reactors have ceased operation for the first time in 14 months.

After the accident at the Fukushima Daiichi nuclear power plant in 2011, all reactors in the country went offline for safety inspections. Two reactors at the Ohi plant restarted operation last year.

Ohi's Number 4 reactor was the only one running in Japan after another reactor at the same plant stopped generating power earlier this month for regular checks.

Electric power companies have asked the Nuclear Regulation Authority for approval to restart 12 reactors at 6 power plants, including the Ohi power plant.

The regulators began safety assessments from July in a process they say will take about 6 months.

Local municipalities must also give their approval before reactors can be restarted.

None of the reactors are likely to resume operations in the near future.
Sep. 15, 2013 - Updated 20:16 UTC

Japan's only operating reactor halts generation

http://www3.nhk.or.jp/nhkworld/english/news/20130916_01.html

The only nuclear reactor in Japan generating power has stopped generating electricity for regular inspections.

The Number 4 reactor at Kansai Electric Power Company's Ohi nuclear power plant in central Japan stopped generating electricity at 11PM Japan time on Sunday.

All nuclear reactors in Japan to be halted

http://www3.nhk.or.jp/nhkworld/english/news/20130915_11.html

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None of the reactors appear likely to resume operations in the near future.
Sep. 15, 2013 - Updated 00:03 UTC

Scrap reactors 5 & 6, says Abe

September 19, 2013

Abe tells TEPCO to scrap two surviving Fukushima reactors

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201309190091

THE ASAHI SHIMBUN AND WIRE REPORTS

Prime Minister Shinzo Abe on Sept. 19 urged Tokyo Electric Power Co. to decommission the two surviving reactors at the stricken Fukushima nuclear plant and set a time frame to resolve the radioactive water problem.

Abe requested Naomi Hirose, the TEPCO president, to secure a sufficient budget for safety measures and to deal with the tons of contaminated water accumulating and leaking at the plant.

"In order for them to concentrate on this, I have asked them to decommission the No. 5 and No. 6 reactors that are now halted," Abe told reporters.

Four reactors were destroyed by meltdowns and hydrogen explosions after the 2011 Great East Japan Earthquake rocked the Tohoku region and a tsunami slammed into the Fukushima No. 1 nuclear plant. The No. 5 and No. 6 reactors were not operating at the time and escaped serious damage.

Abe quoted Hirose as saying that TEPCO "will secure another 1 trillion yen ($10.1 billion) in addition to 1 trillion yen already obtained." The TEPCO chief also promised that the purification of contaminated water will be completed by the end of fiscal 2014.

Hirose also said TEPCO will make a decision on decommissioning the reactors by the end of the year, according to Abe.

Scrapping the two reactors could complicate a turnaround plan the plant's operator has presented to creditors.

TEPCO, which has posted more than $27 billion in net losses since the 2011 disaster, is negotiating with a syndicate of Japanese banks for a refinancing of 80 billion yen due next month.

As of April, the company listed 745.5 billion yen in nuclear power generation assets. Those included the No. 5 and No. 6 reactors as well as the utility's Fukushima No. 2 nuclear plant and Kashiwazaki-Kariwa--the world's largest nuclear plant--in Niigata Prefecture.

The Fukushima No. 2 and Kashiwazaki-Kariwa plants are now halted, and it is uncertain whether they can be restarted in the face of local opposition.

TEPCO has come under heavy criticism for a series of mishaps and delays in releasing information about the situation at the Fukushima No. 1 plant. The water leakage problem even threatened to derail Tokyo's bid to host the 2020 Summer Olympics.

After the government decided to take a more central role in the cleanup at the plant, Abe assured International Olympic Committee members on Sept. 7 that the situation at the Fukushima plant "was under control."

However, Kazuhiko Yamashita, a technology adviser to TEPCO, later said at a meeting with opposition lawmakers, "We regard the current situation as not being under control."

Still, Abe stood by his words on Sept. 19.

"I will work hard to counter rumors questioning the safety of the Fukushima plant," he said.

The visit to the stricken plant was Abe's first since his trip last December shortly after taking office. The prime minister was shown the Alps multi-nuclide removal equipment, which can eliminate 63 radioactive substances from contaminated water but has not been used since corrosion holes were found in one of its storage tanks.

The accident at the nuclear plant, 240 kilometers north of Tokyo, triggered the evacuation of 160,000 people and led to the radioactive contamination of air, sea and food.

Abe asks TEPCO to decommission 2 more reactors

http://www3.nhk.or.jp/nhkworld/english/news/20130919_28.html

Japan's Prime Minister Shinzo Abe has urged the operator of the troubled Fukushima Daiichi nuclear power plant to decommission 2 more of its idle reactors.

Abe was speaking to reporters after inspecting the plant on Thursday. Tokyo Electric Power Company, or TEPCO, has been decommissioning the plant's No.1 to 4 reactors.

Abe said he urged the utility to decommission the plant's No.5 and 6 reactors to concentrate efforts to address problems left by the 2011 nuclear accident.

He quoted TEPCO President Naomi Hirose as saying the firm will decide this year how to deal with the 2 reactors.

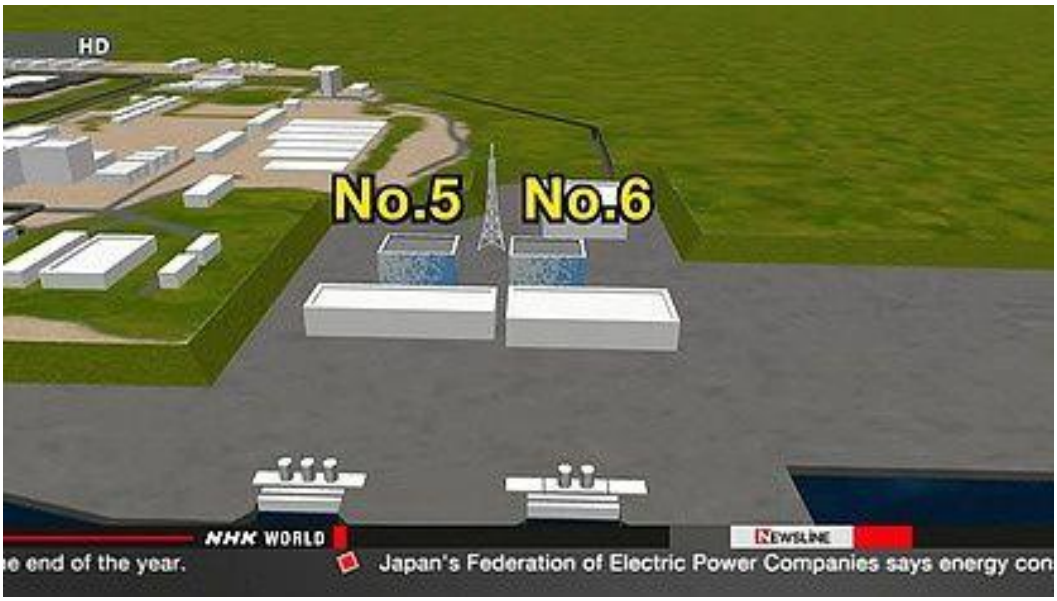
Abe also said he asked TEPCO to earmark discretionary funds that can be used by managers at the site to implement necessary safety measures. He urged the utility to set a deadline for completing purification of contaminated water stored in tanks at the plant.

Hirose reportedly replied that another 1 trillion yen, or about 10 billion dollars, will be added to funds that the company has already earmarked. He also said the company plans to complete purification by March 2015.

Abe stressed that monitoring data collected in the ocean off Fukushima shows that the radioactive water affects only 0.3 square kilometers in the plant's port. He had explained this to the general assembly of the International Olympic Committee in Argentina this month.

The prime minister added that the government will play a major role in the cleanup and that he will be responsible for handling the issue.
Sep. 19, 2013 - Updated 09:06 UTC

status of Number 5 and 6 reactors



http://www3.nhk.or.jp/nhkworld/english/news/20130919_29.html

Tokyo Electric Power Company has not said anything officially about what it plans to do with the Number 5 and 6 reactors at the crippled Fukushima Daiichi nuclear power plant.

The two reactors were off-line due to regular safety inspections when the earthquake and tsunami hit the power plant on March 11th, 2011. The reactors were stable, in a state of cold shutdown.

In March 2012, TEPCO started procedures for decommissioning reactors Number 1 to 4.
Sep. 19, 2013 - Updated 09:04 UTC

Izumida apparently reassured by promise of extra venting equipment

September 26, 2013

TEPCO makes progress toward restarting idled reactors in Niigata

http://mainichi.jp/english/english/newsselect/news/20130926p2g00m0dm103000c.html

NIIGATA, Japan (Kyodo) -- Niigata Gov. Hirohiko Izumida said Thursday that he basically approves Tokyo Electric Power Co.'s plan to apply for a safety assessment of its two idled reactors in Niigata Prefecture, a key step toward resuming their operation.

The announcement came a day after TEPCO President Naomi Hirose met Izumida and promised to install at the Kashiwazaki-Kariwa plant reactors additional safety equipment to deal with severe nuclear accidents.

The approval from Izumida is expected to pave the way for the utility to apply to the Nuclear Regulation Authority for the safety assessment of the Nos. 6 and 7 units at the Kashiwazaki-Kariwa plant. Only reactors that satisfy a set of new safety requirements introduced in July will be allowed to restart.

TEPCO said it will file the application on Friday.

The company, which is struggling to turn its business around following the 2011 accident at its Fukushima Daiichi nuclear complex, wants to reactivate its idled reactors to cut fuel costs, which increased when it returned to thermal power generation following the closure of its other nuclear power plants.

The need to restart the Kashiwazaki-Kariwa plant was stipulated in a 10-year special business plan for TEPCO, which is under effective state control after its receipt of 1 trillion yen in public funds last year.

TEPCO owns the Fukushima Daiichi and Daini plants as well as the Kashiwazaki-Kariwa complex -- the world's largest nuclear power plant with a combined output capacity of 8.2 million kilowatts.

Niigata governor approves TEPCO reactor-restart plan on one condition

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201309260077

THE ASAHI SHIMBUN

Niigata Governor Hirohiko Izumida, who has criticized and humiliated Tokyo Electric Power Co., has now removed a hurdle in the utility's drive to restart two nuclear reactors.

Izumida on Sept. 26 approved TEPCO's plan to apply for a safety screening for restarting the No. 6 and No. 7 reactors at the Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture.

But he attached one condition.

In a document handed to a TEPCO executive on Sept. 26, the prefectural government demanded that the utility promise, in an application request, not to use filtered venting equipment without prefectural approval in the event of an accident at the nuclear plant.

Filtered venting equipment is required for nuclear power plants under new safety standards that took effect in July. The equipment is designed to release steam to keep pressure from building within the containment vessel after radioactive materials are filtered. Still, the steam released would contain radioactive substances.

TEPCO plans to file an application for the safety screening with the Nuclear Regulation Authority on Sept. 27.

In a meeting with Izumida on Sept. 25, TEPCO President Naomi Hirose explained the company's plans to install additional filtered venting equipment at the Kashiwazaki-Kariwa nuclear plant.

Hirose also said TEPCO will abide by a safety agreement with the prefectural government and promised not to apply for an NRA safety screening until it obtains prefectural approval for the construction of filtered venting equipment.

Izumida appeared impressed by TEPCO's policies to take additional safety measures and respect its relationships with the local communities, the sources said.

After the meeting at the prefectural government office on Sept. 25, Izumida said he will decide how to respond after consulting with prefectural government officials.

"I have taken note of the new proposal," he said, referring to the additional filtered venting equipment.

Hirose said: "We are looking forward to (Izumida's) judgment. We want to file an application (for restarting the reactors) as soon as possible based on it."

TEPCO, operator of the crippled Fukushima No. 1 nuclear power plant, is desperate to restart the No. 6 and No. 7 reactors at the Kashiwazaki-Kariwa plant to improve earnings.

Securing a profit for the current fiscal year is a precondition for TEPCO to continue to receive loans from creditors. The utility has suffered losses due to fuel costs for thermal power generation to make up for lost capacity at its nuclear plants.

Izumida previously criticized TEPCO's proposals to ensure safety in case of a major accident at the plant, as well as the utility's handling of the Fukushima nuclear crisis and its response to the growing problem of radioactive water at the site.

The governor spurned Hirose's request for approval when they last met on July 5.

Izumida has questioned TEPCO's plans to put filtered venting equipment on foundations different than those for the reactor buildings.

He repeatedly asked Hirose what would happen if piping that connects the two facilities came off during an earthquake.

"To what extent would residents be exposed to radioactive materials if an accident occurs?" Izumida asked Hirose on Sept. 25.

Hirose said TEPCO will have heavy machinery in place to reconnect piping in case of an accident. He also said the utility will install additional filtered venting equipment underground, which is more quake-resistant than on the surface.

A senior prefectural government official said Sept. 25 that progress has been made since an irate Izumida showed Hirose the door on July 5.

"We cannot tell whether (Izumida) has stopped shaking his fist (at TEPCO), but there is no question that the situation has moved forward," the official said. "We have at last come to a stage where we can talk."

On Sept. 25, Hirose handed a document to the governor requesting prior approval for construction of filtered venting equipment. Izumida refused to accept the document during his previous meeting with Hirose.

Officials of Kashiwazaki and Kariwa, the municipalities that together host the nuclear power plant, received the same document when they met with Hirose on July 5.

They gave prior approval for construction of filtered venting equipment in August.

Niigata gov. gives conditional nod to TEPCO plan

http://www3.nhk.or.jp/nhkworld/english/news/20130926_34.html

The governor of Niigata Prefecture has granted conditional approval to TEPCO to apply for a safety screening at its Kashiwazaki-Kariwa nuclear plant.

The screening will test whether the plant meets stringent new guidelines. Tokyo Electric Power Company cannot resume operations at the compound until it satisfies these standards.

The power company is expected to file an application with the Nuclear Regulation Authority on Friday to restart 2 reactors at the plant, which is on the Sea of Japan coast.

A prefectural official handed a document of approval from Governor Hirohiko Izumida to TEPCO executive Yuji Masuda on Thursday.

Izumida granted his consent after meeting with TEPCO President Naomi Hirose.

Hirose promised to install additional filtered vents at the plant. The vents are designed to release pressure in containment vessels in an emergency, while limiting emissions of radioactive substances.

TEPCO is required to install them before it can restart the reactors.

Hirose also promised to work hard to increase trust in TEPCO by local governments in areas where it has operations.

The Niigata governor says that as a condition of his approval, the firm has to discuss with Niigata and municipal governments how it will avoid exposing residents to radiation from the vents.

Go ahead

September 27, 2013

TEPCO seeks screening toward Niigata plant restart
http://www3.nhk.or.jp/nhkworld/english/news/20130927_17.html

Tokyo Electric Power Company has applied to Japan's nuclear regulator for safety screening needed to restart 2 idle reactors at the firm's Kashiwazaki-Kariwa plant.

The application is the first filed for such reactors -- the same type as those where meltdowns occurred at the Fukushima Daiichi plant.

Officials of the firm visited the Nuclear Regulation Authority and submitted the application for the Number 6 and 7 reactors on Friday.

The move came one day after the governor of Niigata Prefecture, which hosts the Kashiwazaki-Kariwa plant, gave conditional approval for the application.

Under safety requirements put into effect in July, boiling water reactors like the 2 at the plant must have filtered vents. Such vents are designed to release pressure in reactor containment vessels during emergencies while limiting emissions of radioactive substances.

The firm's Managing Executive Officer Takafumi Anegawa said it will tell the authority that the use of such vents will be subject to approval by the prefecture as requested by its governor.

Eighty experts at the regulator are screening applications by 6 other plants with pressurized water reactors. It has yet to announce how it would handle screening of boiling water reactors.
Sep. 27, 2013 - Updated 02:40 UTC

Where is Gov't roadmap on ending reliance on nukes?

September 27, 2013

Editorial: Chubu Electric Power should reconsider reactivating Hamaoka nuclear plant

http://mainichi.jp/english/english/perspectives/news/20130927p2a00m0na003000c.html

Chubu Electric Power Co. reportedly intends to apply with the nuclear power regulating agency for a safety inspection of its Hamaoka Nuclear Power Plant in Shizuoka Prefecture by the end of this fiscal year, in preparation to restart the idled power station.

The utility suspended operations at the atomic power plant shortly after the outbreak of the crisis at the tsunami-ravaged Fukushima No. 1 Nuclear Power Plant in March 2011, following the strong urging of then Prime Minister Naoto Kan. Since resumption of operations at the plant is highly risky, the power company should rather consider decommissioning the complex.

Chubu Electric Power is considering applying for safety inspections of the No. 4 reactor at the Hamaoka plant to restart the unit ahead of its idled No. 3 and 5 reactors. Its No. 1 and 2 reactors are set to be decommissioned. The company cannot restart the No. 4 reactor until October 2015, because it needs to implement additional safety measures.

Nevertheless, the company intends to hastily apply for safety inspections because its increasing reliance on thermal power stations has resulted in a sharp rise in fuel expenses. The utility estimates that it will suffer from a net loss in the business year ending in March 2014 for the third consecutive year. To make up for its increasing losses, the company plans to raise its electricity charges sometime around April next year. Under these circumstances, the Chubu Electric Power board has apparently deemed it indispensable to restart the Hamaoka plant in order to improve its profitability.

However, the conditions of its site have posed a unique danger to the power station. When he urged Chubu Electric Power to suspend operations at the power station, then Prime Minister Kan explained that he considered the huge impact that a serious accident at the Hamaoka nuclear plant could have upon Japanese society as a whole. His explanation is rational.

The plant is situated just above the focus area of a powerful earthquake feared to be triggered by the Nankai trough -- and it could be hit by a massive tsunami if one were to be generated by such a temblor. Furthermore, there is a major industrial district near the power station, and the Tokaido Shinkansen bullet train line and the Tomei Expressway -- two main transportation arteries between eastern and western Japan -- also run nearby. Should a serious nuclear accident occur at the plant, it could cause extremely serious damage to neighboring areas alone. Moreover, such a disaster could divide the Japanese archipelago, dealing a serious blow to the livelihoods of all members of the public, as well as to the industry as a whole.

Even if the nuclear plant's operator implemented various safety measures, it would be difficult to overcome the risks involved with the facility being situated in such an area. The city assembly of Makinohara, situated within 10 kilometers from the Hamaoka plant, has adopted a resolution demanding that the power station be permanently shut down unless its safety is guaranteed. It is expected to be difficult to gain consent from the Shizuoka Prefectural Government, as well as nearby municipalities, for reactivation.

Although business performance improvements are certainly something that company executives should think about, Chubu Electric Power board members should reconsider whether resumption of operations at the Hamaoka plant will truly lead to improvements in its business performance.

Under the Act on Compensation for Nuclear Damage, electric power companies are liable for damages from any accident at nuclear plants that they operate. Since such responsibility is too heavy for a single private company to fulfill, however, even Tokyo Electric Power Co. -- the largest company in the industry -- has been placed under state control following the outbreak of the Fukushima disaster. Therefore, it makes no rational sense for Chubu Electric Power executives to consider restarting the Hamaoka plant.

Behind Chubu Electric Power being so desperate to restart the Hamaoka plant is that the government of Prime Minister Shinzo Abe is leaning toward approving reactivation of idled nuclear reactors without showing a future vision concerning Japan's nuclear power policy. The government needs to show a road map toward ending Japan's reliance on nuclear power, and put its utmost efforts into urging power companies to shut down dangerous nuclear plants.

TEPCO? "Chastened"?

September 27, 2013

Chastened TEPCO applies for safety screenings for restarting 2 reactors

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201309270071

THE ASAHI SHIMBUN

Claiming it had learned a painful lesson from the disaster at its Fukushima No. 1 nuclear power plant, Tokyo Electric Power Co. on Sept. 27 applied for safety screenings for restarting two nuclear reactors in Niigata Prefecture.

Takafumi Anegawa, managing executive officer of TEPCO, submitted applications to the Nuclear Regulation Authority for screenings for the No. 6 and No. 7 reactors at the Kashiwazaki-Kariwa nuclear power plant.

The requests marked the utility's first applications since the Great East Japan Earthquake and tsunami in March 2011 overwhelmed the defenses of the Fukushima No. 1 nuclear plant.

"We have asked (the NRA) to confirm whether our safety measures are sufficient after we learned hard lessons from the accident at the Fukushima No. 1 plant," Anegawa said. "It is a sobering experience."

TEPCO President Naomi Hirose said the same day the company is preparing to apply for safety screenings for other reactors at the Kashiwazaki-Kariwa plant.

The utility hopes to bring the No. 6 and No. 7 reactors back online by the end of March, but hurdles abound.

It is generally believed to take six months for the NRA to check whether a reactor complies with the new nuclear safety standards that took effect in July. But the screenings for the Kashiwazaki-Kariwa reactors could take longer.

One reason is different screening standards depending on the type of reactors.

Four other regional utilities have already applied for safety screenings for 12 reactors at six plants. While these reactors are all pressurized water reactors, the Kashiwazaki-Kariwa reactors are boiling water reactors, the same type as those crippled at the Fukushima No. 1 plant.

Officials at the NRA secretariat have also been preoccupied with the screenings for 10 of the 12 reactors.

The screenings could also be prolonged by NRA investigations into suspected active fault lines at the Kashiwazaki-Kariwa plant.

Under the new safety standards, important facilities of a nuclear power plant are not allowed to be sited immediately above active fault lines, which must be taken into account in seismic designs.

The Kashiwazaki-Kariwa plant has seven reactors, and fault lines below the buildings that house six of them have moved over the past 300,000 years or so.

The only exception is the No. 4 reactor building. In particular, experts suspect that fault lines that run below the No. 1 and No. 2 reactor buildings are active.

TEPCO filed applications for the safety screenings a day after Niigata Governor Hirohiko Izumida gave consent on condition that the company will not use filtered venting equipment in the event of an accident without prefectural approval.

The equipment is designed to release steam to keep pressure from building within the containment vessel after radioactive materials are filtered. Still, the steam released would contain radioactive substances.

However, Izumida, who has criticized TEPCO over its handling of the Fukushima nuclear crisis, has expressed reservations over the utility restarting nuclear reactors.

TEPCO has concluded a nuclear safety agreement with the Niigata and other local governments and is required to obtain their consent before it restarts the Kashiwazaki-Kariwa reactors.

TEPCO has been under pressure to apply for the safety screenings because it must refinance about 80 billion yen ($800 million) in outstanding loans in October.

Securing a recurring profit for the current fiscal year is a precondition for new loans. TEPCO, which incurred more than 300 billion yen in recurring losses in the fiscal year that ended in March, has to at least explain to creditors that it can expect to return to the black.

The company expects an improvement of 100 billion yen in annual earnings if one reactor at the Kashiwazaki-Kariwa plant gets restarted, which will reduce fuel costs for thermal power generation.

The deepening radioactive water crisis at the Fukushima No. 1 plant has also added pressure on TEPCO to restart reactors at the Kashiwazaki-Kariwa plant.

TEPCO has announced it will secure an additional 1 trillion yen for countermeasures against the contaminated water and other problems over the coming 10 years. But a senior industry ministry official said it will not be possible unless reactors are restarted.

TEPCO seeks screening toward Niigata plant restart

http://www3.nhk.or.jp/nhkworld/english/news/20130927_17.html

Tokyo Electric Power Company has applied to Japan's nuclear regulator for safety screening needed to restart 2 idle reactors at the firm's Kashiwazaki-Kariwa plant.

The application is the first filed for such reactors -- the same type as those where meltdowns occurred at the Fukushima Daiichi plant.

Officials of the firm visited the Nuclear Regulation Authority and submitted the application for the Number 6 and 7 reactors on Friday.

The move came one day after the governor of Niigata Prefecture, which hosts the Kashiwazaki-Kariwa plant, gave conditional approval for the application.

Under safety requirements put into effect in July, boiling water reactors like the 2 at the plant must have filtered vents. Such vents are designed to release pressure in reactor containment vessels during emergencies while limiting emissions of radioactive substances.

The firm's Managing Executive Officer Takafumi Anegawa said it will tell the authority that the use of such vents will be subject to approval by the prefecture as requested by its governor.

Eighty experts at the regulator are screening applications by 6 other plants with pressurized water reactors. It has yet to announce how it would handle screening of boiling water reactors.

Sep. 27, 2013 - Updated 02:40 UTC

TEPCO wants to restart two more reactors at Kashiwazaku-Kariwa

September 29, 2013

TEPCO president keen to restart 2 more nuclear reactors in Niigata

http://mainichi.jp/english/english/newsselect/news/20130929p2a00m0na011000c.html

TOKYO (Kyodo) -- Tokyo Electric Power Co. President Naomi Hirose expressed a desire Saturday to make preparations for restarting two more nuclear reactors at a power plant it operates in Niigata Prefecture.

A day after TEPCO filed for state safety assessments for the idled Nos. 6 and 7 reactors at the Kashiwazaki-Kariwa plant, Hirose said in an interview with Kyodo News that he would also like to start the process toward restarting the Nos. 1 and 5 reactors as well.

"The case (of the Nos. 6 and 7 units) will set the example," Hirose said, adding, "The general rule is to abide by the agreement we made with the local community regarding safety."

All of Japan's 50 commercial reactors are currently offline and have to be checked by the Nuclear Regulation Authority to determine whether they satisfy a set of new safety requirements before they can be restarted.

Hirose also said TEPCO can now expect to swing back to a pretax profit for the current financial year through March 2014, even without a further electricity rate hike.

TEPCO, which is struggling due to heavy costs stemming from the 2011 Fukushima nuclear crisis, has set a target to become profitable this year because that is a condition for continuing to receive bank loans.

Despite uncertainty over when the Nos. 6 and 7 reactors will be restarted, Hirose said the goal of posting a pretax profit this year "can be achieved" by implementing more cost-cutting measures and recording certain facility maintenance expenses in fiscal 2014 or later.

Based on an estimate the utility presented in August to its lenders, it would be necessary to raise electricity rates again if no reactors were restarted within fiscal 2013.

TEPCO raised electricity rates last year and increasing rates further is feared to spark a public backlash.

Hirose said a further rate hike would be "the last resort" if the safety checks required before a reactor can be restarted take two to three years to complete.

When asked when he thought the Nos. 6 and 7 reactors can be restarted, Hirose said he did not see it happening in "January or February" and pointed to March or later as more likely.

Once the two reactors resume operating, TEPCO's fuel costs for non-nuclear thermal power generation -- now running at 240 to 330 billion yen annually -- can be reduced, according to the company.

Hirose said the application for safety assessments has increased the likelihood that the Nos. 6 and 7 units will restart within fiscal 2014 starting next April, a move that would improve TEPCO's business situation.

Decommissioning made easier for utilities

October 1, 2013

New accounting rules make axing reactors cheaper

Kyodo
http://www.japantimes.co.jp/news/2013/10/01/business/new-accounting-rules-make-axing-reactors-cheaper/#.Ukq901M0_9k

The government revised accounting rules Tuesday for utilities to prevent their business from deteriorating abruptly if they decommission nuclear reactors earlier than planned.

Power firms are required to set aside reserves for scrapping each of their reactors while they are still in service. The new rules allow them to continue to recoup the funds through electricity rates for up to 10 years beyond the end of a reactor's operational life.

According to an industry ministry official, the rules are likely to be first applied to reactors 5 and 6 of the Fukushima No. 1 complex, which the government recently urged Tokyo Electric Power Co. to scrap in addition to the stricken reactors 1 to 4.

Decommissioning a 1.1 million kw-class atomic unit costs an estimated ¥57 billion to ¥77 billion, the official said.
Under the previous rules, decommissioning funds had been set aside on the assumption that a reactor would be used over a period of 40 years or longer. An operator would have had to post an extraordinary loss if it faced a shortfall in the funds when shutting down a reactor earlier than planned.

The rule change, however, now enables an operator to avoid booking a large extraordinary charge in a single year by extending the period for collecting the decommissioning funds.

The depreciation cost of certain equipment, such as reactor containment vessels, is also permitted to be booked beyond the end of the unit's operation.

The rules have been revised because the Nuclear Regulation Authority introduced new regulations July 8, which could lead utilities to give up on restarting some of their reactors rather than investing in costly safety measures to meet the new standards compiled in view of the 2011 Fukushima meltdowns.
The nation now has a total of 50 commercial reactors, excluding units 1 to 4 at Fukushima No. 1 that Tepco is struggling to keep stable for decommissioning. More than 10 reactors are currently being checked over whether they are safe enough to resume operation.

Scrap Fukushima Daini too, says Motegi

October 1, 2013

Motegi sides with locals calling to scrap Fukushima Daini nuke plant

http://mainichi.jp/english/english/newsselect/news/20131001p2g00m0dm037000c.html

TOKYO (Kyodo) -- Industry minister Toshimitsu Motegi on Monday suggested he supports local calls to scrap the Fukushima Daini nuclear power plant, located near the accident-stricken Fukushima Daiichi complex.

"Thinking about the current feelings of the people in Fukushima Prefecture, I don't think we can treat Fukushima Daini in the same way as other nuclear power plants," the economy, trade and industry minister told a parliamentary committee.

The Daini complex is located 12 kilometers south of the Daiichi plant. The four-reactor plant achieved a stable state of cold shutdown shortly after the natural disasters in 2011.

But he also said plant operator Tokyo Electric Power Co. should make a decision by "comprehensively" considering discussions on Japan's energy policy, local opinion and other factors.

Locals and the prefectural government of Fukushima have been calling for all 10 reactors at the Fukushima Daiichi and Daini plants to be scrapped in the wake of the nuclear crisis, triggered by a huge earthquake and tsunami in March 2011.

TEPCO is already moving to scrap the Nos. 1 to 4 units at Fukushima Daiichi, which were severely damage in the crisis. But it has not been clear about the fate of the remaining six reactors in the northeastern prefecture.

Earlier this month, Prime Minister Shinzo Abe urged TEPCO to scrap the Nos. 5 and 6 reactors at the Fukushima Daiichi plant that avoided meltdowns, saying that the utility should focus more on the plant's cleanup efforts.

October 01, 2013(Mainichi Japan)

Back to active faults issue (Ohi, Takahama)

October 3, 2013

Safety screening of 2 KEPCO plants to take time

http://www3.nhk.or.jp/nhkworld/english/news/20131003_13.html

The operator of 2 nuclear plants in central Japan and the country's nuclear regulatory body remain at odds over safety screenings for the plants' restart.

Kansai Electric Power Company aims to resume operations at the Ohi and Takahama nuclear plants in Fukui Prefecture.

Japan's Nuclear Regulation Authority on Wednesday held discussions over 3 active faults that run near the plants. The faults are the basis for assessing the plants' earthquake resistance.

Kansai Electric repeated its claim that the faults would not shift simultaneously, after assessing sonar surveys of regional topography.

But experts say such an interpretation is convenient for the utility.

Regulation authority member Kunihiko Shimazaki said the assessment won't continue, as there is no definite proof that the faults will not shift simultaneously. He has instructed Kansai Electric to conduct additional surveys.

Is NRA putting screening of Kashiwazaki-Kariwa on hold?

October 10, 2013

NRA chief hints at delaying safety screening of Kashiwazaki-Kariwa nuke plant

http://mainichi.jp/english/english/newsselect/news/20131010p2a00m0na015000c.html

The Nuclear Regulation Authority (NRA) chief has hinted at the possibility of delaying a safety review of the Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture for a planned restart amid the Fukushima contaminated water crisis, during an interview with the Mainichi Shimbun.

NRA Chairman Shunichi Tanaka made the suggestion during the interview on Oct. 9, saying, "We will first and foremost evaluate the situation at the Fukushima No. 1 Nuclear Power Plant," amid a series of blunders at the plant including leakages of radioactively contaminated water.

Tokyo Electric Power Co. (TEPCO), the operator of the Fukushima No. 1 nuclear plant, had earlier filed a request with the NRA on Sept. 27 for a safety screening of the No. 6 and No. 7 reactors at the utility's Kashiwazaki-Kariwa plant for a planned restart of the facility.

On Oct. 4, the NRA instructed TEPCO to file a written report on its measures to address contaminated water at the Fukushima plant and whether the utility would be able to properly manage safety at the Kashiwazaki-Kariwa plant. TEPCO is scheduled to submit the report by the end of this week.

With a new leak of highly radioactive water from a desalination facility at the Fukushima plant on Oct. 9 in mind, Tanaka told the Mainichi, "The Fukushima No. 1 nuclear plant has been hit by trouble almost every day. We must wait until the current situation is settled and the utility can properly manage the facility. We will examine if TEPCO is actually implementing what it states in its report (to be submitted)."

"The work environment at the Fukushima plant is fairly harsh. For such tough work, TEPCO's regular employees should take the lead, but I wonder what actually has been going on at the site. TEPCO tends to use subcontractors and is likely to have avoided directly tackling (the trouble-hit work)," Tanaka said.

He said the NRA will take about a month to examine TEPCO's report before determining its validity.

So far, five power companies have filed for safety screenings on a total of 14 reactors at seven nuclear power stations.

While Tanaka withheld from clearly stating that the NRA was putting on hold the screening of the No. 6 and No. 7 reactors at the Kashiwazaki-Kariwa plant, he told the Mainichi, "We can't work on the (Kashiwazaki-Kariwa) plant as quickly as with other nuclear plants (whose safety screening is under way). The public won't tolerate that."

Regarding other utilities whose nuclear reactors are currently under review by the NRA for planned restarts, Tanaka said, "Some utilities have shown resistance (to our screenings). It is the power companies themselves that would suffer losses from any delayed screenings. Even if they lag behind, we will not become lenient."

He especially criticized Kansai Electric Power Co. for denying possible links between three active faults surrounding the No. 3 and No. 4 reactors at the Oi nuclear power plant and the No. 3 and No. 4 reactors at the Takahama nuclear plant, both in Fukui Prefecture, saying, "The screening has been sluggish because the utility is maintaining things like that."

NRA delays inspections

October 14, 2013

NRA nuclear reactor inspections for restarts delayed

http://mainichi.jp/english/english/newsselect/news/20131014p2a00m0na013000c.html

Nuclear Regulation Authority (NRA) safety inspections on 10 reactors at six power plants -- required for the reactors to restart -- have made little progress as the plant operators have yet to submit necessary documents, NRA officials said.

The NRA has urged the four power companies that operate the 10 reactors to submit the documents and arrange a time to clarify their content during an inspection meeting on Oct. 16.

The NRA has announced how many of the 29 inspection items it has already begun at the 10 reactors. The authority has begun work on the largest number of inspection items at the No. 3 reactor of Hokkaido Electric Power Co.'s Tomari plant -- 11 of the 29 items, or 38 percent. Tomari is followed by the No. 3 reactor at Shikoku Electric Power's Ikata plant at 10 items, or 34 percent. The NRA has started to inspect nine items, or 31 percent, at the No. 1 and 2 reactors at Kyushu Electric Power's Sendai plant and eight items, or 28 percent, at the No. 3 and 4 reactors at the firm's Genkai power station.

Although the NRA has begun inspecting the largest number of items at Tomari power plant, the process is in fact delayed further than inspections at the Ikata plant. This is because the authority has instructed Hokkaido Electric to analyze the subsurface structure below the Tomari plant, as it could amplify earthquake vibrations.

The NRA began examination of four and three items (14 and 10 percent), respectively, at the No. 3 and 4 reactors at Kansai Electric Power's Oi plant and the No. 3 and 4 reactors at its Takahama plant, both in Fukui Prefecture.

NRA safety inspections on nuclear reactors are expected to take about half a year. However, a delay in the submission of relevant documents could prolong the examinations. Five utilities have so far applied for safety inspections of 14 reactors at seven nuclear plants.

The authority has put its inspections on the No. 1 and 2 reactors at the Tomari plant on hold.

Negative impact of Fukushima water crisis on restart

October 23, 2013

Fukushima water crisis threatens TEPCO's plan to restart reactors in Niigata

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201310230078

THE ASAHI SHIMBUN

KASHIWAZAKI, Niigata Prefecture--The growing problem of radioactive water at the stricken Fukushima No. 1 nuclear power plant is stymieing attempts by Tokyo Electric Power Co. to reactivate an idled nuclear power plant here and return to profit.

The Nuclear Regulation Authority decided on Oct. 23 that its chairman, Shunichi Tanaka, will soon meet with TEPCO President Naomi Hirose to discuss safety control measures in light of leaks of contaminated water at the Fukushima plant, among other issues.

Restarting the reactors at the Kashiwazaki-Kariwa nuclear power plant offers the utility the best chance of turning its finances around following the catastrophic meltdowns at the Fukushima plant triggered by the 2011 earthquake and tsunami.

The company started installing new venting equipment at the Kashiwazaki-Kariwa site to put it in compliance with the NRA's safety regulation standards that took effect in July.

However, the NRA is not expected to start full-scale safety screenings for the No. 6 and No. 7 reactors at the Kashiwazaki-Kariwa facility until Tanaka and Hirose have talked things over.

The NRA has not set a date to start the safety screenings due to TEPCO's mishandling of the radioactive water problem at the Fukushima plant.

The agency instructed TEPCO on Oct. 4 to show how it intends to thoroughly implement safety controls at the Fukushima plant. The utility submitted its report on Oct. 15. But the NRA was dissatisfied with the report and decided that Tanaka would have to hear directly from Hirose.

In addition, the boiling water reactors at Kashiwazaki-Kariwa are the first to undergo safety screenings. Some of the conditions required for these reactors are different from those that apply to pressurized water reactors.

Another obstacle is Niigata Governor Hirohiko Izumida's wariness about reactor restarts.

The Kashiwazaki-Kariwa plant is named after the two municipalities it straddles on the Sea of Japan. Its seven reactors have a combined output capacity of 8.212 gigawatts, making it one of the world's largest for a single power plant.
Its boiling water reactors are the same type as the ones at the devastated Fukushima plant.

TEPCO hopes to bring two of the Kashiwazaki-Kariwa reactors--No. 6 and No. 7--online by the end of fiscal 2014. Apart from the Fukushima No. 1 site and the Fukushima No. 2 site, which are not likely to be reactivated anytime soon, the Kashiwazaki-Kariwa plant is the only nuclear facility that TEPCO has any hopes of restarting.

The new safety regulation standards for nuclear reactors stipulate that boiling water reactors can only be restarted after filtered venting equipment is installed.

The equipment is designed to lower pressure inside a reactor containment vessel in the event of a major accident while suppressing the amount of radioactive substances released into the environment.

Work at the Kashiwazaki-Kariwa plant on Oct. 22 involved installing a tank component for removing radioactive substances from vapor, a core element of the filtered venting equipment, on the No. 7 reactor.

Work started in January to reinforce the ground where the heavy equipment was to be installed.

TEPCO plans to finish installing filtered venting equipment on the No. 6 and No. 7 reactors before the current fiscal year ends in March.

TEPCO is reeling under ballooning costs for liquefied natural gas and other fuel to power its thermal plants, which are operating at full capacity to make up for its nuclear reactors that were shut down after the Fukushima disaster.
The utility was in the red in fiscal 2011 and 2012.

Each reactor restart at the Kashiwazaki-Kariwa plant means that TEPCO will not have to shell out for additional fuel costs, which would improve its bottom line by more than 100 billion yen ($1.02 billion) annually.
The utility has no choice but to bank on early restarts to turn its financial situation around.

TEPCO needs to take out 300 billion yen in new loans, partly to repay its bonds, in December. In trying to persuade creditor banks to extend those loans, TEPCO is under pressure to present financial projections that ensure a return to the black in fiscal 2013.

Hirose, the TEPCO president, has said steady cost cutting will allow the utility to post a profit in fiscal 2013.
But that presupposes Kashiwazaki-Kariwa restarts in fiscal 2014, because it is only pushing back necessary expenditures to next fiscal year or later in an effort to make both ends meet in the current fiscal year.

Hirose has pledged to set aside 1 trillion yen to deal with the Fukushima radioactive water crisis over the coming decade, but that amount will be hard to find without nuclear restarts.

TEPCO is expected as early as in November to review its corporate rehabilitation plan and present financial projections incorporating reactor restarts.
(This article was compiled from reports by Kohei Tomida, Takashi Ebuchi and Ryuta Koike.)

NRA : Get a grip on Fukushima before restarting elsewhere

October 28, 2013

NRA to Tepco: Get a grip on No. 1 before thinking of restarts

Jiji, Kyodo
http://www.japantimes.co.jp/news/2013/10/28/national/nra-tepco-heads-discuss-fukushima-no-1-water-woes/#.Um5pD1OwT9k

FUKUSHIMA – Hirose said the safety screening process for the Kashiwazaki-Kariwa units was not among the topics discussed with Tanaka.

The NRA did not open the Tanaka-Hirose meeting to the media, except for the beginning, to allow them to engage in what it called “frank discussions.”

Tepco, which continues to struggle with the massive buildup of radioactive water at the Fukushima plant, filed for NRA safety assessments for idled reactors 6 and 7 at Kashiwazaki-Kariwa in September.

But a formal safety screening meeting for the reactors, usually held in public, has not convened, meaning the assessment process has yet to enter full swing.

Tepco is desperate to curtail the heavy costs it's paying to buy fuel for thermal power generation in place of atomic power.

ALPS unit resumes tests

Following a suspension of about four months, Tokyo Electric Power Co. said Monday it resumed test operations at one of the three high-tech water filtering at the crippled Fukushima No. 1 nuclear plant.

The start of the Advanced Liquid Processing System, or ALPS, which removes most radioactive materials from tainted water at the plant, follows the resumption of another ALPS unit in September.

The daily water processing capacity at the plant now stands at 500 tons, with each unit capable of cleaning 250 tons.
Tepco began using the system in March but halted it in June when corrosion was discovered inside one of the tanks where contaminated water was being stored. A senior official at the Nuclear Regulation Authority suggested Monday that Tokyo Electric Power Co. improve its management of the crippled Fukushima No. 1 power plant before restarting any reactors at its huge complex in Niigata.

Referring to two reactors at the seven-unit Kashiwazaki-Kariwa plant Tepco is seeking to restart, NRA Secretary-General Katsuhiko Ikeda told reporters, "The NRA will decide whether to go ahead with the safety assessment by seeing how the situation at Fukushima No. 1 improves."

He made the comments after joining a rare meeting Monday between NRA Chairman Shunichi Tanaka and Tepco President Naomi Hirose to discuss ways to get a grip on the radioactive water leaking at Fukushima No. 1.

Tanaka was quoted by Ikeda as telling Hirose: "I want you to take drastic measures (to improve the situation) and respond, based on a long-term perspective."

Clearing NRA safety checks is required before Tepco can restart the Kashiwazaki-Kariwa reactors, a move that would improve the firm's tough business predicament resulting from the Fukushima disaster.

The repeated flows, spills and leaks of radioactive water plaguing Fukushima No. 1 have led NRA commissioners to doubt Tepco's management adequately grasps the situation of the workers at the plant or whether the utility has the wherewithal to ensure the safety of the Kashiwazaki-Kariwa reactors.

Tepco has submitted an analysis of the recent water spills and measures it plans to prevent further incidents. This includes transferring about 20 workers from Kashiwazaki-Kariwa to Fukushima No. 1, but the steps didn't impress the NRA.
At Monday's meeting at the NRA building in Tokyo, Tanaka told Hirose to improve the working environment at the Fukushima plant, such as by reducing radiation levels.

"Work efficiency is not good when wearing full-face masks . . . and especially communication is difficult. I expect radiological countermeasures to be taken at the site to end this kind of situation," Tanaka reportedly said.

Hirose separately admitted to reporters that there are still many areas where workers have to put on such masks and that he hopes to secure enough staff to deal with the stricken plant, where three reactors suffered core meltdowns.

Fukushima situation to affect restart of TEPCO's other plant: NRA

http://mainichi.jp/english/english/newsselect/news/20131028p2g00m0dm064000c.html

TOKYO (Kyodo) -- A senior official of the Nuclear Regulation Authority suggested Monday that Tokyo Electric Power Co. should improve its management of the crippled Fukushima Daiichi nuclear power plant before restarting reactors at another nuclear complex.

Referring to the Kashiwazaki-Kariwa plant that TEPCO seeks to restart, NRA Secretary General Katsuhiko Ikeda told reporters, "The NRA will decide whether to go ahead with the safety assessment by seeing how the situation at the Fukushima Daiichi improves."

He made the comments after joining a rare meeting between NRA Chairman Shunichi Tanaka and TEPCO President Naomi Hirose held following a series of radioactive water leaks and other troubles at the Fukushima plant.

Tanaka was quoted by Ikeda as telling Hirose, "I want you to take drastic measures (to improve the situation) and respond, based on a long-term perspective."

Clearing NRA safety checkups is essential for TEPCO to restart the Kashiwazaki-Kariwa plant in Niigata Prefecture, a move that would improve the company's tough business conditions stemming from the nuclear crisis at Fukushima Daiichi in 2011.

The utility filed for assessments of the idled Nos. 6 and 7 reactors in late September. But the NRA has not yet convened a formal safety screening meeting for the reactors, indicating that the assessment process is not yet in full swing.

At the request of the NRA, TEPCO submitted on Oct. 15 a report that analyzed the cause of the leak incidents at the Fukushima plant and presented measures to prevent a recurrence, including transferring about 20 staff from Kashiwazaki-Kariwa to Fukushima Daiichi.

But NRA commissioners have expressed doubts about whether the utility's management personnel fully understand the situation faced by workers on site and whether the company can ensure the safety of the Kashiwazaki-Kariwa plant.

During the meeting on Monday at the NRA's office building in Tokyo, Tanaka told Hirose to improve the working environment at the Fukushima plant, such as by reducing the radiation level.

"Work efficiency is not good when wearing full-face masks...and especially communication is difficult. I expect radiological countermeasures to be taken at the site to end this kind of situation," Tanaka was quoted as telling.

Hirose separately admitted to reporters that there are still many areas where workers have to put on such masks and that he hopes to secure enough staff to deal with the accident-stricken plant, where three reactors have suffered core meltdowns.

Hirose said the safety screening process of Kashiwazaki-Kariwa plant was not among the topics that were discussed with Tanaka.

To allow for "frank discussions" between Tanaka and Hirose, the NRA decided not to make the meeting open to media, except for the outset.

TEPCO, which has been placed under effective state control after receiving a capital injection, is eager to restart the Kashiwazaki-Kariwa plant to curtail fuel costs for thermal power generation that is making up for the loss of nuclear power

Concentrate on Fukushima

October 30, 2013

Editorial: TEPCO should focus on Fukushima crisis, not trying to reactivate idled reactors

http://mainichi.jp/english/english/perspectives/news/20131030p2a00m0na004000c.html

Nuclear Regulation Authority (NRA) Chairman Shunichi Tanaka told Tokyo Electric Power Co. (TEPCO) President Naomi Hirose in a recent meeting that the utility should "drastically reform itself from a long-term perspective," in the wake of leaks of radioactive water on the premises of its tsunami-hit nuclear plant. The NRA will consider when it should start safety inspections on the No. 6 and 7 reactors at the Kashiwazaki-Kariwa Nuclear Power Plant in Niigata Prefecture, which TEPCO is eager to reactivate, after ascertaining whether the situation at the Fukushima No. 1 plant has substantially improved.

TEPCO regards restarting the Kashiwazaki-Kariwa plant as the key to its efforts to rehabilitate its deficit-ridden finances. However, it should rather place priority on countermeasures against leaks of radioactively contaminated water on the premises of the Fukushima nuclear complex. Such being the case, the NRA's decision to effectively freeze its safety inspections on the Niigata Prefecture plant, a process that is a prerequisite for reactivation, is appropriate.

Earlier this month, TEPCO submitted to the NRA a report stating that the power company can take effective countermeasures against contaminated water leaks while resuming operations at the two reactors at the Kashiwazaki power plant. However, some NRA commissioners raised questions about the report, with one of them saying, "Looking at the situation at the Fukushima plant, doubts remain over whether the Kashiwazaki power station is absolutely safe." It is only natural that such questions have been raised. It is highly doubtful that the company which cannot even control contaminated water can be tasked with operating nuclear reactors. TEPCO must concentrate its human resources and funds on efforts to bring the Fukushima No. 1 Nuclear Power Plant under control.

Careless mistakes have occurred one after another at the Fukushima nuclear complex. A pump stopped because a worker pushed the wrong button, while several workers were exposed to radiation because a pipe was erroneously disconnected. The working environment at the plant is severe as workers are required to put on masks to avoid inhaling radioactive substances. In at least one case, an experienced worker was forced to withdraw from the site because his radiation exposure came close to the permissible level. It is easy to imagine that worker morale has declined considerably.

In his meeting with the NRA chief, TEPCO's Hirose admitted that it is now difficult to secure enough personnel to bring the Fukushima plant under control, and then promised that the company will improve the working environment at the crippled power station and add workers to the site. The power supplier should promptly carry out these promises.

Katsuhiko Ikeda, head of the secretariat of the NRA, said, "If TEPCO were to continue making such mistakes from now on, we couldn't say the crisis is under control." The authority should closely monitor TEPCO's efforts to improve its response to the crisis.

The national government should also step up its involvement in efforts to end the crisis. Prime Minister Shinzo Abe has repeatedly pledged that the central government will play a leading role in efforts to bring the situation under control to fulfill its responsibility for the crisis. The government has decided to spend 47 billion yen in taxpayers' money on such efforts, but the funds can only be used exclusively for the construction of underground walls to block ground water from flowing onto the premises of the Fukushima nuclear reactors, for the installation of additional devices to remove radioactive substances from contaminated water and other work that requires high levels of technology.

The government has also solicited experts to offer proposals on technologies necessary to store and treat radioactively contaminated water. The panel on the treatment of contaminated water will incorporate proposed technologies that it deems are feasible in an outline of countermeasures against contaminated water it will draw up by the end of this year. Still, the share of costs between TEPCO and the government and other key issues have not yet been determined.
The government should offer specific proposals on how to steadily treat radioactive water at the Fukushima No. 1 plant and decommission its reactors while considering ways to restructure TEPCO, and the Diet should thoroughly deliberate such proposals.

See recent article:

http://fukushima-is-still-news.over-blog.com/article-nra-get-a-grip-on-fukushima-before-restarting-elsewhere-120835314.html

Restart after verifying safety

November 2, 2013

Ishiba calls for restart of nuclear power plants

http://www3.nhk.or.jp/nhkworld/english/news/20131103_01.html

The secretary general of Japan's governing Liberal Democratic Party says the country's idle nuclear reactors should be restarted once their safety is verified.

Shigeru Ishiba delivered a speech in Sapporo on Saturday on the government's energy policy.

Ishiba said Japan should reduce nuclear dependence by working on renewable sources such as wind and solar.

But he said the current supply is on a tightrope. He advocated putting back online those reactors that pass screenings.

All the reactors are currently offline for safety checks.

Ishiba noted that new reactors are being built in many countries including China, most with Japan's technology.

The LDP secretary general stressed Japan should further advance its nuclear technology and promote its export.

Safety checks at Kashiwazaki-Kariwa

November 13, 2013

Niigata Governor calls for more explanation

http://www3.nhk.or.jp/nhkworld/english/news/20131113_33.html

The Governor of Niigata wants officials at the Nuclear Regulation Authority to provide a more detailed explanation of their decision to start safety checks on reactors in the prefecture.

Governor Hirohiko Izumida noted that the NRA decided to proceed, even though radioactive water continues to leak at the Fukushima Daiichi nuclear plant.

Izumida said that even if the checks show that the reactors in Kashiwazaki-Kariwa meet current safety standards, there is no guarantee that they will be safely operated.

Izumida said it is irresponsible for the NRA to say it will leave the final decision about restarting the reactors in the hands of government officials.

He said the NRA should also examine ways to ensure that residents living near the reactors will be safe in the event of an accident.

Japan's nuclear body to start safety checks
http://www3.nhk.or.jp/nhkworld/english/news/20131113_25.html

Japan's Nuclear Regulation Authority has decided to start safety checks at one of Tokyo Electric Power Company's idle nuclear plants.

The utility asked the NRA in September to conduct checks of the Number 6 and 7 reactors at the Kashiwazaki-Kariwa plant in Niigata Prefecture. The reactors must pass safety checks before TEPCO can restart them.

But NRA officials said they wanted to see first how TEPCO would deal with leaks of radioactive water at the Fukushima Daiichi plant. Regulators held off on calling a public meeting to discuss TEPCO's request for the safety checks.

At a meeting in Tokyo on Wednesday, some participants said it's unfair for the NRA not to convene a meeting to discuss TEPCO's application.

Other people said they appreciate the utility's latest plan to secure enough workers and improve working conditions at the Fukushima Daiichi plant.

After participants decided to proceed with safety checks at the Kashiwazaki-Kariwa plant, the head of the regulators, Shunichi Tanaka, said that the NRA should continue to prioritize the issue of radioactive water leaks at the Fukushima plant.

Tanaka also instructed staff at the Nuclear Regulation Agency to consider the specific procedures for conducting the checks at the Kashiwazaki-Kariwa plant.

NRA forced to get on with safety checks?

November 13, 2013

NRA to hold safety screening meeting for restarting Tepco reactors in Niigata

Kyodo
http://www.japantimes.co.jp/news/2013/11/13/national/nra-to-hold-safety-screening-meeting-for-restarting-tepco-reactors-in-niigata/#.UoSaziewT9k

The Nuclear Regulation Authority said Wednesday it will begin a formal safety screening process for Tokyo Electric Power Co.'s massive Kashiwazaki-Kariwa nuclear plant in Niigata Prefecture, which the utility is seeking to restart to improve its battered finances.

Although Tepco applied for safety inspections of reactors 6 and 7 at the plant in late September, the NRA has not held an official safety screening meeting, which will be open to the public, amid concerns over the utility's poor handling of the shattered Fukushima No. 1 plant.

But the NRA commissioners said Wednesday that the agency should at least hold a meeting to listen to the outline of Tepco's application and check whether there are problems that should be addressed.

The decision was reached after Tepco last week announced steps, in response to NRA suggestions, to improve the tough working conditions for people struggling to clean up the mess at Fukushima No. 1. The complex has been plagued with mishaps caused by human error.

As one of the reasons for moving ahead with the safety screening process, NRA Chairman Shunichi Tanaka told his fellow commissioners at their meeting: "It is the NRA's legal obligation to conduct screenings. . . . If we continue to keep the matter on hold, a legal problem could emerge."

TEPCO's plans for Kashiwazaki-Kariwa

November 19, 2013

TEPCO aims to restart Kashiwazaki plant next July
http://www3.nhk.or.jp/nhkworld/english/news/20131120_03.html

NHK has learned that Tokyo Electric Power Company aims to restart some of the reactors at its nuclear plant in central Japan next July.

TEPCO is drawing up a 10-year business plan. Restarting the Kashiwazaki-Kariwa plant in Niigata Prefecture will help to revive the firm's business after the nuclear accident at Fukushima Daiichi.

The No.6 and 7 reactors are to undergo safety checks by the government's Nuclear Regulation Authority as part of the procedures for restarting nuclear plants.

TEPCO has set the target date for next July because the checks will take at least 6 months and the utility needs to negotiate with the plant's host communities.

If all goes well with TEPCO's plan, the utility is estimated to post a pretax profit of more than 1 billion dollars in the business year that starts next April.

TEPCO says if the reactors cannot return online until January 2015, it will post a pretax loss of 130 million

dollars. The loss is projected to grow to 800 million dollars if the restart is delayed until March 2015.

The business plan is to include further cost-cutting measures such as a voluntary retirement program for about 1,000 officials.

TEPCO aims to coordinate the details with its main lenders and win approval for the business plan from the industry minister next month.
Nov. 19, 2013 - Updated 19:09 UTC

Safety screening starts in Niigata

November 21, 2013

NRA weighs safety of idled Niigata reactors

http://www.japantimes.co.jp/news/2013/11/21/national/nra-weighs-safety-of-idled-niigata-reactors/#.Uo5cTyewT9k

Kyodo

Nuclear regulators on Thursday began assessing the safety of two reactors at Tokyo Electric Power Co.'s Kashiwazaki-Kariwa plant, nearly two months after the utility filed an application to restart them.

The move is a sign of progress for Tepco, which is eager to restart the seven-reactor plant in Niigata Prefecture to improve the tough business conditions it faces due to the crisis at its Fukushima No. 1 complex. Earlier, the Nuclear Regulation Authority suggested the process may not go smoothly.

Open safety screening meetings, which the NRA has convened dozens of times for other reactors, had not been held until Thursday for the Kashiwazaki-Kariwa plant. Tepco's poor handling of the Fukushima No. 1 crisis has made regulators wary.

Ultimately though, NRA Chairman Shunichi Tanaka said, the agency could not continue to put off the screening process for reactors 6 and 7 now that documents submitted by the utility have been completely checked.

He also said that he viewed positively a recent announcement by Tepco that it had taken steps to improve the working conditions at the Fukushima plant, which could help the company to address mishaps caused by human error.

But Tanaka has warned that regulators may temporarily suspend the assessment process if serious problems occur at Fukushima No. 1. The screening period could also be prolonged because the two Kashiwazaki-Kariwa units are the first boiling water reactors to undergo safety assessments since Japan revamped its nuclear regulations in July.

Under the new safety requirements that reflect the lessons learned from the Fukushima crisis, BWRs must be equipped with filtered venting systems so that radioactive substances will be reduced when gas and steam need to be released to prevent damage to containment vessels.

The venting facilities are not an immediate requirement for pressurized water reactors, which are housed in containers larger than those of BWRs, giving more time until pressure rises inside the containers.

The activity of small geological faults beneath the two Kashiwazaki-Kariwa reactors could also become a contentious point, although Tepco has denied that the faults are active.

In quake-prone Japan, nuclear plant operators are not permitted to build reactors directly above faults that could move.

For Tepco, bringing its idled reactors back online would help it cut the huge cost of importing fuel for thermal power generation to meet electricity demand in Tokyo and surrounding areas.

The utility and a state-backed bailout fund have approached main creditor banks to seek about ¥2 trillion in fresh loans, sources close to Tepco said Thursday.

Tepco wants to secure the funds for capital investment, such as to renew its aging thermal power generation facilities, but financial institutions are expected to view the request skeptically, having already provided over ¥4 trillion in loans to the ailing company.

Fuel rods transferred

Tokyo Electric Power Co. on Thursday transferred the first batch of fuel rod assemblies pulled from the reactor 4 fuel pool at the crippled Fukushima No. 1 nuclear plant to another building with more stable storage conditions.

The move came three days after Tepco started a yearlong mission to eventually remove over 1,000 fuel assemblies from the spent fuel pool of the damaged reactor 4 building.

After filling a container with 22 unused fuel assemblies by Tuesday, workers on Thursday used a crane to lower the container from the fifth floor of the building housing the spent fuel pool to the ground about 32 meters below.

The container was then placed on a trailer and taken to a building about 100 meters away. There is a pool inside the building.

Safety assessment process for TEPCO's Kashiwazaki-Kariwa plant begins

http://mainichi.jp/english/english/newsselect/news/20131121p2g00m0dm074000c.html

TOKYO (Kyodo) -- Nuclear regulators on Thursday began a safety assessment process to decide whether two reactors at Tokyo Electric Power Co.'s Kashiwazaki-Kariwa plant are qualified to restart, nearly two months after the utility filed an application.

The move is a sign of progress for TEPCO, which is eager to restart the seven-reactor plant in Niigata Prefecture to improve the tough business conditions it faces due to the crisis at its Fukushima Daiichi complex, but the Nuclear Regulation Authority suggested earlier that the process may not go smoothly.

At the outset of the first safety review session for the Nos. 6 and 7 reactors, TEPCO Managing Executive Officer Takafumi Anegawa said, "We are deeply aware that we are facing doubts over our safety awareness, organization, technical abilities and management. We are expecting strict screening."

Questions from regulators during the 90-minute session focused on a filtered venting system TEPCO plans to install so that radioactive substances will be reduced when gas and steam need to be released to prevent damage to reactor containment vessels.

The installation of the equipment has become a requirement for boiling water reactors for the first time in Japan, after the 2011 Fukushima nuclear crisis led to the release of a massive amount of radioactive material amid the meltdown of three reactors.

Regulators said they want to check the system's filtering ability as well as its operation procedures, given that TEPCO stated in its application document that it will start using the equipment after securing local approval.

TEPCO has included the statement as a result of exchanges with Niigata Gov. Hirohiko Izumida, who has been critical of TEPCO's behavior.

The activity of small geological faults beneath the two reactors could also become a contentious point in the following review process, although TEPCO has denied that the faults are active.

Open safety screening meetings, which the NRA has convened dozens of times for other reactors, had not been held until Thursday for the Kashiwazaki-Kariwa plant as regulators have been wary following TEPCO's poor handling of the Fukushima Daiichi crisis cleanup activities.

As for why the NRA decided to go ahead with the screening process, Chairman Shunichi Tanaka has said the NRA could not continue putting off a screening meeting as format checks of documents submitted by the utility have finished.

He also said that he took positively a recent announcement by TEPCO on a set of measures to improve the working conditions at the Fukushima plant, which could help the company to address mishaps caused by human error.

But Tanaka has warned that regulators may temporarily suspend the assessment process if serious problems occur at Fukushima Daiichi.

For TEPCO, bringing its idled reactors back online would help it cut the huge cost of importing fuel for thermal power generation to meet electricity demand in Tokyo and surrounding areas.

The Nos. 6 and 7 reactors are advanced boiling water reactors and the newest among the seven units at the Kashiwazaki-Kariwa plant, the world's largest nuclear power plant with a combined output capacity of 8.2 million kilowatts.

Sources close to TEPCO said Thursday that the utility and a state-backed bailout fund have approached main creditor banks to seek around 2 trillion yen of fresh loans.

TEPCO wants to secure the funds for capital investment, such as to renew its aging thermal power generation facilities, but financial institutions are expected to cautiously consider whether to respond to the request as they have already provided over 4 trillion yen in loans to the ailing company.

Safety screening begins for TEPCO plant in Niigata

http://www3.nhk.or.jp/nhkworld/english/news/20131121_34.html

Japan's nuclear regulator has begun safety checks on a huge nuclear plant in Niigata Prefecture on the Japan Sea Coast. The checks are the first step toward starting two of the plant's seven reactors.

Nuclear Regulation Authority officials on Thursday held the first open meeting to assess safety measures at the Kashiwazaki-Kariwa plant. The plant is operated by Tokyo Electric Power Company and has the same type of boiling water reactors as Fukushima.

TEPCO applied for the screening in September to restart reactors 6 and 7 at the plant. But the regulator shelved the process because the utility was struggling with tainted water leaks and other problems at Fukushima.

TEPCO executive Takafumi Anegawa told the meeting the utility has learned lessons from Fukushima and incorporated them in new safety measures. He described plans to deal with serious accidents and natural disasters.

The discussion focused on an emergency filtered vent system that lowers air pressure in a containment vessel while curbing radioactive emissions. The system is required for boiling water reactors under tighter guidelines that took effect earlier this year.

NRA officials wanted to know the details of this filtering system and about how the utility plans to get local approval before starting the venting process.

The utility says restarting the plant is the key to its reconstruction but accepts difficulties are expected in the screening process. NRA officials are set to weigh how the company has been dealing with the Fukushima aftermath.

Niigata Governor Hirohiko Izumida criticized the NRA for starting the screening now when the utility has failed to stop contaminated water leaks in Fukushima. He said he will closely follow the discussion.

Local residents who watched the meeting online said the regulator should examine evacuation plans, not just whether the plant clears safety guidelines

TEPCO's hopes

November 23, 2013

TEPCO eyes restarting 4 reactors by 2015

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201311230052

THE ASAHI SHIMBUN

Tokyo Electric Power Co. hopes to have four nuclear reactors in Niigata Prefecture back online by 2015, including two planned for next summer, despite the crisis at its hobbled Fukushima nuclear plant.

The company intends to reactivate the No. 1 and No. 5 reactors at the Kashiwazaki-Kariwa nuclear plant during the first half of 2015 after restarting the No. 6 and No. 7 reactors as early as July 2014, sources said.

Both plans will be included in the utility's rehabilitation program when it is revised toward the end of this year.

The Kashiwazaki-Kariwa plant has seven reactors. TEPCO estimates that for each reactor restart its annual profit will increase by about 100 billion yen ($1 billion).

The revised rehabilitation program will state that electricity rates will be lowered when the four reactors are back online, the sources said. TEPCO raised rates last year, citing increased fuel costs for thermal power plants.

A warning, though, about possible additional rate hikes if the reactors remain idle for an extended period is expected to be included in the revised rehabilitation program, the sources said.

The Nuclear Regulation Authority began full-scale safety screenings for the No. 6 and No. 7 reactors on Nov. 21. The examination, which is done to confirm whether a reactor meets new safety standards, is a prerequisite for reactivation.

TEPCO said it can expect a pretax profit of about 100 billion yen for fiscal 2014 if the two reactors restart operations next summer.

President Naomi Hirose has said the company will also apply for NRA screenings for the No. 1 and No. 5 reactors as soon as preparations are completed.

Safety equipment required under the new safety standards is being installed at the two reactors, including filtered venting equipment.

However, it remains unclear whether TEPCO can restart the reactors under its proposed time frame.

NRA screenings could drag on if regulators demand detailed investigations to confirm that no active faults run immediately under the reactors.

Consent of local communities is also essential, but Niigata Governor Hirohiko Izumida remains cautious. He has criticized plans to restart the two reactors next summer as a pipe dream.

Meanwhile, TEPCO will speed up streamlining its operations while expanding investments, the sources said.

The company plans to adopt a holding company structure as early as fiscal 2016 in view of the electric power industry reform planned by the government.

When the holding company is established, all 10 branch offices will be abolished and employees rendered redundant will be reassigned to other tasks, such as providing compensation to those affected by the 2011 nuclear disaster.

Branch offices fall between the head office and service centers in TEPCO's three-tier organizational structure.

TEPCO will rejuvenate its work force by hiring new graduates in fiscal 2014 for the first time in three years while introducing an early retirement program targeting about 1,000 employees.

The company will also reduce procurement from affiliates by purchasing 60 percent or more of equipment and materials through competitive bidding in fiscal 2015, up from the current 30 percent.

The revised rehabilitation program will include new investment plans, such as an expanded gas business.

"Preparations are indispensable for future growth," a senior TEPCO official said.

The company, which already sells gas to town gas utilities, is looking for new customers because the government plans to liberalize town gas retailing.

TEPCO will introduce "smart meters," or power meters equipped with telecommunication functions, to all 27 million households it serves by around 2020.

New businesses capitalizing on the next-generation meters will be developed with start-ups and other partners.

TEPCO will also resume overseas investments, which were suspended after the Fukushima nuclear disaster. It plans to take part in projects for building power plants in Asia and elsewhere and selling electricity to local utilities.

(This article was written by Mari Fujisaki and Takashi Ebuchi.)

Can TEPCO ignore NRA's safety regulations?

November 28, 2013

NRA wary of conditional use of safety system at TEPCO nuclear plant

http://mainichi.jp/english/english/newsselect/news/20131128p2g00m0dm033000c.html

TOKYO (Kyodo) -- Nuclear Regulation Authority Chairman Shunichi Tanaka said Wednesday that it could be difficult for reactors at the Kashiwazaki-Kariwa nuclear plant to pass the safety screening process if Tokyo Electric Power Co. says it will only use a planned key safety system after securing local approval.

"In that situation, we will probably not give a green light," Tanaka told a press conference, referring to the process of checking whether the plant's Nos. 6 and 7 units are qualified to resume operations in light of new regulations introduced following the 2011 Fukushima Daiichi nuclear power plant disaster.

The safety equipment in question is a filtered venting system, which can reduce radioactive substances when gas and steam need to be released to prevent damage to reactor containment vessels.

Installation of such systems has become mandatory for commercial reactors in Japan, but there is concern over the radiation exposure risk the systems pose to residents living around nuclear power plants.

TEPCO, facing strong distrust from Niigata Gov. Hirohiko Izumida, said the equipment will not be used without securing local approval when it filed for NRA safety assessments of the Kashiwazaki-Kariwa reactors in late September.

While noting that the NRA will "not interfere in the relations between local governments and utilities," Tanaka also expressed concern that regulators may have to reassess the reactors' safety in the event that TEPCO fails to secure local approval.

"We cannot allow the operation of various facilities that should ensure safety to be changed without permission," he said.

The NRA plans to hold its second safety screening session for the Kashiwazaki-Kariwa reactors on Thursday, during which regulators are expected to present what they see will be the main points of discussion.

TEPCO is eager to bring the idled Kashiwazaki-Kariwa plant back online as it is facing a tough business situation due to the massive costs stemming from the Fukushima crisis that began in March 2011. Restarting some of its reactors will help the utility cut huge costs for importing fuel for thermal power generation.

The Nos. 6 and 7 reactors are advanced boiling water reactors and the newest among the seven units at the Kashiwazaki-Kariwa plant, the world's largest nuclear power plant with a combined output capacity of 8.2 million kilowatts.

All 50 commercial reactors in Japan are currently offline and safety checks on some of them started after new regulations were introduced in July.

Restart all Kashiwazaki reactors by 2016, says TEPCO

December 3, 2013

TEPCO eyes restart of all Kashiwazaki-Kariwa reactors by FY2016

http://mainichi.jp/english/english/newsselect/news/20131203p2a00m0na013000c.html

Tokyo Electric Power Co. (TEPCO) and the Nuclear Damage Liability Facilitation Fund (NDF) have decided the outline of a comprehensive special business plan under review in which the beleaguered utility is to restart all of the seven reactors at its Kashiwazaki-Kariwa Nuclear Power Plant by around fiscal 2016 to improve its earnings.

Under the revised business plan, TEPCO, the operator of the crippled Fukushima No. 1 Nuclear Power Plant, is also to issue corporate bonds to stabilize its cash flow. If there are prospects for the restoration of the utility's finances and if the NDF makes profits from selling its holdings of TEPCO shares, the fund will consider setting aside such profits to reduce TEPCO's debts. Nevertheless, there is no guarantee that the rehabilitation scenario, including the envisaged early restart of reactors at the Kashiwazaki-Kariwa Nuclear Power Plant in Niigata Prefecture, will be put into practice as planned.

Under the plan, TEPCO aims to restart the No. 6 and 7 reactors, on which the Nuclear Regulation Authority has been conducting safety assessments, in July 2014. The utility anticipates about 100 billion yen in current account surplus in fiscal 2014 by reducing fuel costs for thermal power generation. While

restarting the No. 1 and 5 reactors in the spring of 2015, the utility plans to restart the remaining three reactors by fiscal 2016, when power retailing will be fully liberalized. In doing so, the utility intends to steadily secure current account surplus of 100 billion to 200 billion yen.

By showing banks a path toward its earnings recovery, the utility intends to secure bank loans and to make a comeback to the bond market in fiscal 2016 where it has not been able to issue corporate bonds in the wake of the outbreak of the Fukushima nuclear crisis.

The utility will also consider measures to reduce its debts. The government currently invests 1 trillion yen in the utility through the NDF. The government also extends loans to help the utility pay damages from the nuclear disaster. TEPCO plans to repay the debts over an extended period of time from profits it makes each business year. Under the revised plan, if the NDF makes profits from selling TEPCO shares after prospects emerge that the utility will be able to rehabilitate its finances, it will consider using the profits for the utility's debt repayments.

The NDF and TEPCO want to make clear how the profits on the sale of such shares will be used in an effort to keep the morale of TEPCO employees from deteriorating, but it is hard to foresee when the NDF will actually sell the shares and whether it will be able to make profits.

Therefore, there are skeptics about the plan within the government. There are cases in which the Industrial Revitalization Corporation of Japan, which provided business revitalization assistance to Daiei Group and other ailing firms, returned capital gains to national coffers. Thus, the scheme could face objections from those who argue that TEPCO is receiving preferential treatment.

The utility also intends to beef up its business operations overseas by investing tens of billions of yen in power projects in Southeast Asia, where it has so far refrained from launching new business projects since the outbreak of the nuclear disaster. On the domestic front, the utility plans to make a full-scale entry into the business of supplying gas to factories, among other projects. TEPCO also plans to introduce next-generation "smart meters," which record details of power consumption data, to all of the 27 million households in its service areas. Based on the power consumption data, the utility will produce diversified electric rate structures in an effort to prepare for the complete deregulation of electricity retailing.

TEPCO will carry out further restructuring by shutting down all of its 10 branch offices and accepting voluntary retirement from about 1,000 employees, among other steps. By doing so, it intends to secure public understanding of public funding for measures it is taking to deal with radioactively contaminated water at the Fukushima No. 1 nuclear plant and other problems.

Apart from spinning it off into a separate company tasked with decommissioning the Fukushima No. 1 nuclear plant, TEPCO aims to turn itself into a holding company in fiscal 2016. It also plans to build cutting-edge coal-fired thermal power stations in two locations in Fukushima Prefecture as early as fiscal 2020 and start using the "J-Village" facility near the crippled nuclear plant, which has been used as a base for dealing with the nuclear disaster, as a soccer training center again by around 2018.

The new business plan will be submitted to the minister of economy, trade and industry at the end of this year, and the government is to approve it as early as the beginning of next year.

December 03, 2013(Mainichi Japan)

Fukushima's six reactors now officially defunct

December 18, 2013

Tepco formally declares surviving Fukushima No. 1 reactors defunct

Kyodo

Tokyo Electric Power Co. officially declared Wednesday that the two reactors that suffered no major damage at the Fukushima No. 1 plant in the 2011 disaster are defunct, meaning the nation will have only 48 operable commercial reactors.

With this decision, all of the plant's six reactors will be classified as defunct," Tepco said in a press release following a meeting of its board. "It is extremely regrettable that we hugely betrayed the local people's trust due to the accident and are deeply ashamed of ourselves."

Reactors 5 and 6 will be classified as defunct on Jan. 31, but instead of dismantling them, Tepco may use them as experimental facilities to support the challenging task of scrapping the three reactors that experienced meltdowns and the other one crippled by a hydrogen explosion.

The public has been demanding that Tepco scrap both the Fukushima No. 1 and nearby Fukushima No. 2 plants. The utility has not made clear what it intends to do with the four-reactor Fukushima No. 2 complex, located about 12 km south of the crisis-ridden Fukushima No. 1 facility.

As new accounting rules regarding decommissioning came into force in October, Tepco is likely to avoid booking a large extraordinary charge for the current business year through next March due to a shortfall in funds for decommissioning.

We are currently examining the impact of the latest decision on our accounting," Tepco said.

After the Fukushima No. 1 plant was hit by the March 11, 2011, magnitude 9.0 earthquake and tsunami, reactors 1, 2 and 3 experienced core meltdowns. And the building housing reactor 4, which did not have fuel inside its core because it was under maintenance, was damaged by a hydrogen explosion.

But reactors 5 and 6, which were also under maintenance at the time of the earthquake, achieved cold shutdowns through the use of an emergency diesel generator that avoided flooding.

Reactors 1 to 4 were deemed defunct in April last year. In September, Prime Minister Shinzo Abe visited the severely damaged nuclear plant and urged Tepco to also scrap reactors 5 and 6 as well, saying the utility should focus more on the crisis cleanup efforts. Just scrapping the crippled reactors alone will take decades, and radiation levels in and around them will remain dangerous at least over that time.

Fukushima No. 1 is Tepco's first nuclear power station. It started commercial operation in 1971. Electricity supplied by the plant supported the economy after the oil crisis in the 1970s, said Tepco, which serves Tokyo and nearby areas.

Tepco is seeking to bring its remaining Kashiwazaki-Kariwa nuclear plant in Niigata Prefecture back online to improve its tough business condition in light of the nuclear crisis.

The utility estimates that if it can restart that plant's reactors 6 and 7 as planned, it can cut between ¥240 billion and ¥330 billion annually in fuel costs for thermal power generation.

Tepco has been under effective state control after receiving a ¥1 trillion capital injection from a government-backed fund.

TEPCO decides to decommission 2 more reactors

http://www3.nhk.or.jp/nhkworld/english/news/20131218_35.html

The operator of the Fukushima Daiichi nuclear plant has officially decided to decommission the facility's 2 reactors that escaped serious damage in the 2011 disaster.

Tokyo Electric Power Company, or TEPCO, made the decision at its board meeting on Wednesday. Four of the plant's 6 reactors were crippled due to meltdowns or hydrogen explosions in their buildings.

Japan's Prime Minister Shinzo Abe in September urged the utility to decommission the plant's No. 5 and 6 reactors. The 4 others were already being decommissioned.

TEPCO gained approval for the decision from 2 host towns last week. The firm's president Naomi Hirose plans to report on the move to Fukushima Prefecture on Thursday.

The decision means the utility needs at least 260 million dollars more for decommissioning. Part of the additional cost is expected to be passed on to consumers through higher electricity fees.

TEPCO does not plan to immediately dismantle the No. 5 and 6 reactors and their buildings. They are to be used to test technologies and train workers to remove melted fuel and dismantle facilities at the plant's No.1 to 4 reactors.

The utility is moving fuel assemblies from the No. 5 and 6 reactors to cooling pools in their buildings. The work is to be completed by next September.

The company says it will keep a total of more than 3,000 fuel units in the pools for the time being. How to finally dispose of the fuel has yet to be decided.

The decision reduces the number of reactors in Japan that could be restarted to 48. Japan had 54 operating reactors before the disaster.
Dec. 18, 2013 - Updated 10:21 UTC

TEPCO to permanently shut down 2 surviving Fukushima reactors

http://mainichi.jp/english/english/newsselect/news/20131218p2g00m0dm094000c.html

TOKYO (Kyodo) -- Tokyo Electric Power Co. decided at its board meeting Wednesday to permanently shut down two reactors at the Fukushima Daiichi plant that avoided meltdowns in the 2011 accident, responding to a request by Prime Minister Shinzo Abe in September.

The Nos. 5 and 6 reactors, however, will not be dismantled and will be used as research facilities to support the challenging task of scrapping the four other reactors that have suffered core meltdowns or have been affected by hydrogen explosions.

Local calls are strong that TEPCO scrap both the Fukushima Daiichi and the nearby Fukushima Daini plants. But the utility has not made clear what it will do with the four-reactor complex about 12 kilometers to the south.

As new accounting rules regarding decommissioning came into force in October, TEPCO is likely to avoid booking a large extraordinary charge in the business year through March 2014 due to a shortfall in funds for decommissioning.

After the plant was hit by a magnitude 9.0 earthquake and tsunami on March 11, 2011, the Nos. 1 to 3 reactors suffered meltdowns and the building housing the No. 4 reactor, which did not have fuel inside its core because it was under maintenance, was damaged by a hydrogen explosion.

But the Nos. 5 and 6 reactors, which were also under maintenance at the time of the earthquake, achieved cold shutdowns through the use of an emergency diesel generator that avoided flooding.

The Nos. 1 to 4 reactors were classified as defunct in April last year as TEPCO decided to decommission them, reducing the total number of operable commercial reactors in Japan to 50.

In September this year, Abe visited the stricken plant and urged TEPCO to also scrap the No. 5 and 6 reactors, saying that the utility should focus more on the crisis cleanup efforts.

On the other hand, TEPCO is seeking to bring its remaining Kashiwazaki-Kariwa nuclear plant in Niigata Prefecture back online to improve its tough business conditions after the nuclear crisis.

The utility estimates that if it can restart the plant's Nos. 6 and 7 reactors as planned, it can cut between 240 billion yen and 330 billion yen of annual fuel costs for thermal power generation.

TEPCO has been under effective state control after receiving 1 trillion yen in capital injection from a state-backed fund.

Cut power rates by restarting Kashiwazaki-Kariwa

December 16, 2013

TEPCO to cut power bills, restart nuclear plant
http://www3.nhk.or.jp/nhkworld/english/news/20131216_40.html

Tokyo Electric Power Company is drawing up a business plan to cut electricity rates by restarting all the reactors at a nuclear power plant in central Japan.

TEPCO raised the rates to cover its losses after the nuclear disaster at the Fukushima Daiichi plant in 2011. The increases averaged about 8.5 percent for households, and 17 percent for businesses.

But the plan TEPCO is drawing up includes reactivating all seven reactors at the Kashiwazaki-Kariwa plant in Niigata Prefecture over the next several years. The utility wants to show that it will be able to reduce electricity bills through the full-scale resumption of operations. All nuclear reactors at the plant are now offline.

TEPCO also plans to slash fuel costs by replacing old thermal power plants with more efficient facilities.

Industry sources say the utility could lower electricity rates in stages if it can realize the resumption. They say the rate cuts would total about 10 billion dollars a year in 10 years.

TEPCO plans to finalize the business program by the end of the year.

Heightened breakwater for Hamaoka

December 20, 2013

Chubu Electric eyes Hamaoka reactor restart with heightened breakwater

A four-meter-tall steel plate is moved into position to raise the height of the breakwater at the Hamaoka nuclear power plant in Omaezaki, Shizuoka Prefecture, on Dec. 19. (Yoichi Kawatsu)

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201312200069

By SO OUCHI/ Staff Writer

OMAEZAKI, Shizuoka Prefecture--Chubu Electric Power Co. has reported progress in its effort to heighten the breakwater at its Hamaoka nuclear power plant, a requirement to bring the facility back online.

The utility showed reporters Dec. 19 the construction site where it is adding an additional four meters of steel plates to the existing breakwater to prevent a future tsunami from damaging the plant.

Chubu Electric originally completed an 18-meter-tall barrier stretching 1.6 kilometers to protect the plant in December 2012. However, it decided to heighten the structure after a Cabinet Office panel predicted a major quake in a worst-case scenario could trigger a 19-meter tsunami along the Pacific coast.

The tsunami generated by the Great East Japan Earthquake that caused reactor meltdowns at the Fukushima No. 1 nuclear power plant in March 2011 was about 13 meters high.

The Cabinet Office's report predicted a major quake along the Nankai Trough, an underwater trench stretching from Suruga Bay off Shizuoka Prefecture along Japan's Pacific coastline to Kyushu, could strike the region within decades.
By satisfying the new regulatory standards against tsunami and other disasters, the utility hopes to restart at least one reactor soon after the barriers are completed in September 2015.

The company is expected to apply to the Nuclear Regulation Authority for a safety review of the No. 4 reactor by the end of March as one of the steps toward its eventual restart.

Shimane restart

December 25, 2013

Screening sought to restart Shimane reactor

http://www3.nhk.or.jp/nhkworld/english/news/20131225_13.html

Chugoku Electric Power Company has applied to Japan's nuclear regulator for a safety screening needed to restart an idle reactor. The reactor is at the firm's Shimane nuclear power plant in Matsue City, Shimane Prefecture, western Japan.

The application is the 2nd filed for boiling water reactors --- the same type as those that melted down at the Fukushima Daiichi nuclear power plant, in northeastern Japan, in March, 2011.

Chugoku Electric Vice President Mareshige Shimizu visited the Nuclear Regulation Authority and submitted the application on Wednesday.

The utility says it has not yet decided when to bring the reactor back online.

It says it hopes to install a filtered vent at the reactor next May at the earliest. Under safety requirements, boiling water reactors must have such vents, which are designed to release pressure in a reactor containment vessel during an emergency while limiting emissions of radioactive substances.

The firm has raised the height of a breakwater in front of the reactor by 6.5 meters, to 15 meters, as a tsunami prevention measure.

The nuclear regulator has been occupied with screening 7 other plants. Plants around the country, including the Onagawa plant, in northeastern Japan, which suffered damage in the March 2011 disaster, may also apply for a restart.

It is unknown how long the screening of the Shimane plant will take.
After the screening by the nuclear regulator, the company must get agreement on restarting the reactor from Shimane Prefecture, Matsue City and other local governments, such as neighboring Tottori Prefecture.

Restart Onagawa

Restart sought for reactor damaged in 2011 tsunami disaster
December 28, 2013
http://ajw.asahi.com/article/0311disaster/fukushima/AJ201312280050

THE ASAHI SHIMBUN

In a step toward restarting its Onagawa nuclear power plant, Tohoku Electric Power Co. has filed an application with the government's nuclear watchdog for safety checks, a first among nuclear facilities affected by the 2011 earthquake and tsunami.
The utility is keen for the No. 2 reactor at the Onagawa plant in Miyagi Prefecture to come back online as its net profit has been weighed down with ballooning fuel costs to operate thermal power plants to make up for the suspension of nuclear plants.
Tohoku Electric filed the application with the Nuclear Regulation Authority on Dec. 27.
Operators of nuclear plants that are deemed to have higher risks have either applied or are preparing for safety screening applications for a restart at an earliest possible date to improve their financial standings.
Chugoku Electric Power Co. applied Dec. 25 for the NRA's checks for its Shimane nuclear plant in Matsue, capital of Shimane Prefecture.
Chubu Electric Power Co. is expected to file an application for its Hamaoka nuclear plant in Omaezaki, Shizuoka Prefecture, in January.
The Hamaoka plant is particularly controversial because it sits on the projected epicenter area of a long-predicted earthquake that could devastate the Tokai region. Chubu Electric is now building a 22-meter barrier to protect the plant from tsunami, 4 meters taller than initially planned, after scientists said there was a greater likelihood of a temblor spawning a tsunami taller than 18 meters.
Tohoku Electric's Onagawa plant, with three reactors, was damaged by fire and other problems due to the Great East Japan Earthquake and tsunami in March 2011.

The plant was shaken by a temblor registering lower 6 on the Japanese scale of 7. The tsunami that reached the plant was 13 meters, nearly as high as the ground where the plant stands.

Tohoku Electric's safety check application is for the No. 2 reactor, which suffered relatively less damage than the other two reactors. Work to bolster quake resistance for the No. 2 reactor is already in progress.

The utility, based in Sendai, Miyagi Prefecture, has also begun work to raise the height of the coastal levee near the plant to 29 meters to prepare for a projected tsunami of 23.1 meters.

The company hopes to restart the No. 2 reactor in April 2016 or later.

Shigeru Inoue, vice president of Tohoku Electric, expressed confidence about the plant's safety features.

"We have confirmed the safety of the plant on our own by conducting a special study," he said.

The utility was in a hurry to proceed with the Onagawa plant first as it is expected to take a lot longer to prepare for safety screenings for its other facility, the Higashidori nuclear plant in Higashidori, Aomori Prefecture.

The Higashidori plant emerged basically unscathed from the 2011 disaster.

But experts say the facility sits on a possible active fault, forcing the company to halt preparations for safety applications.

The balance sheets of utilities have been hit hard since all their nuclear plants were shut down to meet the new safety standards, following the triple meltdown at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear plant in the wake of the 2011 quake and tsunami.

The situation is particularly serious for Kansai Electric Power Co., which relies on nuclear energy for roughly half of its electricity output, higher than any other utilities.

"If we cannot restart our idled reactors by summer, we may be forced to consider an additional hike in electricity rates," said a Kansai Electric official.

The government is also pushing reactor restarts to prevent another rise in electricity rates.

It fears a further increase in rates could deliver an additional blow to the nation's economy, which has begun to pick up with Prime Minister Shinzo Abe's economic measures, since the consumption tax rate will rise from 5 percent now to 8 percent in April.

But no reactors are likely to go online during the current fiscal year ending in March due to a delay in the NRA's safety evaluations.

The NRA has accepted applications of 16 reactors at nine nuclear plants since July, including the Onagawa plant reactor, and has reported progress in checks of 10 reactors at six plants.

The screening process is stalled for the rest either due to a lack of sufficient measures to prepare for a severe accident or because applications were submitted only recently.

Even safety evaluations of the 10 reactors are not moving as fast as expected because the safety standards for nuclear facilities became more stringent after the Fukushima disaster, particularly in regard to preparedness for earthquakes and tsunami.

Even if electric power companies clear the new safety standards, they need to gain consent from local governments over a restart, a process that could require more time.

(This article was compiled from reports by Miho Tanaka, Norihisa Hoshino, Toshio Kawada and Ryuta Koike.)

No plant ready to go back online, says NRA

January 1, 2013

Nuclear plants unlikely to resume operations soon

http://www3.nhk.or.jp/nhkworld/english/news/20140101_18.html

Officials with the Nuclear Regulation Authority in Japan say no nuclear plants are likely to resume operations in the near future.

They set new safety standards last July following the 2011 accident at Fukushima Daiichi. The guidelines call on operators to prepare for severe accidents and to reinforce facilities to make them earthquake-resistant.

Seven utilities have applied for safety screenings for 9 plants so they can restart operations.

The regulators have held 65 meetings to examine those applications. They say none of the plants is ready to go back online because operators have not appropriately renewed their estimations of the scale of possible earthquakes.

Nuclear Regulation Authority Chairman Shunichi Tanaka says he has no clear idea how long the screening process will take.

All commercial reactors in Japan are currently offline. Utilities want to restart them as soon as possible because the cost of importing fuel for thermal power generation is straining their bottom lines.

If and when regulators give them the green light, the firms still need consent from local governments before they can fire up their nuclear plants.

JNFL applies for safety assessment on Rokkasho plant

January 7, 2014
Japan Nuclear Fuel files for safety checks of fuel reprocessing plant
http://mainichi.jp/english/english/newsselect/news/20140107p2g00m0dm051000c.html

TOKYO (Kyodo) -- Japan Nuclear Fuel Ltd. on Tuesday applied for a state safety assessment on its spent fuel reprocessing plant in Rokkasho in northeastern Japan to put it onstream.
Although it is not clear how long the safety assessment process will take, the company said it hopes to secure the permission of authorities to use the plant in Aomori Prefecture by October and start its actual operation after securing local consent.
The plant was designed for a key role in Japan's fuel recycling policy that aims to reprocess spent uranium fuel and reuse the extracted plutonium and uranium as reactor fuel.
After submitting the application, Japan Nuclear Fuel Senior Executive Vice President Kazuhiro Matsumura told reporters that he expects the Nuclear Regulation Authority to implement the safety review "efficiently" and that the company is making preparations so that it will not see a delay in completing the plant in October.

Japan Nuclear Fuel started building the plant in 1993 and a trial operation began in March 2006. But its completion has been repeatedly postponed following a series of problems, including leakage of high-level radioactive waste liquid.

For the NRA, an entity launched after the 2011 Fukushima Daiichi nuclear power plant disaster, it will be the first safety checkup of a spent fuel reprocessing plant. The NRA put in place related regulations in December.

Under the new safety standards, spent fuel reprocessing facilities are required to take measures to respond to severe accidents such as criticality incidents. They are also required to enhance protection against earthquakes and other natural disasters.

The safety assessment process could be long, as the reprocess flow is complicated and involves a lot of equipment. The activity of a fault located off the coast of Rokkasho could also become a contentious point.

The Rokkasho plant is designed to reprocess 800 tons of spent fuel per year, extracting about 8 tons of plutonium in the process.

Japan, as the only non-nuclear weapons state in the world that is carrying on with a commercial reprocessing project, says it upholds the principle of not keeping excessive plutonium stockpiles.

Matsumura suggested that plutonium generated through the planned operation of the Rokkasho plant will be consumed by existing reactors in the form of plutonium-uranium mixed oxide fuel, a project called "pluthermal" in Japan.

"The pluthermal plan is promoted by the state and electric power companies and we believe it will steadily show progress," he said.

All of the country's commercial reactors are currently offline. About 15 reactors are waiting for their safety to be confirmed by the NRA to move ahead with resumptions.

Restart

January 12, 2013

Nuclear plant restarts on the table

http://www.japantimes.co.jp/opinion/2014/01/12/editorials/nuclear-plant-restarts-on-the-table/#.UtLiBrSao_g

Japan is going through its first winter without nuclear power since the March 2011 meltdowns at Tokyo Electric Power Co.'s Fukushima No. 1 plant. All of the nation's 50 nuclear power reactors have remained offline since the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Oi plant in Fukui Prefecture were shut down for maintenance last September.

The Nuclear Regulation Authority, which examines idled nuclear power plants that utility firms want to restart, must proceed strictly on scientific grounds — focusing on whether their restart plans comply with the new safety regulations, introduced in 2013, that incorporated lessons learned from the Fukushima nuclear disaster. The NRA must not be swayed by political considerations.

As soon as the new safety regulations took effect last July, power companies rushed to apply for the NRA's assessment of their plans to restart the reactors. Six months on, the NRA has under consideration seven utilities' plans to restart a total of 16 reactors at nine plants across the country.

The assessment process is taking longer than was initially thought due partly to delays on the part of the power companies preparing massive volumes of paperwork. It remains uncertain how soon the NRA will conclude its examination of any nuclear power plant included in the plans.

Under the new standards — billed as the world's toughest nuclear regulations — utilities are obliged to install specific countermeasures for major contingencies ranging from core meltdowns to tsunamis. Reactors will be required to be equipped with a filtered venting system to reduce the amount of radioactive substances released into the environment when pressure needs to be vented from a reactor core during emergencies.

But pressurized water reactors, used mainly at plants in western Japan, have been given a five-year grace period to meet the requirement. (Most of the reactors used in eastern Japan, including Fukushima reactors, are boiling water reactors.)

Utilities are also required to make a strict assessment of whether geological faults running underneath nuclear plants are active, a factor that would result in permanent shutdown of reactors.

Power companies have reason to hurry. They need to restart nuclear power plants to reduce the massive cost of imported fuel for increased thermal power generation, which has been making up for the shutdown of nuclear plants.

The Abe administration, which now calls nuclear power an "important baseload power source" for the nation's energy supply stability, says it is ready to reactivate reactors that have passed the NRA's examination **once the consent of local authorities hosting the power plants is obtained.**

More utilities are expected to apply to restart their plants. Japan Nuclear Fuel Ltd. also recently filed for NRA screening of its spent nuclear fuel reprocessing plant and related facilities in its complex at Rokkasho, Aomori Prefecture.

Assessment of the Rokkasho facilities will be made according to a separate set of safety regulations that took effect in December. That work is expected to take longer because of the complicated process of spent-fuel reprocessing and the sheer number of facilities to be examined.

Manpower support for the NRA will be needed if the screening process becomes backlogged due to staff shortages or work overloads. NRA assessment is a crucial process toward ensuring that nuclear power plants are adequately safe and can withstand major disasters on the basis of the experience with the Fukushima disaster. The NRA needs to point out any safety shortcomings in the utilities' plans and get them corrected before approving the restarts.

Delay likely for Hokkaido restart

February 5, 2014
Construction may delay restart of Tomari reactor

http://www3.nhk.or.jp/nhkworld/english/news/20140205_11.html

The operators of a nuclear power plant on Japan's northern main island of Hokkaido say they will start major construction to improve the safety of one of their reactors. The work will significantly delay their plan to restart the reactor.

Hokkaido Electric Power Company announced the work on the Tomari plant No. 3 reactor at a meeting on Tuesday with the Nuclear Regulation Authority or NRA.

Tomari is one of 6 nuclear plants that applied for NRA safety inspections in July. The inspections are required under new safety guidelines for restarting reactors.

The NRA has been assessing the safety of the plant's No. 3 reactor for more than half a year. The reactor has only one pipe for spraying water into the containment vessel in the event of an accident.

NRA officials say the reactor does not meet the government's safety standards because the operator's assumptions about the possibility of a malfunction are insufficient.

Hokkaido Electric Power officials say the planned construction work will take more than a few months.

NRA officials say the plant's No. 1 and 2 reactors are also not ready for safety inspections.

Inspection of the No 3 reactor is also hampered by estimates of the scale of an earthquake that could hit the plant.
Feb. 5, 2014 - Updated 04:37 UTC

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See also: February 4, 2014

Hokkaido reactor needs construction work to satisfy new regulations

http://www.japantimes.co.jp/news/2014/02/04/national/hokkaido-reactor-needs-construction-work-to-satisfy-new-regulations/#.UvEVfbTrV1s

Tokyo election will help restart

February 10, 2014

INSIGHT: Tokyo vote emboldens moves for reactor restarts
http://ajw.asahi.com/article/behind_news/politics/AJ201402100058

THE ASAHI SHIMBUN

Yoichi Masuzoe's landslide victory in the Feb. 9 election for Tokyo governor strengthened the hand of the Abe administration in its efforts to forge ahead with restarts of idled nuclear reactors.

The 65-year-old Masuzoe, a former welfare minister backed by the ruling Liberal Democratic Party and its junior coalition partner New Komeito, garnered 2.11 million votes, more than the combined tally of the two anti-nuclear runners-up.

Kenji Utsunomiya, 67, former president of the Japan Federation of Bar Associations, ended with 983,000 votes, while former Prime Minister Morihiro Hosokawa, 76, gained 956,000 votes. At 46.14 percent, voter turnout was the third lowest on record.

"It was good that a person facing in the same direction as the government was elected," Chief Cabinet Secretary Yoshihide Suga told reporters when he visited Masuzoe's office Feb. 9 to congratulate him on his win.

Takeo Kawamura, chief of the LDP's election strategy committee, said that having an ally as head of the metropolitan government "will give the administration great leverage in advancing its policies."

The Abe administration, which threw its full support behind Masuzoe, views his victory as a signal that the public approves of its policy to reactivate reactors this year once they are declared safe by nuclear regulators.

Seven utilities have applied for safety screenings to the Nuclear Regulation Authority for 16 reactors at nine nuclear plants as a condition for bringing them back online.

The nation's 48 reactors are all shut down for safety checks following the triple meltdown at the Fukushima No. 1 nuclear power plant triggered by the March 2011 Great East Japan Earthquake and tsunami.

The government is moving to have reactors restarted as early as summer, depending on the results of NRA safety screenings and support from local governments that host nuclear plants. In this regard, securing public sentiment is crucial.

Hosokawa was backed by popular former Prime Minister Junichiro Koizumi, who has become a scathing critic of Prime Minister Shinzo Abe's pro-nuclear energy policy.

Government leaders were concerned that Koizumi would become more confrontational if Hosokawa won or even made an impressing showing.

"If Hosokawa and Utsunomiya together receive more votes than Masuzoe, it could send a message that Tokyo residents support their call for zero nuclear plants," education minister Hakubun Shimomura, a close ally of Abe, said Feb. 6.

Abe campaigned for Masuzoe in Tokyo's Ginza district Feb. 2, along with New Komeito leader Natsuo Yamaguchi.

Many government officials believe that Hosokawa's crushing defeat will undermine moves seeking nuclear phase-out.

"Koizumi will not be able to pick himself up again," a veteran LDP lawmaker said. "The government will proceed with reactor restarts as if nothing had happened."

Koizumi, who was in power between 2001 and 2006 and groomed Abe under his wing, took up the anti-nuclear cudgels last year and has repeatedly called on the prime minister to immediately abolish nuclear energy.

Media reports in early January that Hosokawa may run with backing from Koizumi gave the government a fright. It feared that the nuclear energy issue could dominate the campaign agenda.
Government officials were also concerned that the election outcome could shake up the LDP as some lawmakers are sympathetic to calls to move away from nuclear energy.

Abe fired a warning shot against a campaign preoccupied with nuclear energy during his African tour Jan. 12, saying pressing issues need to be discussed in a balanced manner.

He cited accepting more children in day care, preparing to host Tokyo Olympics in 2020 and improving preparedness against a mega-earthquake as examples.

In mid-January, the government postponed Cabinet approval of a basic energy policy, which features continued use of nuclear energy, to minimize the impact on the election.

The government and the ruling coalition changed tack and went all out to back Masuzoe after opinion polls showed he was the front-runner. Previously, the campaigning was led by the LDP's Tokyo chapter.

LDP Secretary-General Shigeru Ishiba, for example, demanded party lawmakers each submit a list of 100 supporters in Tokyo for canvassing for votes.

"A hard slog"

February 10, 2014

Japan's nuclear restart bogged down in safety checks and paperwork
http://ajw.asahi.com/article/0311disaster/fukushima/AJ201402100011

REUTERS

Hundreds of technicians and engineers are camped out in Tokyo hotels trying to revive Japan's nuclear industry, shut down in the wake of the Fukushima disaster almost three years ago.

It's proving a hard slog. A new, more independent regulator is in place, asking difficult questions and seeking to impose tougher safety rules on powerful utilities that were largely their own masters for the past 50 years.

The Nuclear Regulation Authority (NRA) was created in 2012 and set new safety guidelines in July last year. It now has four teams vetting reactors at nine nuclear power stations on a list of those seeking to restart. A deadline to complete the checks has been missed as the NRA is still asking for reams of information. No one is able to predict when the first of 48 reactors will be turned back on.

The delays are biting the utilities which are having to spend billions of dollars to import fossil fuels to keep the power on, pushing Japan into a record trade deficit and risking undermining Prime Minister Shinzo Abe's polices to end years of stagnant growth.

"All the utilities are in a similar situation and, unless outstanding issues are resolved, we can't judge that they are in compliance with the standards," Tomoya Ichimura, an NRA director, told Reuters.

SLOW PROGRESS

The regulator and staff from the utilities and Mitsubishi Heavy Industries Ltd, a leading supplier of nuclear plant equipment, are ploughing through mountains of paperwork on the technical specifications of reactors and their vulnerability to natural disasters such as the earthquake and tsunami that knocked out the Fukushima No. 1 nuclear power plant in March 2011.

All lack experience in carrying out such detailed safety checks because of the lax regime that existed before Fukushima.

"Only the framework of the safety criteria was decided, not the details, so the dialogue between the NRA and power companies to work out the specifics is taking time," said Seiichi Nakata, Project Leader, Department of Policy, Communication and International Affairs at the Japan Atomic Industry Forum.

And once the checks are done, reactors must undergo planned inspections, which took as long as two months under the previous regime, as well as get the go-ahead from local authorities before they can be turned back on. The plants are being treated as if they have just been built and are seeking certification to start operating for the first time.

Interviews with utility and nuclear industry staff, regulators and government officials reveal a climate of uncertainty, frustration and long hours.

A taskforce of some 90 NRA inspectors dispatch orders and requests to hundreds of staff from regional utilities seconded to the capital and camped out for months in business hotels near the regulator's headquarters. As many as 2,800 staff at Mitsubishi Heavy are involved in dealing with utilities' requests on specifications and other data, the company said.

LONG HOURS

Kyushu Electric Power Co, Hokkaido Electric Power Co, Kansai Electric Power Co and Shikoku Electric Power Co say they have each stationed scores of employees in Tokyo to respond to queries from the regulator.

A typical working day for them lasts from 8 a.m. to 11 p.m. They stay in cheap business hotels within a quick commute of the NRA headquarters in a leafy district of central Tokyo. One of those, the Hotel Unizo in Shimbashi, a bustling district of bars and restaurants, charges 11,000 yen ($110) a night. To keep costs in check, some companies offer staff a daily allowance of as little as 1,500 yen for meals, and no laundry, said one person close to the safety review process.

Any downtime not spent returning home to visit families is used to prepare for more meetings with the regulator.

"Everyone involved in the safety reviews is irritated and it is mentally draining," said one staffer at a regional utility, who has been stationed in Tokyo since July and has missed key dates on his children's school calendar.

"I can't read books or watch TV. There's no time to relax," he said, adding he rarely has time even to wash his clothes. "I have 20 sets of underwear and socks bought from convenient stores rolled up like sushi in my office," he said.

PAPER ... AND MORE PAPER

The utilities also rent office space for staff to prepare paperwork for the regulator, said an official who oversees the process at a regional utility. Asked when he expected reactors to be restarted, he replied: "That's what we want to know."

Utilities must submit thousands of pages of documents outlining their compliance and readiness on a checklist of 27 main items required by the NRA, covering everything from quake protection to their

emergency responses. Kyushu Electric, which has applied to restart four reactors, has alone submitted more than 10,000 pages of documents to the regulator, said spokesman Hiroki Yamaguchi.

The regulator is still feeling its way and often changes the criteria for compliance, forcing utilities to submit more documentation, people in the industry said. The utilities then take their requests to Mitsubishi Heavy, which is struggling to meet deadlines.

"Mitsubishi Heavy basically handles safety assessments of the plants, and the utilities vie with each other to get help from them, creating a bottleneck," said the person involved in the checks at a regional utility.

Mitsubishi Heavy declined to comment on claims that it was the reason for some delays.
The cost to Japan's economy and the utilities' finances is heavy. Japan imported a record 87.5 million tons of LNG last year, at a cost of $69 billion, according to customs-cleared import data. Imports of thermal coal were also at record levels.

"There's a growing consensus from a purely economic perspective that Japan needs to restart as many reactors as it can in order to build out the diversification of its power sources and reduce fuel prices," said Tom O'Sullivan, founder of independent energy consultancy Mathyos Japan.

Forecasts that the first nuclear reactor would be back in operation by the middle of this year are misplaced, said Tetsuo Yuhara, a director at The Canon Institute of Global Studies, who previously spent 30 years at Mitsubishi Heavy.

"I have no forecast for restarts. It's the same situation as a year ago, as two years ago. Nothing has changed."

Boost of confidence for pro-nukes

February 10, 2014

Nuke foes' loss lets Abe push for restarts

by Miya Tanaka
http://www.japantimes.co.jp/news/2014/02/10/national/nuke-foes-loss-lets-abe-push-for-restarts/#.UvkM54XrV1t

Kyodo

The defeat of two anti-nuclear candidates, including former Prime Minister Morihiro Hosokawa, in Sunday's Tokyo gubernatorial election has given the central government a boost of confidence as it prepares to move forward with an energy policy supporting the use of atomic power.

"We plan to compile a feasible and balanced Basic Energy Plan (for medium- to long-term energy policy)," Prime Minister Shinzo Abe told a Diet committee Monday morning.

Nevertheless, Hosokawa's attempt to focus attention on nuclear policy — a politically sensitive issue since the Fukushima nuclear crisis started in 2011 — appears to have put more pressure on Abe's government to refrain from rushing toward endorsing a draft energy plan that has been criticized for its strong pro-nuclear tone.

Abe's administration initially wanted to approve the plan in January, after unveiling a draft the month before praising nuclear energy as an "important base-load power source." Base-load power refers to electricity sources that are cheap and stable and can be used continuously through the day.

The draft also said the government will push for restarting nuclear reactors that meet the country's new safety regulations introduced last July, while effectively leaving open the possibility of building new reactors.

In the drafting process, officials of the Ministry of Economy, Trade and Industry did not even seem to be shy about showing that METI remains a strong promoter of atomic power, despite the lingering anti-nuclear sentiment generated by the Fukushima meltdowns, which was termed a man-made disaster in part because of the industry's cozy ties with METI.

"We have no intention at all to give up the nuclear option. The most important issue is to deliver this message outside," Takayuki Ueda, head of the Natural Resources and Energy Agency, which is under METI, said in December when briefing lawmakers in the ruling Liberal Democratic Party on the contents of the draft.

But the government appeared to shift toward a more cautious stance amid criticism from some LDP members who felt the draft deviated from the party's campaign pledge for the 2012 general election. The LDP promised to strive for the establishment of social and economic structures independent of nuclear power.

Applying further brakes was the Tokyo gubernatorial election, in which Hosokawa, tying up with charismatic former Prime Minister Junichiro Koizumi, joined the race in a bid to turn the poll into a referendum on energy policy.
Abe's government was quick to avoid triggering a backlash over its energy policy stance.

A day after the official campaigning for the election kicked off on Jan. 23, METI Minister Toshimitsu Motegi said the government would consider revising the draft energy plan to avoid "misunderstandings" that Japan seeks to rely heavily on nuclear power.

"I do not intend to change the term 'base-load power,' but if it is perceived as an electric source used for an extremely large amount, or given a high priority, I will consider changing the context," Motegi told a press conference.

His remarks indicated the part of the plan that highlights the importance of nuclear power could be watered down.
Motegi also refrained from setting deadlines for establishing the new energy policy.

NRA to speed up restart

February 19, 2014

_No53 / News in Brief
Japan Regulator Plans To Speed Up Reactor Restarts
http://www.nucnet.org/all-the-news/2014/02/19/japan-regulator-plans-to-speed-up-reactor-restarts

Plant Operation
19 Feb (NucNet): Japan's Nuclear Regulation Authority is working to speed up the restart of some of the nation's offline nuclear reactors, officials said today.

The NRA, an independent body created in 2012 in response to the March 2011 accident at Fukushima-Daiichi, said it would create "a priority list" of nuclear power stations which meet the earthquake and tsunami criteria as soon as next month, which will help move some nuclear facilities forward in the restart process.

Regulatory officials will compile reports on a handful of prioritised plants, which will then be handed off for public comment for an additional four weeks, a statement said. The NRA will also hold town hall meetings in local communities where plants are based to field any scientific and technical questions.

Japan has 50 commercial nuclear reactors, but only two, Kansai Electric Power Company's Ohi-3 and Ohi-4, have been restarted since the Fukushima-Daiichi accident. They have since been taken offline for scheduled refuelling and maintenance

The NRA is in the process of reviewing reactors to confirm that they meet new nuclear safety standards, which came into force on 8 July 2013.

Figures released by the NRA in December 2013 showed that applications have been submitted for the restart of 16 nuclear power reactors in Japan.

According to those statistics, the NRA has received applications for the restart of the following reactor units: Tomari-1, -2 and –3; Onagawa-2; Kashiwazaki Kariwa-6 and -7; Takahama-3 and -4; Ohi-3 and -4; Shimane-2; Ikata-3; Genkai-3 and -4; and Sendai-1 and -2.

Some plants are more equal than others

February 20, 2014

NRA to designate nuclear plants for priority safety screenings

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201402200032

THE ASAHI SHIMBUN

The Nuclear Regulation Authority said it will designate nuclear power plants for priority safety checks from among the six that are currently being screened to determine if their reactors comply with its tightened regulation standards.

The decision came during a regular meeting of the government's nuclear watchdog Feb. 19.

The plants are to be singled out as early as March, making them likely to be the first to be brought back online.

While operators have requested NRA safety screenings for 10 nuclear plants across Japan, such examinations are presently under way only for six of them--the Sendai plant in Kagoshima Prefecture, the Genkai plant in Saga Prefecture, the Ikata plant in Ehime Prefecture, the Takahama and Oi plants in Fukui Prefecture, and the Tomari plant in Hokkaido.

Requests for those plants were submitted last July when the new regulation standards went into effect.

The NRA is expected to work out draft screening reports on a plant-by-plant basis as it nears the end of the screening process, once the standard seismic ground motion and the standard tsunami heights have been established. The standard seismic ground motion and the standard tsunami height, or the largest expected values that should be considered, have yet to be designated at any of the nuclear plants.

After the NRA selects the plants to be prioritized, it plans to concentrate on hammering out its first draft screening reports.

The NRA also plans to call for opinions from a broad audience on the draft screening reports, because they will be the first under the new regulation standards. It plans to co-host public hearing sessions with local governments in and around areas hosting nuclear plants if such requests are made by those governments.

The opinions contributed during the public calls and hearing sessions could be incorporated into the screening reports, NRA officials said.

What nuclear-free Japan?

February 20, 2014

Energy policy revised but intent remains same: Restart nuke reactors

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201402200063

THE ASAHI SHIMBUN

The Abe administration's long-awaited basic energy policy, set to be approved in March, means that Japan will continue to rely on nuclear power to generate electricity in spite of the disaster three years ago.

It will pave the way for the restart of idle nuclear reactors as early as this summer, when electricity demand is at its peak.
The basic energy plan, which will define the country’s mid- and long-term energy policy, will use slightly different wording from the draft plan revealed by the economy ministry last December.

The draft plan said that nuclear power generation is an “important base electricity source that serves as a basis” for society. The revised plan will say that nuclear power generation is an “important base load electricity source.”

The “base” in the draft plan and the “base load” in the revised plan both imply that nuclear power continues to generate a certain amount of electricity irrespective of seasons or hours.

However, base load is a more technical term that laypeople might easily construe as putting less importance on nuclear power generation--when nothing could be further from the truth.

The phrase “that serves as a basis” in the draft plan will be also deleted in the revised plan. The decision to delete it reflects concern in the ruling parties over such strong wording in the face of public opposition to nuclear power generation in the aftermath of the Fukushima nuclear disaster in 2011.

Despite the changes to wording, the intent of the basic energy plan remains the same: to restart the nation's idle nuclear reactors as soon as possible.

“Even with the slight change in expressions, the direction in policy (toward the restart of idled nuclear reactors) is unchanged,” said a senior administration official.

By keeping the wording “nuclear power generation is an important electricity source,” the Abe administration seeks to proceed smoothly with the restarts of idle nuclear reactors.

The revised basic energy plan is set to be approved by the Cabinet in March. It must first be adopted in a meeting of ministers tasked with the issue, probably as early as Feb. 25.

Initially, the administration planned to approve the basic energy plan, based on the economy ministry’s draft plan, in mid-January. But those plans went awry after former Prime Minister Morihiro Hosokawa decided to contest the Feb. 9 election for governor of Tokyo on a platform of creating a nuclear-free society.

Fearing that signing off on the basic energy plan would give momentum to Hosokawa or other anti-nuclear candidates, the Abe administration postponed taking the matter to Cabinet level.

In the event, Hosokawa and the other anti-nuclear candidates lost to Yoichi Masuzoe, who favors a gradual phase-out of nuclear power and was backed by the ruling party headed by Abe. Masuzoe's victory removed a key obstacle in the Abe administration's plans to move forward on the issue.

The government plans to approve the restart of idle nuclear reactors as early as this summer if the facilities pass new stringent safety screenings imposed by the Nuclear Regulation Authority.

In a December meeting of the economy ministry's panel that compiled the draft basic energy plan, Fukui Governor Issei Nishikawa asked the government to clearly state its position on maintaining nuclear power to generate electricity.
By enunciating a strong pro-nuclear stance, the central government would find it easier to obtain consent for the restart of idle nuclear reactors from prefectures and municipalities that host nuclear power plants.

The basic energy plan also endorses the government's policy of promoting a nuclear fuel recycling program.

Studies at the prototype fast breeder reactor Monjuin Tsuruga, Fukui Prefecture, which is a key part of the program, will continue.

(Norihisa Hoshino, Tomoyoshi Otsu, Yuriko Suzuki and Mari Fujisaki contributed to this article.)

Restarting Kashiwazaki not so easy

February 26, 2014
Incoming TEPCO chairman says July restart of Kashiwazaki-Kariwa nuclear plant unlikely
http://mainichi.jp/english/english/newsselect/news/20140226p2a00m0na007000c.html

Fumio Sudo, who is set to become chairman of Tokyo Electric Power Co. (TEPCO) in April, said Feb. 25 it is unlikely the Kashiwazaki-Kariwa nuclear plant in Niigata Prefecture will be restarted in July.

In an interview with the Mainichi Shimbun, Sudo, an adviser to and former president of steelmaker JFE Holdings Inc., explained that screening by the Nuclear Regulation Authority (NRA) for earthquake faults, which has a bearing on the plant's future, is likely to take several months. "A July restart is looking difficult," he said.

Under a business turnaround plan that the government approved in January this year, TEPCO predicted that its pretax profits for fiscal 2014 would reach roughly 167 billion yen, assuming it could bring the Kashiwazaki-Kariwa plant back online in July. If the restart of the plant's idled reactors is significantly delayed, then this will hold back the utility's earnings, and the company could come under pressure to increase customers' electricity bills again, despite the hike in 2012.

Sudo, however, said it was premature to consider increasing electricity bills, and maintained that TEPCO would strive to cut costs.

"We'll reduce costs to the bone, and even if there's an increase, we want to do all we can to hold it down -- even by a single yen," he said.

Speaking from his experience as president of a steel company that felt the heat of international competition, Sudo said, "TEPCO, too, needs an awareness of international competition." He said that the lack of such awareness was one reason behind the increase in electricity prices.

"Japan's energy costs are roughly triple those of the United States. Unless we make and break alliances, we won't get anywhere," he said. He underscored his position that major restructuring was needed in the power company, just like in the steel industry.

Sudo declared that he will visit Fukushima Prefecture, host to the company's crippled Fukushima No. 1 nuclear plant, soon after he becomes chairman.

"TEPCO lost trust through the nuclear accident. For my first three years (as chairman), we'll start off by restoring confidence," he said. He indicated that he would place priority on restoring confidence by putting effort into providing compensation, handling the nuclear disaster and decommissioning reactors at the Fukushima plant.
February 26, 2014(Mainichi Japan)

Paving the way for restart

February 26, 2014

Draft of gov't energy plan paves way for reactivation of nuclear plants

http://mainichi.jp/english/english/perspectives/news/20140226p2a00m0na002000c.html

The draft of the government's basic plan on energy has paved the way for reactivation of idled nuclear power stations.

The draft, announced by the government on Feb. 25, clarifies that the government will give the green light for reactivation of nuclear reactors that meet the new standards set by the Nuclear Regulation Authority (NRA). Moreover, the draft states that a certain ratio of nuclear power to total electricity consumed across the country should be maintained.

Although the wording in the government's draft has been slightly watered down from the proposal made by an advisory panel to the Economy, Trade and Industry Ministry, its calls for restarting atomic power stations remain unchanged.

However, some legislators within the ruling coalition are critical of its content because it clarifies the government's policy of clearly departing from the "zero nuclear" policy adopted by the previous administration led by the Democratic Party of Japan (DPJ). As such, the coalition is poised to cautiously deliberate the plan.

Issei Nishikawa, governor of Fukui Prefecture that hosts 13 commercial nuclear reactors, appreciated the government's draft of the basic plan on energy that clearly calls for maintaining Japan's reliance on nuclear plants. "The government fulfilled its responsibility for showing the importance of atomic power," he said.

One of the main aims of the draft is to clarify the government's stance toward atomic power to prefectures and municipalities hosting nuclear reactors and gain consent from local bodies.

The proposal drawn up by the industry ministry's panel in December last year recognizes nuclear power as an "important foundational power source that constitutes the basis" for electricity supply.

The ministry considered how to water down the wording of atomic power's role in electricity supply as ruling coalition partner New Komeito has pledged to seek to eliminate atomic power in the long run and the issue was a key point of contention during the Feb. 9 Tokyo gubernatorial election.

Some officials within the ministry proposed to delete the word, "important." However, as the draft describes natural gas and oil as "important" power sources, deleting the word from the description of nuclear plants could have provoked protests from local bodies hosting atomic power stations.

As such, the ministry erased the phrase, "that constitutes the bases," and used a technical term, "base load power source," to make it unclear whether nuclear power is far superior or inferior to other power sources.

The government's draft more proactively calls for the introduction of renewable energy sources than the panel's proposal. "The introduction of renewable energy should be sped up to the maximum extent over the next three years, after which it should also be actively promoted." The proposal made by the advisory council only states that the introduction of renewable energy should be sped up to the maximum extent over the next three years.

Although the draft says Japan's reliance on atomic power should be reduced as much as possible, its shows no road map toward cutting back on nuclear power, such as numerical targets.

Even though the wording in the draft has been changed, some government officials believe "it won't make any change to policy measures that the government should implement," as a senior official of the industry ministry says.

The government's draft also states that Japan will continue its nuclear fuel cycle project in which plutonium extracted from spent nuclear fuel will be reused for nuclear reactors. However, there are no prospects that a reprocessing plant in Rokkasho, Aomori Prefecture, and the Monju prototype fast-breeder reactor in Tsuruga, Fukui Prefecture -- the core facilities in the project -- will be placed into operation in the foreseeable future because of a series of technical problems and a failure to meet the new safety standards.

The specific goal of putting fast-breeder reactors to practical use in the future has been dropped from the government's draft. At the same time, the draft emphasizes that the Monju reactor will be used for research on reducing the amount and toxicity of high-level radioactive waste.

Still, it does not mean that the government has given up putting the fast-breed reactor into practical use, says a senior ministry official, noting that the draft only shows what should be done with the prototype reactor for now.

Japan already possesses 44 tons of plutonium which could be used to make thousands of nuclear weapons. The draft says plutonium intended for use in fast-breeder reactors will be mixed with uranium and burned in conventional nuclear reactors as long as Monju can be reactivated soon. However, it remains unclear whether it is feasible.

If Japan is to start reprocessing spent nuclear fuel to produce plutonium while the current situation remains unchanged, it would run counter to the principle of not possessing plutonium without clear purposes of using it.

The continuation of the nuclear fuel cycle project is based on the assumption that various nuclear facilities are in operation. Therefore, the project runs counter to the government's policy of "reducing Japan's reliance on atomic power as much as possible."

Furthermore, since pools holding spent nuclear fuel are becoming full at many nuclear power stations across the country, the handling of radioactive waste that has nowhere to go poses a serious challenge.

The draft proposes to increase the capacity of temporarily storing spent nuclear fuel both on and outside the premises of atomic power stations. However, the proposal falls short of showing any specific measure to achieve this, and it is difficult to win consent form local communities.

While the government's draft of the basic energy plan calls for continued reliance on nuclear power, it fails to answer questions about various challenges posed by such an energy source. (By Wataru Okubo, Tokyo Economic News Department, and Daisuke Yamada and Yuka Saito, Tokyo Science and Environment News Department)
February 26, 2014(Mainichi Japan)

Sendai (Kagoshima Pref.) reactors get priority

March 13, 2014
Nuclear watchdog puts two Kyushu reactors on shortlist for restart screening

http://ajw.asahi.com/article/behind_news/politics/AJ201403130014

REUTERS
The government's nuclear watchdog put two reactors on a shortlist for a final round of safety checks on March 13, moving a step closer to reviving the country's nuclear industry, three years after the Fukushima disaster that led to the shutdown of all plants.

Two days after the third anniversary of the meltdowns at the Fukushima No. 1 nuclear power plant, the Nuclear Regulation Authority placed two reactors operated by Kyushu Electric Power Co. on a list for priority screening at a meeting of officials reviewing restart applications.

No timing for a potential restart was decided at the meeting and the next stage of checks incorporates a period of public hearings, which may be a fraught process given widespread skepticism about a return to nuclear power.

Kyushu Electric's Sendai reactors in Satsuma-sendai, Kagoshima Prefecture, are located about 980 kilometers southwest of Tokyo.

The utility is one of the most reliant of Japan's regional electricity monopolies that provide nuclear power, supplying about a third of Japan's energy needs before the Fukushima disaster.

Prime Minister Shinzo Abe, a strong supporter of nuclear power, finalized a mid-term energy plan last month, which embraces nuclear energy and calls for the restart of reactors deemed safe by regulators, overturning the previous administration's plan to eventually mothball all reactors.

Tokyo Electric Power Co's Fukushima No. 1 plant suffered a triple meltdown after an earthquake and tsunami that left at least 15,000 dead, sending a massive radioactive plume into the air and ocean.

In the worst nuclear disaster since Chernobyl in 1986, thousands were forced to flee their homes and much of the area around the Fukushima plant, about 220 km north of Tokyo, remains a no-go zone due to high levels of radiation.

Cleaning up Fukushima is expected to take decades and cost at least 11 trillion yen ($108 billion).
The disaster led to the eventual shutdown of all reactors, forcing utilities to spend billions of dollars on expensive fossil fuels to generate electricity.

Sendai nuclear plant screening prioritized
http://www3.nhk.or.jp/nhkworld/english/news/20140313_18.html

Japan's Nuclear Regulation Authority says it will prioritize the safety screening process for the Sendai nuclear plant in Kagoshima Prefecture, southwestern Japan. The country's 48 commercial reactors, now off-line, have to pass the screening before they can be reactivated.

Thursday's announcement means that the Number 1 and 2 reactors at the plant will likely be the first in Japan to clear the screening and resume commercial operation. Kyushu Electric Power Company is the operator of the units.

The authority discussed whether procedures should be speeded up for any of the six plants in the advanced stages of the safety review. Ten nuclear plants in Japan are currently being screened.

Prioritization requires confirmation of the maximum levels of tremors and tsunami expected from possible earthquakes.

The chairman of the authority, Shunichi Tanaka, told a meeting on Wednesday that major safety issues have mostly been resolved.

Authority officials expressed satisfaction with the Sendai plant operator's efforts.

Authority chairman Tanaka declared that they will begin preparations to wrap up the screening process.

The authority will report on the results of the safety review process, and give permission for a restart after listening to experts' views and holding public hearings in the prefecture.

Kyushu Electric hopes to resume operation of the Sendai plant before demand for power surges in the summer.
But the utility will still have to clear on-site inspections and persuade local residents.
Mar. 13, 2014 - Updated 03:09 UTC

Sendai nuclear plant emerges as leading candidate to restart
http://mainichi.jp/english/english/newsselect/news/20140313p2g00m0dm032000c.html

TOKYO (Kyodo) -- Nuclear regulators on Thursday decided to prioritize the safety review of two reactors at Kyushu Electric Power Co.'s Sendai plant in southwestern Japan, making them potentially the closest to being allowed to restart among Japan's 48 offline commercial reactors.

Currently, a total of 17 reactors at 10 nuclear power plants are subject to inspections to determine whether they satisfy a set of new safety requirements introduced in the wake of the 2011 Fukushima Daiichi nuclear power plant disaster.

But the Nuclear Regulation Authority has decided to narrow down the number of reactors it will place priority on so that the organization can efficiently finish its first safety checkup process based on the new regulations.

During a meeting Thursday, commissioners agreed that the Nos. 1 and 2 reactors at the Sendai plant in Kagoshima Prefecture are qualified to move on to the final stage of the review process.

"I understand that the Nos. 1 and 2 units at the Sendai plant have cleared major agendas (in regard to the assessment of earthquake and tsunami that could affect the plant), while others have not yet," Chairman Shunichi Tanaka told the meeting.

Toyoshi Fuketa, a commissioner in charge of checking the safety of facilities and countermeasures against severe nuclear accidents, also said he is satisfied so far with Kyushu Electric Power's approach toward serious accidents.

Under procedures agreed earlier, the NRA staff is expected to start devoting efforts to crafting a draft assessment report of the basic policies on the reactors' design and accident response. The document will serve as a certificate showing the inspected reactors have cleared the screening.

After compiling the draft, the NRA plans to solicit public opinion from scientific and technical viewpoints over a period of about four weeks.

Kyushu Electric Power wants to restart the plant by summer, when electricity demand increases. But it is not clear when the reactors will actually restart, as the NRA will need time to fully finish the checkups, while the utility will have to secure local consent before actually moving to reactivate the reactors.

The two reactors at the Sendai plant were operating when a magnitude 9.0 earthquake and tsunami hit eastern Japan in March 2011, triggering the Fukushima crisis, but they have been shut down for mandatory regular checkups since September the same year.

Kyushu Electric Power applied for the NRA's safety checks of the two reactors in July 2013, saying the maximum possible seismic ground motion that could affect the plant's important facilities is 540 gals.

During the safety review process, however, the utility decided to raise the estimate to 620 gals. It also revised upward the size of tsunami that could hit the plant to about 5 meters above sea level.

None of Japan's 48 reactors are allowed to reactivate unless they satisfy the new regulations, which for the first time oblige utilities to put in place specific countermeasures against severe accidents like reactor core meltdowns, as well as against huge tsunami -- the direct cause of the Fukushima crisis.

Prime Minister Shinzo Abe has reiterated that his government will push for the restart of reactors that have satisfied what it calls the world's toughest nuclear regulations, but a majority of the public is believed to be against such moves.

Anything could happen with screening

March 13, 2014

NRA chief: Massive tasks for screening

http://www3.nhk.or.jp/nhkworld/english/news/20140313_42.html

Japan's nuclear regulator has brushed away speculation about the restart date of the Sendai nuclear plant, despite prioritizing it for safety screenings.

Shunichi Tanaka, chairman of the Nuclear Regulation Authority, was explaining its decision on Thursday to check the plant in Kagoshima Prefecture ahead of others.

Tanaka said with so many safety items still to be examined anything could happen, especially if officials take time over planned checkups.

He said the decision on whether to speed up procedures for checks at other plants depends on the efforts of operators.

He said the NRA may make such a decision if operators clear major safety problems. But he said the reality is that they have yet to resolve outstanding issues.

Tanaka said one reason why safety screening is taking time is because operators are struggling to adapt to new safety regulations, which are very different from previous ones.

Meeting standards not enough to preclude accidents

March 17, 2014

Editorial: Overcome challenges before restarting Sendai nuclear plant

http://mainichi.jp/english/english/perspectives/news/20140317p2a00m0na002000c.html

The government's Nuclear Regulation Authority (NRA) has decided to prioritize safety inspections on the No. 1 and No. 2 reactors at Kyushu Electric Power Co.'s Sendai Nuclear Power Plant in Kagoshima Prefecture among examinations on idled reactors that would pave the way for restarting them. As such, Sendai plant's No. 1 and No. 2 reactors are set to be the first nuclear reactors to be examined under the new regulatory standards.

The government intends to go ahead with reactivation of nuclear reactors that pass the NRA's safety inspections on the grounds that Japan's new safety standards for nuclear reactors are the strictest in the world. However, if the government is to restart idled reactors based solely on the results of the NRA's inspections, it would only revive the myth of nuclear reactors' infallible safety that collapsed following the March 2011 outbreak of the Fukushima nuclear crisis. The NRA is supposed to only check if nuclear reactors meet the new standards, but confirmation that nuclear reactors meet the standards does not mean that there are no risks of accidents.

One cannot help but wonder whether the operators of nuclear reactors are sufficiently prepared for accidents, as well as who would take responsibility for any accidents, why the government intends to go ahead with reactivation despite risks of accidents and how the government will win consent from local communities hosting nuclear plants. The government has obligations to clearly answer these questions while showing the specific procedures for restarting nuclear reactors.

The new regulatory standards for atomic power stations that came into force in July last year require the operators of nuclear plants to strengthen countermeasures against earthquakes and tsunami, and to be fully prepared for serious accidents and terrorist attacks. Eight power companies have so far filed applications with the NRA for safety inspections on 17 reactors at their 10 nuclear plants. Based on inspections that have been conducted so far, the NRA has concluded that Kyushu Electric Power Co.'s assumption of the scale of earthquakes and tsunami that could hit Sendai's No. 1 and 2 reactors is appropriate.

The NRA is poised to assign inspectors intensively to the Sendai nuclear plant, draft an evaluation based on their inspections and announce the results. The authority will then complete its inspection process after hearing opinions from members of the general public. The evaluation document will also be used as a model for safety inspections on other nuclear power stations.

Apart from electric power suppliers, some government officials are also increasingly frustrated at the fact that none of the idled nuclear reactors has passed NRA safety inspections although eight months have passed since the new regulatory standards were enforced. However, as the delay is attributable partly to power companies' insufficient preparations, the NRA should strictly inspect reactors under the standards. In doing so, it is essential for the authority to sufficiently explain its efforts in a way that can convince the public.

Even after safety inspections are completed, numerous challenges must be overcome before restarting idled reactors. The most important of all these challenges is evacuation plans in case of a nuclear accident.

Nine municipalities within a radius of 30 kilometers from the Sendai plant, with a total population of approximately 220,000, have compiled their own evacuation plans. Still, they have not conducted sufficient evacuation drills to confirm the effectiveness of their evacuation plans. Specific measures to respond to the elderly and others vulnerable to disasters, which have been incorporated in the plans, are far from sufficient. These problems are common to other local bodies hosting atomic power plants. It is necessary for a third-party body to evaluate municipalities' evacuation plans.

The government has pledged to "gain understanding and cooperation from officials of local bodies hosting nuclear power plants" in reactivating idled reactors. However, it goes without saying that the government must respect the opinions of not only municipalities hosting nuclear plants but also those within a 30-kilometer radius of such power stations that are obligated to map out evacuation plans.
If the government goes ahead with reactivation of nuclear reactors that pass safety inspections, the administration of Prime Minister Shinzo Abe cannot achieve its goal of "decreasing Japan's reliance on nuclear power as much as possible."

The government should clearly show its specific goal of cutting down the country's dependence on atomic power in restarting idled nuclear reactors.

March 17, 2014(Mainichi Japan)

Sendai only plant to undergo screening before summer

March 27, 2014
Sendai to be only nuke plant to undergo NRA screening before summer
http://mainichi.jp/english/english/newsselect/news/20140327p2a00m0na006000c.html

The Sendai Nuclear Power Plant in Kagoshima Prefecture is likely to be the only nuclear plant to undergo the safety inspections that are required before restarting this coming summer, as other power companies have failed to submit data necessary for screening.

The government's Nuclear Regulation Authority (NRA) is set to prioritize safety inspections of the No. 1 and No. 2 reactors at the idled Sendai nuclear plant, which is operated by Kyushu Electric Power Co. Other utilities, too, hope to restart their idled reactors, but they failed to submit documents on "basic earthquake ground motion" in time for a March 26 screening meeting. The data is used to calculate quake-resistance standards for reactor buildings and other key facilities.

So far, eight power companies have applied for the NRA to screen 17 reactors at 10 nuclear plants. Among them, it had been expected that priority would be put on either the No. 3 reactor at the Shikoku Electric

Power Co.'s Ikata nuclear plant in Ehime Prefecture, the No. 3 or No. 4 reactors at Kansai Electric Power Co.'s Oi nuclear plant in Fukui Prefecture, or the No. 3 or No. 4 reactor at the utility's Takahama nuclear plant in the prefecture, on top of the Sendai nuclear plant. The No. 3 and No. 4 reactors at Kyushu Electric Power Co.'s Genkai nuclear plant in Saga Prefecture were also on the potential priority list.

The NRA, which started safety screenings under the new regulatory standards in July last year, had expected six months or so would be enough to inspect each reactor. However, screenings have fallen behind significantly due to power companies' delays in submitting necessary documents.

On March 13, the NRA decided to prioritize screenings at the Sendai nuclear plant, whose operator had finished calculating basic earthquake ground motion figures for the facility, as a model case for other nuclear plants, thereby accelerating the entire screening processes. At the same time, the NRA announced that it would additionally prioritize screenings at other nuclear plants once their basic earthquake ground motion is determined.

Out of the seven meetings that the NRA has held for safety screenings since March 13, five focused on inspections at the Sendai nuclear plant. The NRA will draw up a draft screening report on the plant outlining safety measures by around mid-April, and will solicit public opinions. The plant could be restarted as soon as this summer if local and other consent is gained as planned.

As for the Ikata and Genkai nuclear plants, the NRA has rejected their operators' calculations of basic earthquake ground motion due to insufficient data, forcing the utilities to start over. The NRA also ordered the operator of the Oi and Takahama nuclear plants to reanalyze potential tremors that the reactor buildings and other facilities at the plants would be exposed to, after the operator revised the estimated focus depth from 4 kilometers to 3.3 kilometers. As a result, it will take "at least another two weeks" before the basic ground motion at other nuclear complexes will be determined, according to a senior NRA secretariat official. This raises the possibility that basic ground motion figures at other plants would not be determined before the NRA finishes drafting the screening report for the Sendai plant.

At a press conference on March 26, NRA Chairman Shunichi Tanaka said, "I hope to see one reactor after another ready for prioritized screenings." But he added, "I don't think preparations (for screenings) are progressing at other nuclear plants. Power companies should put in a bit more effort, spurring the NRA into action."

March 27, 2014(Mainichi Japan)

Decommission Shimane?

March 28, 2014

Decommissioning is 'an option' for Shimane reactor: utility chief

http://mainichi.jp/english/english/newsselect/news/20140328p2g00m0dm044000c.html

HIROSHIMA (Kyodo) -- Chugoku Electric Power Co. President Tomohide Karita said Thursday that retiring a 40-year-old reactor at the company's Shimane Nuclear Power Station is "an option," a rarely heard remark from a top utility official in Japan suggesting decommissioning of an aging reactor.

In June, Kanda had indicated that the utility would consider seeking approval to extend the operation period of the unit 1 reactor, one of two at its only nuclear power station. He said at that time that he had no plan to retire it.

Some local residents in Shimane Prefecture have been calling for taking the reactor out of service permanently. With many other local communities having expressed strong concerns about the safety of aging reactors, Karita's remark could impact the thinking of executives at other utility companies in the country.

"Continuing operation beyond 40 years would require investment to deal with a variety of equipment issues," Karita told a press conference, apparently bearing in mind tougher safety measures demanded under new regulatory standards introduced after the Fukushima crisis.

He suggested that costs for extending the reactor's life and other factors would come into play in determining whether to reboot it. "There is an option of decommissioning it," he said.

The unit 1 reactor with capacity for 460,000 kilowatts went online in 1974 and will reach 40 years of operations Saturday, an age at which reactors need extensive retooling. It has been kept offline since March 2010 after it was discovered numerous devices remained uninspected sufficiently in regular checkups.

The power station has another reactor, unit 2, capable of generating 820,000 kw -- operational since 1989 and currently placed offline for a scheduled checkup.

A third reactor with a 1.37 million kw capacity is under construction with no date set for starting commercial operation, according to the company's website.

Masataka Matsuura, mayor of Matsue city, which hosts the nuclear power plant, said at a press conference Wednesday, "After 40 years, it should be decommissioned in principle. Citizens are hoping it will be decommissioned."

Under its fiscal 2014 business plan, the utility aims to make 67 billion yen in efficiency gains, which would be one of the largest cost saving targets for the company, through deferring or canceling building projects and taking other measures.

Karita said his company should be able to generate a profit in the year even if the unit 2 reactor is not rebooted. The utility is seeking authorization to restart it from the government's Nuclear Regulation Authority.

Many reactors will never be restarted

April 2, 2014

Only a third of nuclear reactors may be restarted

http://www.japantimes.co.jp/news/2014/04/02/national/only-one-third-of-nations-nuclear-reactors-may-be-restarted-analysis/#.UzwihVfi91s

by Mari Saito, Aaron Sheldrick, and Kentaro Hamada
Reuters
TEPCO, CHIEF SPEAKS OUT: PAGE 3 – Three years after the Fukushima disaster prompted the closure of all of Japan's nuclear reactors, Prime Minister Shinzo Abe is moving to revive atomic power as a core part of the nation's energy mix, but many of those idled reactors will never come back online.

Fewer than one-third, and at most about two-thirds, of the reactors will pass today's more stringent safety checks and clear the other seismological, economic, logistical and political hurdles needed to restart, a Reuters analysis shows.
Hokkaido Electric Power Co., facing a third year of financial losses, is seeking a capital infusion from a state-owned lender, which would make it the second utility after Tokyo Electric Power Co., whose Fukushima No. 1 plant suffered three core meltdowns, to get a government bailout since the March 2011 disaster started.

Continuing indefinitely to burn more coal and gas also means Tokyo will find it much harder to meet targets for reducing greenhouse-gas emissions.

Japan had 54 nuclear reactors supplying about 30 percent of its electricity before the March 11, 2011, Great East Japan Earthquake hit and tsunami knocked out the Fukushima No. 1 nuclear plant.

Of the nation's remaining four dozen reactors, 14 will probably be restarted at some point, a further 17 are uncertain and 17 will probably never be switched back on, the analysis suggests. As a result, nuclear energy will eventually make up less than 10 percent of Japan's power supply.

The analysis is based on questionnaires and interviews with more than a dozen experts and input from the 10 nuclear plant operators. It takes into account such factors as the age of the plants, nearby seismic faults, additional work needed to address safety concerns, evacuation plans and local political opposition.

It's impossible to say how many reactors will eventually pass safety inspections and win local approval to restart, but the analysis constitutes "a very good guess," said Tatsujiro Suzuki, who stepped down this week as vice chairman of the government's Japan Atomic Energy Commission.

A number at the low end of the Reuters calculations could make it impossible for Japan toreinstate nuclear as a "base-load" power source — enough to feed a constant minimum supply to the grid — as specified in a draft national energy plan that the government may adopt as soon as this week.

The public has turned against nuclear power after watching Tepco struggle to deal with the Fukushima disaster. Recent polls put opposition to reactor restarts at about 2-to-1 over support.

Abe's government, which reversed the previous government's goal to phase out nuclear power by 2030, has set no timetable for restarting nuclear plants, saying the process is in the hands of a tough, more independent safety regulator set up after Fukushima.

Some utilities have business plans that assume restarts by this summer, but that looks highly unrealistic as the Nuclear Regulation Agency says the utilities aren't taking the process seriously enough.

Eight power firms have requested safety inspections to allow the restart of 17 reactors at 10 power stations. The NRA has fast-tracked two reactors at the Sendai plant in Kagoshima Prefecture after Kyushu

Electric Power Co. broke ranks with its peers and said it would provision for far greater seismic shocks to the plant.

Three reactors in southern Japan are considered next in line, among 11 pressurized-water reactors at five plants, run by Shikoku Electric, Kansai Electric and Hokkaido Electric, being actively vetted by the NRA.

"I think the government is incredibly clever by doing the restarts in the most modern, advanced places that have the most local support and are yet far from centers of political activity," said Jeff Kingston, director of Asian studies at Temple University's Japan campus. "Then you use that to create momentum for the agenda of restarting as many reactors as possible."

Even after the NRA says a reactor is safe to restart, the government will defer to local areas for the final decision. Some of the front-runners have local governments strongly behind nuclear power and the wealth it brings to communities through jobs and government subsidies.

Other communities may balk at disaster preparedness. A survey of 134 mayors of towns and villages near reactors by the Asahi newspaper found that 10 of the country's 16 nuclear plants do not have evacuation plans to cover a full 30 km radius — the size of the Fukushima exclusion zone.

Some reactors can essentially be ruled out, like Tepco's Fukushima No. 2 station, which is well within the No. 1 plant evacuation zone and faces near-universal opposition from a traumatized local population. Also highly unlikely to switch back on is Japan Atomic Power Co.'s Tsuruga plant in Fukui Prefecture. It sits on an active fault, according to experts commissioned by the NRA.

Twelve reactors will reach or exceed the standard life expectancy of 40 years within the next five years, probably sealing their fate in the new, harsher regulatory climate. These include reactor 1 at Shikoku Electric's Ikata power station.

Safety screening at Sendai

April 3, 2014

No problem found with Sendai nuclear plant

http://www3.nhk.or.jp/nhkworld/english/news/20140403_44.html

A commissioner of Japan's Nuclear Regulation Authority, or NRA, says that the Sendai nuclear plant in Kagoshima Prefecture has no major problems with its anti-disaster measures.

The plant is likely to be the first to clear government safety screening procedures and resume operation.

NRA Commissioner Kunihiko Shimazaki and his team inspected the Kyushu Electric Power Company plant on Thursday. They studied how prepared the facility is for earthquakes and tsunamis.

The team members inspected seismic faults running beneath the facility. They observed the construction of barriers designed to protect a seawater intake facility in the event of a tsunami.

Shimazaki said the team found no problems, and will not change an earlier assessment of the plant.

The nuclear regulator announced last month that it will prioritize the safety screening process for the two reactors at the Sendai plant. Government guidelines state that idle reactors must undergo that process before they can restart.

All of Japan's nuclear plants are now offline. Ten of them are undergoing the screening.

The local community must also give consent before the plant can come back online.
Apr. 3, 2014 - Updated 12:23 UTC

On-site survey begins at Sendai nuclear plant

http://www3.nhk.or.jp/nhkworld/english/news/20140403_28.html

Japan's Nuclear Regulation Authority is conducting an on-site inspection of Kyushu Electric Power Company's Sendai nuclear power plant in the southwestern prefecture of Kagoshima.

NRA Commissioner Kunihiko Shimazaki and 14 staff members visited the complex on Thursday. The inspection is aimed at confirming the plant's preparedness for possible earthquakes and tsunami.

The Sendai plant is projected to be the first to clear government safety screening procedures and resume commercial operation. Currently 10 nuclear plants are undergoing the screening.

The new safety standards were set in the wake of the 2011 accident at the Fukushima Daiichi nuclear power plant.

They require nuclear plant operators to conduct stricter assessments of the maximum level of earthquakes and tsunami that could hit their facilities.

In the morning, the inspectors observed seismic faults running beneath the facility. They also checked the seawater intake to confirm whether enough water can be secured to cool nuclear fuel even if the sea level becomes lower after a tsunami.

The NRA will compile a report on the outcome of the screening and ask for technical opinions from a wide range of sources.

But it remains uncertain when the plant can be actually restarted as the utility has to clear further NRA safety inspections of the nuclear power plant and win consent from local communities.
Apr. 3, 2014 - Updated 07:21 UTC

Jeff Kingston: Japan should not restart reactors

April 5, 2014
Lessons of Fukushima: Reactor restarts are unwise
by Jeff Kingston
Special To The Japan Times
http://www.japantimes.co.jp/opinion/2014/04/05/commentary/lessons-of-fukushima-reactor-restarts-are-unwise/#.U0FlPFfi91s

Kyle Cleveland, my colleague at Temple University Japan, recently published a report in the online Asia-Pacific Journal, "Mobilizing Nuclear Bias: The Fukushima Nuclear Crisis and the Politics of Uncertainty" that has drawn widespread media attention. Based on numerous interviews with government officials, military officers and nuclear energy experts, along with documents obtained through Freedom of Information requests to U.S. government agencies, Cleveland has pieced together a critical, but nuanced picture of a crisis that was closer to careening out of control than is generally acknowledged. There was a great deal of confusion in the early weeks of the crisis as different actors had different information and made varied assessments about what the information indicated.

Cleveland elucidates the yawning chasm between the minimizing and downplaying efforts of Tokyo Electric Power Co. and the U.S. government's assessments of the nuclear crisis. Because the Japanese government was reliant on Tepco for information this also created a gulf of perceptions between the two governments.

The USS Ronald Reagan, a nuclear powered aircraft carrier, arrived off the tsunami stricken coast of Tohoku on March 13, 2011, to provide rescue and relief assistance. Naval officers, according to Freedom of Information Act documents scrutinized by Cleveland, discovered the level of radiation was far worse than they anticipated. Radiation gauges on the ship measured levels of radiation at 100 nautical miles off the coast that were 30 times greater than normal. Aircrews that ventured closer to the stricken plant were found to have high levels of radiation on their shoes and clothing. Tepco's downplaying of the crisis and misleading information is at issue in a lawsuit filed by sailors from the U.S.S Reagan, who claim that they have had significant health problems due to exposure to radiation during their rescue efforts. Had Tepco acted responsibly by clarifying the scale of the crisis, the plaintiffs assert, they would not be suffering various cancers they attribute to exposure to high doses of radiation.

The higher than expected radiation readings created a delicate diplomatic situation as the U.S. did not want to embarrass or offend its ally, but it also wanted to ensure the safety of its military and government personnel, their dependents and American civilians. Cleveland finds that there was considerable disagreement between various U.S. agencies about the severity of the risk, but in the end the Defense Department ruled that there were no adverse health consequences from the reported radiation doses.

The international media has been lashed for exaggerating the risks to Tokyo, but Cleveland believes this 20/20 hindsight is misleading. Critics often cite Jeffrey Bader's 2012 article in Foreign Affairs, "Inside the White House During Fukushima" to assert that the U.S. government never considered the risk sufficient to justify evacuation of Tokyo. Bader served as the senior director for East Asian Affairs on the U.S. National Security Council from January 2009 until April 2011, but he would not be the first insider to put a gloss on what happened on his watch.

Bader explains that the U.S. decided to expand the exclusionary zone to 80 km, exceeding the Japanese government's 20-km evacuation zone, because the available data indicated that this is what the U.S. government would do in a similar situation at home. Washington also authorized a voluntary departure for dependents of U.S. personnel and issued a travel advisory recommending U.S. citizens consider leaving Japan. John Holdren, the president's science adviser, argued that U.S. Navy nuclear experts were overstating the risks, but as Cleveland explains, when science meets policy, politics prevails. Bader acknowledges that the withdrawal of U.S. forces from bases in Yokosuka, Kanagawa Prefecture, and Yokota in western Tokyo would have stoked panic among Japanese and gravely damaged the alliance.

Based on Holder's interpretation of worst-case scenarios developed by the Lawrence Livermore National Laboratory working with the NRC, Bader concludes that, "there was no plausible scenario in which Tokyo, Yokosuka, or Yokota could be subject to dangerous levels of airborne radiation." Cleveland's sources disagree. He suggests that Bader,"downplays the level of discord and debate among the radiation experts and privileges interpretations by State Department folks whose guiding concerns were the diplomatic impact of expanding evacuation/exclusionary zones, the implications of an actionable worst-case scenario and military departures. State essentially refereed the decision-making and pushed for less conservative measures to align more closely with the Japanese, with a close eye on implications for the American nuclear industry."

In Cleveland's view, the navy was, "more risk averse than either the NRC (Nuclear Regulatory Commission) or State, and from day one was ringing alarms that were not entirely understood, not completely validated and not well received by the NRC and State. The navy was pushing the other federal agencies to take more aggressive actions because their radiation measurements were indicating dose rates that were more significant than what was implied by the abstract modeling that guided the NRC and Holdren's views." Given that the U.S. government expanded the exclusionary zone in Fukushima to 80 km and developed contingency plans for a massive evacuation while shredding of documents continued for four days at the U.S. Embassy and military bases in Japan, somebody was obviously very worried.

Regarding accusations that The New York Times exaggerated the crisis, Cleveland argues, "The reporting of the NYT was warranted by the information known at the time. Their discussion of worst-case scenarios and their withering view of Tepco and the J-Gov were based on solid reporting.

. . . Their views were based on interviews with insiders who provided this information and so their coverage was not unduly alarmist. . . . If anything, the NYT was a mainstream, moderate voice in line with mainstream experts and the policy decisions being debated by elite-level insiders." Some of his insider sources tell him that the crisis was actually far worse than anyone acknowledged at the time and that information was withheld to prevent a panic.

Cleveland concludes that Japan's nuclear reactors should not be restarted. As one American nuclear expert told him, "Without a qualitatively different regulatory system, and in light of how Japan/Tepco responded to this crisis, Japan has not earned the right to have nuclear energy. No critically minded and informed person can evaluate this disaster and look at how Japan has responded in the aftermath and have any confidence that Japan will use nuclear energy safely. And in the most seismically active country in the world, even if Japan had a robust regulatory structure and thoroughly integrated crisis protocols, nature conspires against the best-laid-plans of human institutions. And what Japan has is certainly not the best plan by any measure."

Jeff Kingston is the director of Asian Studies, Temple University Japan

Sendai likely to get clearance

April 10, 2014
Sendai nuclear power plant may get OK in June

http://www3.nhk.or.jp/nhkworld/english/news/20140410_28.html

The Sendai nuclear power plant in Kagoshima Prefecture, southwestern Japan, is likely to get government safety clearance as early as June, in the first step toward restarting its two reactors.

Officials from the operator of the plant told the Nuclear Regulation Authority, or the NRA, on Thursday that it will present a revised report outlining safety measures it will take for the plant, reflecting advice from the NRA. The operator, Kyushu Electric Power Company, says it will complete the report by the end of April.

The NRA officials said they will start compiling a safety assessment report for the plant, and plan to finish it by the end of May.

The NRA will then set up a 30-day public comment period to invite outsiders to post scientific opinions about whether the plant should be restarted.

If everything goes according to plan, the NRA could issue safety clearance for the Sendai plant in June. This would be the first such clearance under Japan's revised nuclear safety guidelines.

Kyushu Electric will have to clear some more hurdles before it can restart the plant. NRA officials will check safety equipment on site at the plant. The local community must give consent before the plant can come back online.

All of Japan's 48 reactors at 16 commercial nuclear power plants are currently offline.

The Sendai nuclear power plant is one of the 10 plants now undergoing screening by the Nuclear Regulation Authority.
Apr. 10, 2014 - Updated 08:45 UTC

Some people can't wait for restart

April 14, 2014
Yukio Nakano, 55, a nearby resident and conservationist, walks along the beach next to the Kyushu Electric Power Co.'s Sendai nuclear power plant in Satsumasendai, Kagoshima Prefecture, on April 5. | REUTERS

In test of post-Fukushima policy, town rallies for restart of reactors
http://www.japantimes.co.jp/news/2014/04/14/national/in-test-of-post-fukushima-policy-town-rallies-for-restart-of-reactors/#.U0wKD1fi91s

BY MARI SAITO
REUTERS

SATSUMASENDAI, KAGOSHIMA PREF. – On the main road leading from the Sendai nuclear plant in Kagoshima Prefecture, a construction crew is laying down asphalt to widen the evacuation route in the event of a future disaster.

For many living in the area, that's a hopeful sight. It means the authorities are edging closer to restarting two nuclear reactors that have been an economic engine for nearly three decades in a remote coastal town that has few other options.

Satsumasendai never felt the earthquake that triggered the Fukushima nuclear disaster some 1,600 km (almost 1,000 miles) to the north in March 2011. But residents saw their friends lose jobs and felt their future was threatened when the Sendai nuclear plant, run by Kyushu Electric Power, was idled along with the rest of the nation's reactors for a more stringent round of safety checks after Fukushima.

"I know it was a horrible accident, but right now I'm more concerned about the economy and my job," said Hiroya Komatsu, 28. "We saw it on TV, but it could very well have been the Philippines. It didn't feel like it was Japan."

Like Komatsu, many living in Satsumasendai support a pronuclear mayor who remains hopeful that a now-shelved plan to build a third reactor may some day be revived.

The Sendai plant has been fast-tracked for a safety review by the Nuclear Regulation Authority and could come back online as early as August.

Proponents hope Satsumasendai will be a test case for a nationwide effort to bring other nuclear plants back onto the grid in coming months.

Prime Minister Shinzo Abe's government last week approved a long-delayed energy policy statement that describes nuclear power — which once generated 30 percent of the nation's power — as a key energy source.

All 48 of Japan's reactors are shut down. Analysts see a good chance to bring at least 14 back online in a review process that begins with Satsumasendai, a town with a population of about 100,000.

A quick restart there will be good news for Kyushu Electric, which is seeking a $1 billion capital infusion from the government-run Development Bank of Japan.

The shutdown has been costly. While the reactors have been idled, their operators, including Kyushu Electric, have had to spend around $87 billion to burn replacement fossil fuels. They had posted combined losses of close to $50 billion as of March and have seen $60 billion wiped off their market value.

Satsumasendai, meanwhile, has received more than $250 million in government subsidies since 1974 for hosting the plant.

Subsidies and tax income from the plant have paid to build community centers and parks and to repair roads, creating jobs in a prefecture where pay is around a fifth below the national average.

"We have the strictest regulatory standards in the world, and the fact that our plant is considered first in line to re-start means we have the most reliable power plant here," said Hideo Iwakiri, Satsumasendai's mayor.

Iwakiri won his second term in 2012 after promising to lobby for a quick restart.

For now, shutters remain drawn on many city shop windows, a legacy of the 1980s economic downturn. Once-bustling motels, filled with plant workers, stand empty.

"This whole town used to be booked up and you couldn't get a room even if you made reservations months ahead," says Daisaku Fukuyama, the owner of Hotel Otori. Fukuyama, who heads the local hotel union, said several local motels have closed since 2011.

The local chamber of commerce says the Sendai plant contributes up to $25 million a year to the local economy, mostly from twice-yearly maintenance checks that bring around 3,000 workers to stay for up to four months.

A nearby Kyocera Corp. plant also supports 4,000 workers and a paper pulp processing plant on the Sendai River employs a few hundred more. But for construction, hotels, restaurants and other service industries, the shutdown of the Sendai plant has meant a significant drop in business.

The winding road leading to the Sendai plant is surrounded by empty fields and sloping hills. A sign a few kilometers from the plant reads, "No Nukes!" Closer to the plant, another sign says, "Developing Towns With Nuclear Power."

The mayor and his supporters say those against nuclear power are outside agitators. Opponents say many are intimidated against speaking out. Local media have reported that in the past Kyushu Electric packed a government-sponsored town hall meeting, and some managers were found to have encouraged employees to send in fake emails of approval to restart one of its nuclear plants in 2011.

Katsuhiro Inoue is a rare local dissenter.

As one of two local city council members opposed to the Sendai restart, Inoue holds a placard outside a darkened Kyushu Electric building on the city's busiest road, protesting with a handful of other activists.

Inoue says many residents are worried about how the town will evacuate in the event of a Fukushima-style crisis, but many are afraid to speak up because of the town's economic dependence on the plant.

"I have a cousin who works for a subcontractor and we never talk about the re-starts," he said. "Every family knows someone who benefits from the plant and people are afraid to speak out against it."

Abe has said Japan will defer to the prefecture and host city for the final decision on any reactor restart. The governor of Kagoshima Prefecture says it will hold a few town hall meetings in Satsumasendai and cities that are closest to the plant.

Around 100 protesters gathered last week on a windy beach near the Sendai plant where activists released colored balloons in a demonstration intended to show how far radioactive fallout could travel when carried by the wind.

Yukio Nakano, 55, a nearby resident and a conservationist, says he knows the plant will eventually restart. He lives alone in the mountains overlooking the plant.

"Even if you're personally opposed, everyone has brothers, parents, friends who are in industries that benefit," says Nakano, who walks the beach behind the plant every day to pick up trash and protect turtle eggs from predators.

"I can't imagine not being able to go home like those people in Fukushima. The people in my village have lived on this land for 70, 80 years. I want to die here."

No shortage of power this summer

April 17, 2014

Utilities expected to secure sufficient power supplies this summer

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201404170087

By MARI FUJISAKI/ Staff Writer

Even if their nuclear reactors remain offline, all power companies across Japan should be able to secure stable electricity supplies this summer with help from other utilities, an industry ministry subcommittee said.

The subcommittee's announcement April 17 is based on supply-demand projections by the nine major power companies in Japan.

The average reserve rate--the margin by which supply exceeds demand--of the nine utilities is 4.6 percent, even if their nuclear power plants do not return to service, according to the subcommittee. Okinawa Electric Power Co., which does not operate nuclear power plants, was excluded from the figure.

A reserve rate of 3 percent is considered the minimum level necessary for achieving a stable supply. That means the government for the second straight summer will likely not ask the public to take electricity-saving measures.

Kansai Electric Power Co. and Kyushu Electric Power Co., which provide electricity in western Japan and had been heavily dependent on nuclear power generation, have said their electricity supply this summer will be tighter than last year.

In fact, the reserve rate for Kansai Electric, which ran two reactors at its Oi nuclear power plant in Fukui Prefecture last year, will drop from 3.0 percent last year to 1.8 percent this summer now that those reactors have been shut down.

However, Kansai Electric will be able to reach the 3.0-percent level by receiving nearly 400,000 kilowatts of electricity from Tokyo Electric Power Co. for the first time and increasing its thermal power generation, according to the subcommittee.

The average reserve rate for Kyushu Electric, whose Sendai nuclear plant in Kagoshima Prefecture is not expected to resume operations this summer, will sink from 3.0 percent to 1.3 percent.

The company will raise the rate to 3.0 percent by receiving 200,000 kilowatts of electricity from other utilities.

Due to the different power frequencies used in eastern and western Japan, power companies are basically required to secure the minimum reserve rate of 3 percent without receiving electricity from utilities serving other regions.

"Costly" safety reviews

April 25, 2014
Costs keep mounting for idled reactors
Consequences of turn from nuclear begin to hit home

http://www.japantimes.co.jp/news/2014/04/25/national/costs-keep-mounting-for-idled-reactors/#.U1qP_lfi91t

by Aaron Sheldrick **and** Osamu Tsukimori

Reuters

Since March 2011, the government has focused on the cost of cleaning up after Fukushima, the worst nuclear disaster since Chernobyl. Now, the bill is coming due for another unbudgeted consequence of that calamity — shutting down the nation's 48 remaining nuclear reactors for costly safety reviews that could see many of them mothballed.

While their reactors have been idled, nuclear plant operators have had to spend around $87 billion to burn replacement fossil fuels. This, in part, explains the utilities' estimated combined losses of around $47 billion as of March, and the $60 billion wiped off their market value.

That pain is beginning to tell.

In early April, Kyushu Electric Power Co. was confirmed to be seeking an almost $1 billion bailout in the form of equity financing from the government-affiliated Development Bank of Japan because of the cost of idling its reactors. Hokkaido Electric Power Co. has also asked the bank for financial backing.

Even as Prime Minister Shinzo Abe's government has hammered out the final terms of a delayed energy policy, the bill for a reduced role for nuclear power in the world's third-largest economy is becoming clearer. One way or another, taxpayers are going to be saddled with the cost of throttling back on nuclear power through taxes and higher electricity bills, analysts say, just as the government has had to provide funding for those who lost their homes and livelihoods due to the Fukushima disaster.

The government took a controlling stake in Fukushima No. 1 operator Tokyo Electric Power Co. in 2012 to keep it from insolvency, and Tepco, as it is known, still relies on government credits to pay compensation to those affected by the disaster, which forced 160,000 people from their homes.

The expanded government role in helping utilities pivot from nuclear power — from providing around 30 percent of Japan's electricity to less than 10 percent — has echoes of the public bank bailouts from the 1990s, said Tom O'Sullivan, founder of energy consultancy Mathyos Japan and a former investment banker. "The banks were forced to consolidate after those losses, so the outcome might be similar in this case," he said.

Regional power companies also face the prospect of tougher competition under planned electricity reforms that may ultimately see them broken into transmission and generation companies by around 2020.

All of the nation's 48 nuclear reactors have been shut down since last year, forcing utilities to import extra fossil fuels, driving their costs higher. To ease the strain, the companies have raised electricity charges, but the industry minister has warned that further increases must be avoided.

The nine publicly traded nuclear plant operators together have lost the equivalent of about $31 billion in the two business years since Fukushima, and five of them also expect to be loss-making in the year that ended in March. Those results are due early next month. Japanese banking practices make it difficult for private lenders to extend credit, including the refinancing of existing loans, to companies that post three straight years of losses.

Many creditors face the possibility of a double whammy in if any of the utilities collapse because they also hold shares. A unit of Mitsubishi UFJ Financial Group is the biggest shareholder of Hokkaido Electric, and at least one of the big three banks is listed in the top 10 shareholders of all the utilities except one, Shikoku Electric Power Co.

Hokkaido Electric's equity ratio — a measure of how much of its assets are financed by shareholders rather than creditors — has dropped to 8.9 percent from 24.2 percent before March 2011. Kyushu Electric's ratio has more than halved to 11.5 percent. The average ratio of Japan's top companies is 43 percent, Finance Ministry data show.
Hokkaido Electric, Kyushu Electric, Kansai Electric Power Co. — the second-biggest utility after Tepco — and Shikoku were the most reliant on nuclear power before the Fukushima disaster.

All of them forecast a third year of losses for the 12 months to March 31.

The two reactors at Kyushu Electric's Sendai nuclear plant are on the fast track for restarting, and are likely to be the first to come back online.

The utilities are also likely to have large, but still uncertain, decommissioning costs as many idled reactors are unlikely to pass strict new standards, a Reuters analysis has shown. Of the 48 reactors, 17 are unlikely to be restarted, and as many as 34 may have to be mothballed.

Utilities are required to set aside reserves for future decommissioning costs, but have an industrywide shortfall of about $11 billion if all the reactors remain offline, according to trade ministry estimates.

"Given Japan's government finances are mainly paid for by debt, bailing out the utilities means they're passing on the cost to future generations, which are declining in numbers," said Gerhard Fasol, the founder of Eurotechnology Japan, a Tokyo-based consultancy on energy and technology issues.

"Speeding up the pace of liberalization might help by reducing costs. But this is unlikely to happen, given the pace of change in the electricity industry is generally slow."

Kagoshima - More info needed for restart

May 2, 2014
Regulators need more info for Kyushu nuclear plant safety checks
http://mainichi.jp/english/english/newsselect/news/20140502p2g00m0dm068000c.html

TOKYO (Kyodo) -- Regulators said Friday that Kyushu Electric Power Co. has not included enough information in a key document outlining the safety measures for two nuclear reactors the utility is seeking to restart.

The document was submitted to the Nuclear Regulation Authority on Wednesday so that the NRA can confirm that the reactors at the Sendai plant have satisfied a set of new safety requirements introduced in the wake of the 2011 Fukushima nuclear crisis.

The Nos. 1 and 2 reactors at the Sendai plant in Kagoshima Prefecture, southwestern Japan, are seen as the closest to being allowed to restart among Japan's 48 offline commercial reactors, as the NRA has decided to prioritize the safety checkup process for the two units.

None of the 48 reactors are allowed to reactivate unless they satisfy the new regulations, which for the first time oblige utilities to put in place specific countermeasures against severe accidents like reactor core meltdowns, as well as against huge tsunami -- the direct cause of the Fukushima crisis.

But during a meeting of the NRA commissioners on Friday, an official reported that "some information needed for the assessment appears to be lacking" from the 7,200-page document submitted by Kyushu Electric.

For example, the document should include measures to be taken against forest fires and fires triggered by an airplane crash, but Kyushu Electric only referred to the case of forest fires, the official said. It also lacked some descriptions regarding studies on how far equipment can withstand heat following fires.

Another NRA official told reporters that he cannot currently foresee whether the latest development will lead to a delay in the assessment process.

"We are still examining the document in detail...prospects will also be affected by the utility's response," he said.

The NRA said it plans to hold a safety assessment meeting next Thursday to discuss the issue with Kyushu Electric.

Kyushu Electric filed for the NRA's safety assessment of the two reactors in July last year. The document submitted Wednesday reflected the discussions that had taken place between the utility and regulators thereafter.

May 02, 2014(Mainichi Japan)

May 1, 2014

Kagoshima plant in final stage of safety screening

http://www3.nhk.or.jp/nhkworld/english/news/20140501_15.html

A nuclear power plant in Kagoshima Prefecture, southwestern Japan, has entered the final stage of the nuclear regulator's safety screening process for restarting its 2 reactors. But the timing of the restart is still not clear.

Japan's Nuclear Regulation Authority decided in March to prioritize the safety screening process for the No.1 and No.2 reactors at the Sendai nuclear plant.

The reactors are likely to be the first in Japan to resume commercial operation.

The plant's operator, Kyushu Electric Power Company, submitted a revised report on Wednesday outlining the safety measures to be put in place, based on advice from the NRA. The safety screening has now entered its final phase.

The revisions include higher maximum levels of tremors and tsunami expected from possible earthquakes.

Kyushu Electric has raised the estimate for tremors from the original 540 gals to 620. Gals are units of acceleration. It has also raised the estimated height of tsunami from about 3.5 meters to about 5 meters.

The NRA plans to compile a safety assessment report for the plant by the end of this month, and may issue a safety clearance at the end of June.

Kyushu Electric hopes to restart the reactors before demand for power surges in the summer.

But the utility is still continuing work to reinforce the plant against tsunami. It will also have to clear on-site inspections by the NRA and obtain consent from the local governments.
All 48 reactors at Japan's 16 commercial nuclear power plants are currently offline. The Sendai nuclear plant is one of the 10 plants undergoing screening by the NRA. May 1, 2014 - Updated 03:18 UTC

Revision of safety report (Kagoshima) needed

May 2, 2014
NRA asks for revision of plant safety report

http://www3.nhk.or.jp/nhkworld/english/news/20140502_34.html

Japan's Nuclear Regulation Authority has asked Kyushu Electric Power Company to revise a safety report the utility compiled as a first step toward restarting a nuclear plant.

NRA Commissioner Satoshi Fuketa made the request on Friday for the report on the Number 1 and 2 reactors at the Sendai plant in Kagoshima Prefecture, southwestern Japan.

At an NRA meeting on Friday, an official said the report submitted 2 days ago lacks data on how the plant's operator would respond to a fire if an aircraft crashed in the plant's compound. The report also does not mention fireproof levels for pumps and other equipment.

Regulators are to hold a screening session next Thursday.

In March, the authority decided to fast-track screening for the 2 reactors.

Regulators were expected to give safety clearance for the reactors as early as late June after drawing up a safety assessment by the end of May.

But the request for a revision indicates that the screening may take longer than planned. The utility must also get consent from the communities hosting the plant.

Kyushu Electric may not be able to put the reactors back online before summer.
May 2, 2014 - Updated 08:29 UTC

Needs revision

May 8, 2014
NRA: Plant report needs revisions on 42 items

http://www3.nhk.or.jp/nhkworld/english/news/20140508_29.html

Japan's nuclear regulator has asked Kyushu Electric Power Company to revise a report on a nuclear power plant. The key document is needed for safety screening that will decide if the idle plant can be restarted.

The Nuclear Regulation Authority screened the utility's report on its Sendai plant in southwestern Japan on Thursday. It identified 42 cases of insufficient data.

The utility applied last July for the screening of the plant's 2 reactors. The firm resubmitted the 7,200-page document late last month in response to NRA instructions.

In Thursday's session, NRA officials noted that the report fails to mention how the plant's operator would prevent a fire from an airplane crash.

The officials also said the report must specify ways to estimate hydrogen density in order to prevent an explosion. It must also detail procedures to cope with certain emergencies.

The NRA is expected to draw up a safety assessment by the end of May, and could complete the screening by the end of June.

But the request for revisions could delay the process, depending on how the utility responds.

Kyushu Electric may not be able to put the plant back online before summer, as it also must also undergo inspections of its facilities and operations.
May 8, 2014 - Updated 06:59 UTC

Court rejects suit to suspend restart of Oi reactors

May 9, 2014
High court turns down suit seeking suspension of Oi reactors
http://mainichi.jp/english/english/newsselect/news/20140509p2g00m0dm071000c.html

OSAKA (Kyodo) -- The Osaka High Court on Friday turned down a lawsuit seeking to suspend the planned resumption of two reactors at the Oi nuclear power plant operated by Kansai Electric Power Co., upholding a lower court decision.

The suit was filed by a group of residents in western Japan.

The Nos. 3 and 4 reactors at the Oi plant in Fukui Prefecture on the Sea of Japan coast have been suspended since last September for regular checkups, and are now under examination by the Nuclear Regulation Authority to determine whether they can resume operations under Japan's new safety standards introduced last July.

The plaintiffs argued there are three faults near the Oi plant and that a major temblor caused by these faults could lead to a serious nuclear disaster.

In April last year, the Osaka District Court rejected the suit, determining such a temblor would not cause specific risks.

Oi reactors may not restart so soon

May 10, 2014

New Oi plant quake estimate expected to delay any restart of reactors

http://www.japantimes.co.jp/news/2014/05/10/national/new-oi-plant-quake-estimate-expected-to-delay-any-restart-of-reactors/#.U24ERlfi91v

JIJI

Kansai Electric Power Co. said Friday it plans to raise its earthquake force estimate for its Oi nuclear power plant in Fukui Prefecture — a move that is expected to delay the refiring of the plant's reactors.

The company said the plant's No. 3 and 4 reactors may be hit by a quake with a peak ground acceleration of up to 856 gals, against its initial estimate of 700 gals.

The company unveiled the new estimate at a meeting of the Nuclear Regulation Authority held to examine the safety of the reactors.

It will take some time for reinforcement work as a result of the changes, an official at Kansai Electric said. This is expected to cause a significant delay in the reactors' possible restart.

The initial estimate was provided in July when the company, in an effort to restart the stalled reactors, applied for the NRA's safety screenings.

The company will make the changes to reflects pinions by the NRA.

Geological survey on Shimokita Peninsula (Aomori)

May 12, 2014

NRA conducts geological survey in Aomori

http://www3.nhk.or.jp/nhkworld/english/news/20140512_33.html

Japan's nuclear regulator is conducting a geological survey of a northeastern area where many nuclear facilities are located.

The Nuclear Regulation Authority began examining underground structures on the Shimokita Peninsula and its surrounding areas on May 2nd. A sea bottom fault stretches 84 kilometers east of the peninsula and a 55-kilometer inland fissure runs from east to west toward the Bay of Mutsu.

On Monday, NRA Commissioner Kunihiko Shimazaki began an inspection of the survey.

Media people were invited to observe his visit to a ship anchored at a port, where he examined sonic equipment used to locate undersea faults.
The NRA will also assess underground areas about 10 kilometers deep using devices that can create artificial tremors.

The survey will last until early June.

Nuclear facilities on the Shimokita Peninsula include a power station, a spent nuclear fuel reprocessing plant, and a temporary storage site for high-level nuclear waste.

The Japanese government regards the reprocessing plant as a pillar of the country's spent nuclear fuel cycling policy. The plant is undergoing safety screening by the Nuclear Regulation Authority. Its operator plans to complete work to boost protective measures against earthquakes in October before starting full operations.

May 12, 2014 - Updated 11:03 UTC

Restart necessary to cut fuel costs, says Aso

May 13, 2014
Aso urges nuclear plant restarts to cut fuel costs
http://www3.nhk.or.jp/nhkworld/english/news/20140513_36.html

Japan's Finance Minister says the country's nuclear power plants need to be restarted once their safety is confirmed.

Taro Aso told reporters on Tuesday the step is necessary to slash the huge fuel import costs that cut deep into the nation's current account surplus in fiscal 2013.

He expressed concern about the impact of higher electricity rates on businesses and households.

Aso said nuclear power is the cheapest source of energy for the time being. He noted higher utility costs could raise prices and dampen consumer spending.

All nuclear reactors in Japan are now offline.

Aso also said Japan needs a growth strategy that will allow businesses to earn foreign currency not only through exports but also through overseas investments.

He said such a strategy is needed to stop the current account surplus from shrinking further.

Japan's surplus in the year ended March was the smallest since comparable data became available in 1985.
May 13, 2014 - Updated 08:42 UTC

Tokai no2. will apply for restart

May 19, 2014
Tokai No.2 nuclear plant to apply for safety check

http://www3.nhk.or.jp/nhkworld/english/news/20140519_21.html

The operator of the Tokai No. 2 nuclear power plant north of Tokyo in Ibaraki Prefecture will apply on Tuesday for safety checks to restart the plant's reactor.

Japan Atomic Power Company decided to ask the Nuclear Regulation Authority for the check after getting the go-ahead from 11 surrounding municipalities, including Tokai village. The communities agreed after the company held public briefings about safety concerns. The prefectural government has also agreed.

The plant has been idle because of damage to a turbine and pump caused by the March 2011 earthquake and tsunami.

But prospects for resuming operations are still poor due to a number of safety issues.
The reactor dates to 1978 and is older than 17 reactors now under screening. Cables in use at the plant are more flammable than those at newer plants.

The municipalities around the Tokai plant also insist that applying for safety checks and restarting operations are separate matters.

Nearly one million people live within 30 kilometers of the plant, more than at any other nuclear plant in Japan. The surrounding communities have yet to adopt appropriate evacuation plans in the event of a nuclear accident.
May 19, 2014 - Updated 06:52 UTC

JAPC applies for restart of Tokai 2

May 20, 2014

Japan Atomic Power applies for safety checks on Tokai No. 2 power plant

http://mainichi.jp/english/english/newsselect/news/20140520p2a00m0na016000c.html

The Japan Atomic Power Co. (JAPC) applied for safety checks on the Tokai No. 2 Power Station in the village of Tokai, Ibaraki Prefecture, on May 20 in a bid to restart the 35-year-old reactor there.

The reactor at the Tokai No. 2 Power Station is the oldest among those reactors being under safety screening by the Nuclear Regulation Authority (NRA). Attention, therefore, will be focused on the NRA's decision after screening as the revised Nuclear Reactor Regulation Law limits the life of a reactor to 40 years in principle.

The reactor at the Tokai No. 2 Power Station is a light water reactor of the boiling water type -- the same type of reactors at the troubled Fukushima No. 1 Nuclear Power Plant. The JAPC has been preparing to build a breakwater which is over 18 meters above sea level and install venting equipment with filters as it seeks to restart the reactor. The company plans to finish work to put measures against severe accidents in place by 2016.

Eleven municipalities around the nuclear plant, including Tokai, endorsed the JAPC's decision to apply for safety checks on May 15. This was after the company showed its stance to hold talks with other municipalities, besides Tokai, on signing nuclear safety pacts and released the outline of its application for safety checks to local residents, among other steps. Ibaraki Gov. Masaru Hashimoto had already agreed to the JAPC's application.

Meanwhile, there are 14 municipalities, including the cities of Mito and Hitachi, within a radius of 30 kilometers from the Tokai No. 2 Power Station, where a total of about 980,000 people live -- the biggest number of people living near a nuclear power plant in the country. But none of the municipalities has drawn up an evacuation plan in the event of a severe accident partly because it is difficult to secure places of refuge.

Mito Mayor Yasushi Takahashi said something to the effect that the issue of whether to reactivate the reactor should be handled separately from the JAPC's application for safety checks. "As long as evacuation plans are not drawn up, there can never be discussion on whether to reactivate the reactor," he said.

May 20, 2014(Mainichi Japan)

Tokai No.2 nuclear plant applies for safety check

http://www3.nhk.or.jp/nhkworld/english/news/20140520_81.html

The operator of the Tokai No.2 nuclear power plant in Ibaraki Prefecture north of Tokyo has applied for a government safety check to restart the plant's reactor.

Japan Atomic Power Company's Executive Vice President Hiroshi Masuda submitted application papers to the Nuclear Regulation Authority on Tuesday.

The operator is upgrading safety measures at the plant to withstand an earthquake that's 1.5 times stronger than previously assumed.

It is also building an embankment that's over 18 meters high to withstand potential tsunami of up to 14.3 meters.

However, the operator faces many obstacles to gaining approval and resuming operations.
The plant began commercial operation in 1978 and its reactor is now the oldest of the 18 across Japan that have applied for screening. Attention is focused on how the nuclear regulator will judge the safety of old, flammable cables.

Another factor is the lack of progress by nearby municipalities in drawing up evacuation plans for residents. Nearly one-million people live within 30 kilometers of the plant. That's the largest number among all the nuclear plants in Japan.

The plant's host municipality, Tokai village, and 10 other local governments gave approval for the application last week, but they say applying for screening and resuming operations are separate issues.

Masuda said his firm has submitted the application with confidence that the plant will be able to clear the new standards.
Tokai village mayor Osamu Yamada says he has confirmed that the safety check will not lead directly to a resumption of operations. He says he expects the nuclear regulator to carry out a strict inspection.

Yamada added that he wants the plant operator to actively provide information, including updates on the progress of the screening. He said the operator should hold public meetings to provide explanations to the residents.
May 20, 2014 - Updated 06:54 UTC

May 19, 2014
Tokai No.2 nuclear plant to apply for safety check

http://www3.nhk.or.jp/nhkworld/english/news/20140519_21.html

The operator of the Tokai No. 2 nuclear power plant north of Tokyo in Ibaraki Prefecture will apply on Tuesday for safety checks to restart the plant's reactor.

Japan Atomic Power Company decided to ask the Nuclear Regulation Authority for the check after getting the go-ahead from 11 surrounding municipalities, including Tokai village. The communities agreed after the company held public briefings about safety concerns. The prefectural government has also agreed.

The plant has been idle because of damage to a turbine and pump caused by the March 2011 earthquake and tsunami.

But prospects for resuming operations are still poor due to a number of safety issues.
The reactor dates to 1978 and is older than 17 reactors now under screening. Cables in use at the plant are more flammable than those at newer plants.

The municipalities around the Tokai plant also insist that applying for safety checks and restarting operations are separate matters.

Nearly one million people live within 30 kilometers of the plant, more than at any other nuclear plant in Japan. The surrounding communities have yet to adopt appropriate evacuation plans in the event of a nuclear accident.
May 19, 2014 - Updated 06:52 UTC

Court orders not to restart Ohi reactors

May 21, 2014
Court rules against restarting Ohi reactors

http://www3.nhk.or.jp/nhkworld/english/news/20140521_28.html

A Japanese court has ordered the operator of the Ohi nuclear plant in Fukui Prefecture, central Japan, not to restart 2 of its reactors, citing inadequate safety measures.

The plant's No. 3 and 4 reactors were halted for regular inspections last September.

Local residents filed a lawsuit asking that the reactors be kept offline. They said an estimate of possible tremors is too small, and that the reactors lack backup cooling systems.

The operator, Kansai Electric Power Company, has insisted that no safety problems exist.

On Wednesday, presiding judge Hideaki Higuchi of the Fukui District Court upheld the residents' claim.

The ruling is the first against resuming operations at a nuclear plant since the accident at Fukushima Daiichi in March 2011.

The decision could affect screening procedures by Japan's Nuclear Regulation Authority to determine whether the country's nuclear plants can be restarted.
May 21, 2014 - Updated 06:32 UTC

Court orders power supplier not to operate Oi nuke plant
http://mainichi.jp/english/english/newsselect/news/20140521p2g00m0dm087000c.html

FUKUI, Japan (Kyodo) -- The Fukui District Court on Wednesday ordered Kansai Electric Power Co. not to operate its Oi nuclear plant in Fukui Prefecture, western Japan, as demanded by a total of nearly 200 people around the country.

In the lawsuit, a group of 189 people from Tokyo, the plant's host prefecture of Fukui and 20 other prefectures contended that the power supplier resumed operation of two of the four reactors at the plant in August 2012 even though their safety has yet to be guaranteed.

Reactions to court ruling

May 21, 2014

Kansai Electric to appeal ruling

http://www3.nhk.or.jp/nhkworld/english/news/20140521_35.html

Kansai Electric says it will promptly take procedures to appeal the ruling.

The firm issued a statement on Wednesday expressing regret that the court failed to take up its claim.

The utility said it will study details of the ruling and underscore the plant's safety in a higher court.
May 21, 2014 - Updated 08:03 UTC

Nuclear Regulation Authority on ruling

http://www3.nhk.or.jp/nhkworld/english/news/20140521_32.html

Japan's Nuclear Regulation Authority has been conducting safety screening at Ohi and other plants to determine whether they can be restarted.

NRA Chairman Shunichi Tanaka says he has no comment on court rulings.

He said the authority will continue its safety screening of the Ohi plant in accordance with its policy.
May 21, 2014 - Updated 08:17 UTC

Court rules against restarting Ohi reactors
http://www3.nhk.or.jp/nhkworld/english/news/20140521_80.html

A Japanese court has ordered the operator of the Ohi nuclear power plant not to restart 2 of its reactors, citing insufficient safety measures.

The facility is located in Fukui Prefecture, central Japan. Its no. 3 and 4 reactors were shut down for regular inspections last September.

Local residents filed a lawsuit to keep the reactors offline. They said the plant operator's estimate of possible earthquakes is too small, and the reactors lack sufficient cooling systems.

Operator Kansai Electric Power Company has insisted that no safety problems exist.

On Wednesday, presiding judge Hideaki Higuchi of the Fukui District court said the operator's earthquake estimate at the plant is too optimistic and not reliable.

He cited the fact that during the past 10 years there have been 5 cases in Japan where actual tremors exceeded prior estimates set by the operators.

The judge also referred to problems at the plant including the emergency cooling function in the event of an earthquake.

The court also said during the Fukushima nuclear crisis, authorities considered evacuating people living within 250 kilometers of the plant. Therefore, it upheld the claims of the plaintiffs living within that distance.

The court ruling is the first since the accident, against resuming operations at a nuclear plant.

All 48 of Japan's commercial reactors are currently off-line.

Kansai Electric says it will promptly take procedures to appeal the ruling. The firm issued a statement on Wednesday expressing regret that the court failed to take up its claim.

The utility said it will study details of the ruling and underscore the plant's safety in a higher court.
May 21, 2014 - Updated 12:30 UTC

Oi court ruling: What impact on next safety trials?

May 22, 2014
ANALYSIS: Court ban on restart of Oi plant puts nuclear safety screening on trial
http://ajw.asahi.com/article/0311disaster/fukushima/AJ201405220051

THE ASAHI SHIMBUN

A court ruling ordering Kansai Electric Power Co. not to restart the No. 3 and No. 4 reactors of the Oi nuclear power plant in Fukui Prefecture has called into question the legitimacy of ongoing safety screenings of nuclear plants across Japan.

While the Nuclear Regulation Authority is currently inspecting 18 reactors that operators aim to reactivate at 11 nuclear plants, the Fukui District Court decided that no safety measures could ever be sufficient, as it is impossible for modern science to predict the biggest possible earthquake that could strike.

In handing down the ruling May 21, Presiding Judge Hideaki Higuchi said that the people's safety must not be dealt with on the same basis as cost efficiency.

"People's right to life is the very foundation of personal rights, which are protected by the Constitution. It must be regarded with the highest respect in the field of law," the judge said.

"While Kansai Electric says the operation of the plant will secure a stable supply of electricity, comparing the fundamental rights of so many people to survive and the utility prices on equal grounds is not a legitimate argument for this legal authority to consider," he added.

The ruling was the first handed down by a court in Japan in response to a lawsuit seeking the suspension of operations of nuclear reactors in the wake of the March 2011 accident at the Fukushima No. 1 nuclear power plant.

Kansai Electric appealed the ruling on May 22.

Until the ruling is finalized, the utility can still restart the Oi plant if the NRA finds that the two reactors meet new safety standards. But if Kansai Electric ignores the ruling and resumes plant operations, it will face immense opposition from local residents and others.

The focal point of the trial was whether the Oi plant's quake-resistant capability, which Kansai Electric says can withstand tremors with a maximum ground acceleration of 1,260 gals, is sufficient in securing its safety.

According to the utility, the maximum limit is 1.8 times stronger than the predictable strongest tremors of 700 gals that can hit the plant compound.

The ruling, however, said, "It is essentially impossible to eliminate the possibility of an earthquake stronger than 1,260 based on hard scientific evidence," citing the 2008 Iwate-Miyagi Nairiku Earthquake, which registered a maximum ground acceleration of 4,022 gals.

It also noted the fact that four nuclear power plants have experienced tremors stronger than their maximum standard since 2005.

Presiding Judge Higuchi added that the Fukushima nuclear disaster has clearly shown "the fundamental danger of nuclear power generation technologies" and the extensive damage an accident can cause.

The decision is likely to have a major impact on other trials concerning nuclear plants across Japan that are now being heard.

The NRA's new safety standard requires utility companies to map out safety measures at nuclear plants, based on calculations of the strongest potential earthquake at the sites, taking into account active faults running in the areas, ground conditions and other factors.

Kansai Electric used the same method in drawing up safety standards for the Oi plant, but the ruling challenged the capability of calculating maximum strongest earthquake at nuclear plants, citing the limitations of scientific knowledge.

The ruling added that centers of seismic activity are often located deep underground and it is impossible to predict the scale of future earthquakes without relying on hypothesis and presumptions. Data from the past earthquakes is also very limited, it said.

"The ruling is right in pointing out the limitation of the precision of earthquake prediction today," said Kazuki Koketsu, a professor of seismology at the University of Tokyo, who was involved in the NRA's safety screenings. "It is apparent that the ruling flatly denies the ways the NRA is screening the safety of each plant."

GOVERNMENT REMAINS STEADFAST

Even if the NRA's methods are questioned by the court, Prime Minister Shinzo Abe's government has made it clear that it will push for the resumption of nuclear plants if they pass the NRA's safety screening.

On May 21, industry minister Toshimitsu Motegi said the ruling will not have an impact on the NRA's safety regulation standards and its ongoing safety screening of nuclear plants, including the Sendai nuclear plant in Kagoshima Prefecture.

The government has a reason to be optimistic. In past lawsuits related to nuclear power plants, there have been two court rulings in favor of residents, but higher courts overturned them and those rulings became finalized.

One was a 2003 order handed down by the Kanazawa branch of the Nagoya High Court, which nullified the government's approval of the installation of the Monju prototype fast-breeder reactor in Tsuruga, also in Fukui Prefecture.

Another was the 2006 Kanazawa District Court's ruling that ordered a halt to operations of the Shika nuclear power plant in Shika, Ishikawa Prefecture.

"Everything depends on how the high court will rule on the case, although higher courts have tendency to judge more in line with the government's intentions," said Taro Kono, deputy secretary-general of the ruling Liberal Democratic Party. Kono is known for his anti-nuclear stance.

During a news conference May 21, the NRA's chairman, Shunichi Tanaka, confirmed the nuclear watchdog's stance that the ruling has no impact on its safety screening of nuclear plants.

"I have nothing to say about the judicial judgment. We have our own concepts and will proceed with the safety screening based on our scientific knowledge," Tanaka said.

Kansai Electric appeals

May 23, 2014

Kansai Electric appeals court ruling on Ohi plant
http://www3.nhk.or.jp/nhkworld/english/news/20140522_29.html

The operator of the Ohi nuclear power plant in central Japan has appealed a district court ruling against the restart of its 2 reactors.

Kansai Electric Power Company filed the appeal on Thursday with the Kanazawa branch of the Nagoya high court.

The appeal comes one day after the Fukui District Court ordered the utility not to restart the number 3 and 4 reactors at the plant in Fukui Prefecture. The 2 reactors were shut down for regular inspections last September. Local residents filed a suit to keep the reactors offline.

The ruling said nuclear plants require extremely high levels of safety and reliability.

It said the operator's estimate of possible earthquakes was too optimistic and the plant's cooling systems are faulty.

Kansai Electric argued in the trial that there were no safety problems.

Tetsuen Nakajima, who heads the plaintiffs' group, said he thinks it will be difficult to overturn the ruling that fully approved their arguments. But he said Kansai Electric must be aware of the challenge it faces so his group must fight resolutely again. He said he is appalled that Kansai Electric is trying to restart its reactors after the epoch-making ruling.

No point whatsoever in restarting Tokai 2

May 26, 2014
Editorial: From economic, safety view, no case for restarting Tokai No. 2 nuke reactor

http://mainichi.jp/english/english/perspectives/news/20140526p2a00m0na007000c.html

Japan Atomic Power Co. has applied to the Nuclear Regulation Authority (NRA) for a safety inspection of the Tokai No. 2 nuclear plant in Ibaraki Prefecture. Once it gets the agreement of local residents, the firm is looking to restart the plant's single reactor in fiscal 2016 or shortly thereafter.

From both a safety and an economic standpoint, however, putting the Tokai No. 2 plant back on-line is simply not realistic.

The application for safety screenings looks like a desperate, all-out attempt to prolong the life of Japan Atomic Power itself. In that case, however, what the firm needs to do first and foremost is reassess its corporate structure, based on the assumption that it will not be able to restart the Tokai No. 2 plant.

The Tokai No. 2 Power Station in the village of Tokai has been in commercial operation for more than 35 years, and has the oldest reactor of any of the 18 at 11 power plants currently applying for NRA screenings. Japan Atomic Power is set to spend some 78 billion yen on safety improvements at the No. 2 plant, including building a new breakwater to defend it against tsunami. Meanwhile, the NRA inspection will pay especially strong attention to fire prevention measures, including proofing electrical cables against blazes.

New basic nuclear plant safety regulations demand flame retardant cables. The cables at the Tokai No. 2 station, however, are flammable, and replacing them would be an enormous cost in time and money. Japan Atomic power has said it will paint the cables and take other steps to make sure they are just as fire-proof as newer flame-retardant versions.

Is this valid fire prevention? What if the flame-resistant paint deteriorates? This is but one of the serious issues that need addressing, and it's impossible to predict whether the plant will pass the NRA check.

Meanwhile, the 30-kilometer radius zone around the Tokai No. 2 plant has the highest local population of any nuclear station in Japan, at about 980,000 people. Despite this, the municipalities within the 30-

kilometer zone have not set evacuation plans in case of an accident at the plant. There have been numerous barriers in drawing up these plans, including finding places for evacuees to go.

Even if Japan Atomic Power overcomes all these problems and gets the restart of the Tokai No. 2 plant approved, the aging reactor has very little time left before it has to be decommissioned. Under the revised nuclear reactor regulation law, reactors have a maximum operating life of 40 years.

Ibaraki Gov. Masaru Hashimoto told the Mainichi Shimbun in a recent interview, "Considering the balance between operational life and running costs, it doesn't seem to me that restarting the reactor would be all that economical." He's exactly right.

The Tokai No. 2 station is not Japan Atomic Power's last ray of hope. The company also has two reactors at its Tsuruga Nuclear Power Station in Fukui Prefecture. However, all three reactors have been off-line since June 2011, and it looks like restarting the Tsuruga reactors will -- due to age and nearby active fault lines -- be quite difficult as well.

Japan Atomic Power is a nuclear energy wholesaler. Even though it is selling zero electricity right now, it still managed to stay in the black for the fiscal year ending March this year -- a feat managed only because of approximately 125 billion yen in "basic charges" paid by its clients, the big five electrical utilities, for equipment maintenance and other costs. Japan Atomic Power more or less has to show it's trying to get the Tokai No. 2 plant back on-line, otherwise the logic for the "basic charge" would evaporate. Meanwhile, the Big Five simply pass on these charges to consumers through their electricity bills.

Even as Japan Atomic Power jumps through hoops to keep its creaking business model intact, the firm is proceeding with the decommissioning of the Tokai Power Station -- home to the oldest commercial reactor in the country. Japan Atomic Power should use that experience to transform itself from a nuclear power supplier into a specialist in reactor decommissioning. The Japan Atomic Power case also calls into question the system of supports from other power companies.

There are some electrical utilities that have announced they're considering decommissioning aging reactors. What system will be created to handle what may become a long string of decommissionings? The government must hammer out a clear plan on this issue.

May 26, 2014(Mainichi Japan)

Koizumi calls court ruling "common sense"

May 24, 2014
Koizumi: Court ruling blocking Oi reactor restarts is 'common sense'
http://ajw.asahi.com/article/behind_news/politics/AJ201405240041

The ASAHI SHIMBUN

Former Prime Minister Junichiro Koizumi lauded a recent court ruling ordering an electric power company not to restart its reactors, saying the decision is in line with the “common sense” of the people.

The still-popular retired politician made the remark after he attended a meeting May 23 of the Japan Assembly for Nuclear Free Renewable Energy, an organization he set up with Morihiro Hosokawa, another former prime minister.

Koizumi reportedly said at the meeting that Hosokawa’s failed bid in February’s Tokyo gubernatorial election, in which they campaigned for the abolishment of nuclear power, possibly influenced the court’s decision.

Kansai Electric Power Co. was seeking to restart two reactors at its Oi nuclear power plant. But the Fukui District Court on May 21 sided with residents living near the plant and ordered the utility to keep the reactors offline.

The landmark ruling calls into question the legitimacy of current safety screenings of nuclear plants across Japan. It judged that no safety measures could ever be sufficient because it is impossible for modern science to predict the scale of possible earthquakes.

Hosokawa’s campaign “created an environment in which one cannot criticize a court by labeling it as leftist, even when it hands down an order to suspend (the operation of a nuclear plant),” Koizumi reportedly said at the meeting.

Residents file injunction against restart

May 30, 2014
Court order sought to stop reactor restart

http://www3.nhk.or.jp/nhkworld/english/news/20140530_24.html

Residents near a nuclear plant in Kagoshima Prefecture, southwestern Japan, have filed a temporary injunction with a local court to keep the facility from going online.

The Sendai nuclear plant's 2 reactors are the top priority of regulators carrying out safety checks required for restarting nuclear power plants in Japan.

23 people filed for the provisional order with the Kagoshima District Court on Friday. They demand that the plant's operator, Kyushu Electric Power Company, not restart the facility.

They say the plant drastically lacks earthquake resistance, and that a massive quake could cause radioactivity leaks.

The plaintiffs are among more than 2,200 people across the country who had already filed an injunction suit against restarting the plant after the Fukushima Daiichi nuclear crisis in 2011.

The 23 plaintiffs say they filed for the order as the regulators are prioritizing the check of the Sendai plant, and that restarting the facility could threaten the lives of nearby residents.

Kyushu Electric says it will study the content of the filing and decide what to do. The operator has been insisting that the plant is safe. It says it implemented a sufficient investigation and other measures after checking nearby underground faults.

This month, a court in Fukui, central Japan, ordered the operator of the Ohi nuclear plant not to restart 2 of its reactors, citing inadequate safety measures. The operator has appealed the ruling.
May 30, 2014 - Updated 06:13 UTC

Trying to restart Higashidori

June 10, 2014
Tohoku Electric seeks screening of nuclear plant

http://www3.nhk.or.jp/nhkworld/english/news/20140610_20.html

The operator of the Higashidori nuclear power plant in northern Japan has applied for a government safety screening with an eye to restarting the plant's reactor.

Shigeru Inoue, vice president of Tohoku Electric Power Company, filed papers with the Nuclear Regulation Authority on Tuesday.

The utility wants the NRA to examine whether the plant in Aomori Prefecture conforms to stricter regulations introduced after the 2011 Fukushima nuclear accident.

Tohoku Electric says it has increased the estimated strength of an earthquake that could hit the

Higashidori plant from 450 to 600 gals. Gal is a unit of acceleration.

The utility says it is reinforcing pipes and taking other steps to improve the structure's quake-resistance. Officials also plan to build a facility to serve as a command center in the event of an emergency.

Tohoku Electric aims to complete such work and restart the plant in March 2016.

However, experts advising the NRA have warned that geological faults under the facility are at high risk of shifting in the future.

NRA officials have suggested they will not begin full-scale screening of the plant until the experts come to a conclusion about the fault risks.

Inoue told reporters the utility believes the faults are not active, and wants the regulator to start the screening in parallel to its studies on the faults.

The NRA has now received safety screening applications for 19 reactors at 12 nuclear plants. Japan has 48 reactors at 16 plants across the country. All of the reactors are now offline.
Jun. 10, 2014 - Updated 04:02 UTC

Lack of detailed data and analyses

Utilities slammed for lack of preparation for reactor safety review
http://mainichi.jp/english/english/newsselect/news/20140617p2g00m0dm078000c.html

TOKYO (Kyodo) -- Japan's nuclear regulators slammed two plant operators Tuesday for their lack of detailed data and analyses in a safety review that would allow them to resume operations.

The Nuclear Regulation Authority, which held the first assessment meetings for reactors at the Tokai Daini plant, located some 130 kilometers north of Tokyo, and the Higashidori plant in northeastern Japan, urged the operators to provide more data so it can proceed with the review.

"It just won't do" that plant operators apply for the assessment with "quick-fix" documents to feel out whether their measures are sufficient to pass the review, NRA Commissioner Toyoshi Fuketa told utility officials.

Not one of the 48 commercial nuclear reactors in Japan has passed the NRA's safety assessment, based on new safety standards introduced in the wake of the 2011 Fukushima Daiichi nuclear accident, and they all remain offline, despite 19 safety review applications being made.

Shigeru Inoue, vice president of Tohoku Electric Power Co. -- the operator of the Higashidori plant -- told reporters he believes "the utility is ready" for the screening and the company wants the NRA to confirm the reactor's safety as soon as possible.

The nuclear watchdog, however, is not planning to begin a full-fledged assessment, as the plant has not finished investigating faults under the complex that the NRA says are active.

Regulatory officials also raised questions about fire protection measures Japan Atomic Power Co. plans to implement at the Tokai plant, which started commercial operation in 1978.

The operator said it plans to apply fire-retardant coatings on electric cables at the complex, instead of replacing them with flame-resistant cables. But NRA officials questioned the feasibility of the plan.
June 17, 2014(Mainichi Japan)

See also :
June 17, 2014

Nuclear utilities faulted for scant data

http://www.japantimes.co.jp/news/2014/06/17/national/nuclear-utilities-faulted-scant-data/#.U6FJayji91s

Kyodo
Nuclear regulators slammed two plant operators Tuesday for failing to supply detailed data and analyses ahead of a safety review that could allow them to resume operations.[...]

Restart or not restart? (1)

June 18, 2014
Reactor safety screening to follow fault study
http://www3.nhk.or.jp/nhkworld/english/news/20140618_26.html

Japan's nuclear regulatory body says it will not begin safety checks at a reactor in northern Japan until it judges the safety of geological faults under the facility.

Tohoku Electric Power Company, which operates the Higashidori nuclear plant in Aomori Prefecture, applied last week for a review of the plant's No.1 reactor. The utility hopes to restart it in March 2016.

But in February last year, an expert panel of the Nuclear Regulation Authority compiled a draft report warning that faults under the facility are at high risk of shifting.

Tohoku Electric insists the faults are not active.

On Wednesday, the authority decided not to launch a full-scale screening until its members can issue a unified opinion of the faults.

But the authority did agree to let Tohoku Electric join discussions with other power companies on filtered vents and other safety measures at reactors already being screened.
Jun. 18, 2014 - Updated 08:09 UTC

Restart or not restart ? (2)

June 18, 2014
Nuclear regulator to begin safety review on Higashidori plant
http://mainichi.jp/english/english/newsselect/news/20140618p2g00m0dm067000c.html

TOKYO (Kyodo) -- Japan's nuclear regulator decided Wednesday to start a safety assessment on a reactor at the Higashidori nuclear plant in northern Japan, although experts have yet to conclude an investigation of faults running under the complex.

The Nuclear Regulation Authority -- which initially said it would not launch a full-fledged review of the No.1 reactor until the investigation of the faults is done -- will begin the safety assessment on issues common with other boiling water reactors.

The decision "will not affect" the ongoing research on the faults, NRA Commissioner Kunihiko Shimazaki told a regular meeting of the nuclear watchdog.

A panel under the NRA said last year in a draft report that the faults under the Higashidori site are active, though Tohoku Electric Power Co. denies this.

According to the NRA, issues peculiar to the complex will not be included in the upcoming assessment.

Instead it will check items such as the performance of a filtered venting system, which releases radioactive substances to the outside to prevent damage to the reactor's primary containment vessel in the event of a severe accident.

Tohoku Electric applied for the safety review earlier this month, asking the regulatory body to proceed with the safety assessment in parallel with the investigation of the faults.

None of Japan's 48 commercial reactors has passed the review needed to restart operations in the wake of the 2011 Fukushima Daiichi nuclear accident, and they all remain offline, despite 19 safety review applications being made.

June 17, 2014

NRA begins screening for 2 nuclear facilities

http://www3.nhk.or.jp/nhkworld/english/news/20140617_30.html

Japan's nuclear regulator has criticized the operators of 2 nuclear facilities for failing to fully prepare for safety assessments needed to restart them.

The facilities are the Tokai Number 2 nuclear power plant in Ibaraki Prefecture and the Number 1 reactor at Tohoku Electric Power Company's plant in Higashidori, Aomori Prefecture. They must meet stricter regulations introduced after the 2011 Fukushima nuclear accident to be restarted.

The Nuclear Regulation Authority on Tuesday held its first session to examine applications from the operators for the safety assessments.

Authority members took issue with old flammable cables at the Tokai plant, which began commercial operation more than 30 years ago. They asked why the operator plans to apply non-flammable coating to the cables rather than replace them with non-flammable ones.

They also criticized the operator for failing to have its application reflect discussions by the authority on the impact of earthquakes that may be caused by unknown geologic faults.

Regulators asked Tohoku Electric about its assumptions concerning quake levels, and said it did not provide specific figures on worker radiation exposure in case of serious accidents.

Japan Atomic Power Company Executive Vice President Hiroshi Masuda said his firm already has data to explain the issues raised by the regulators.

Tohoku Electric Vice President Shigeru Inoue expressed regret that his firm failed to provide detailed data. He said it is preparing fully and will present them in a future assessment.

No active fault under Hamaoka... says Chubu Electric

June 19, 2014
No active faults found under Hamaoka nuclear power plant: operator
http://mainichi.jp/english/english/newsselect/news/20140619p2g00m0dm041000c.html

TOKYO (Kyodo) -- The operator of the Hamaoka nuclear power plant in central Japan said Wednesday its investigation found no active geologic faults under or around the site, which was forced to shut down in 2011 after operation of the plant was deemed risky.

Chubu Electric Power Co. plans to submit the results of the probe to the Nuclear Regulation Authority after it applied for the nuclear watchdog's reactor safety review in February, seeking to resume its operation.

Located on the Pacific coast, about 190 kilometers southwest of Tokyo, the Hamaoka complex in Shizuoka Prefecture is believed to be situated at the potential epicenter of a massive earthquake.
"Everyone in the prefecture knows that the Hamaoka plant is right above the source zone (of the possible quake)," said a Shizuoka Prefecture official, urging the utility to expand the scope of the faults investigation.

In quake-prone Japan, nuclear plant operators are not allowed to build reactors above active faults, which are defined as those that have moved in the last 120,000 to 130,000 years.

Chubu Electric concluded that the faults on the premises of and around the plant "have not moved at least in 130,000 years" and they will not trigger earthquakes.

Following the 2011 Fukushima nuclear accident triggered by the massive earthquake and tsunami, the previous government led by the Democratic Party of Japan asked Chubu Electric to halt the operation of the Nos. 4 and 5 reactors at the Hamaoka site, while not permitting reactivating the No. 3 reactor that was under checkups at that time, citing a lack of measures against quake and tsunami hazards.

Two of the five reactors at Hamaoka were retired in 2009.

None of Japan's 48 commercial reactors has passed the NRA's safety assessment based on new regulations introduced in the wake of the nuclear crisis, despite a total of 19 applications being made.
June 19, 2014(Mainichi Japan)

Revised safety report submitted for Sendai plant

June 24, 2014
Utility submits safety report to restart plant
http://www3.nhk.or.jp/nhkworld/english/news/20140624_31.html

The operator of the Sendai nuclear plant in Kagoshima Prefecture, southwestern Japan, has submitted a revised safety report to nuclear regulators to restart 2 reactors.

Kyushu Electric Power Company submitted an 8,600-page report to the Nuclear Regulation Authority on Tuesday that outlines safety measures for the Number 1 and 2 reactors.

The utility revised the report it submitted in April after the regulator said it lacked details on safety measures.

The regulators plan to compile a draft safety assessment by July 9th.

They are expected to complete the assessment report in August, after hearing public opinions on the draft for about a month.

Before restarting the plant, the utility will also need to obtain the approval of local municipalities, and complete inspections of equipment and other procedures.

The firm hopes to be able to restart the 2 reactors in September at the earliest.

Kyushu Electric's Managing Executive Officer Akira Nakamura said he doesn't know when the plant can be restarted, as the safety screening is continuing.

The Sendai plant is likely to be the first to resume operation under stricter safety standards.

But all Japan's commercial reactors are likely to remain idle in the summer when electricity demand peaks.
Jun. 24, 2014 - Updated 10:05 UTC

Kyushu Electric submits documents for reactor safety checks
http://mainichi.jp/english/english/newsselect/news/20140624p2g00m0dm064000c.html

TOKYO (Kyodo) -- Kyushu Electric Power Co. said Tuesday it submitted to nuclear regulators additional documents required for safety reviews of two reactors at its nuclear power plant in southwestern Japan that are considered the closest to being allowed to restart among the country's 48 offline commercial reactors.

The Nuclear Regulation Authority will draw up a draft report on the results of the safety reviews of the Nos. 1 and 2 reactors at the Sendai plant in Satsumasendai, Kagoshima Prefecture, based on the documents from the utility.

The operator of the two-reactor plant originally filed in July last year for reactor safety assessments by the regulators, and this April submitted to the regulators additional documents outlining safety measures. But the regulators asked the company to resubmit the documents after some flaws were found.

All of the commercial reactors in Japan currently remain halted as the Fukushima nuclear crisis, triggered by a massive earthquake and tsunami, has made it difficult for utilities to restart reactors shut down for routine checks. They need to satisfy a set of new regulations introduced after the accident to be allowed to go back online.

The nuclear agency has given priority to proceeding with the safety checks of the reactors at the Sendai plant because the units have cleared major hurdles regarding the assessment of future earthquakes and tsunami that could affect the plant.

Kyushu Electric had sought to restart the reactors by this summer when power demand is highest. But resumption is not expected before fall given the need for the utility to obtain permission from local municipalities and to pass equipment checkups for the reactors, among other procedures.

Kyushu Electric and eight other utilities have so far applied for safety review for a total of 19 reactors.
June 24, 2014(Mainichi Japan)

Emergency measures not so urgent after all

July 7, 2014

Sendai nuclear plant set to restart without off-site emergency center
http://ajw.asahi.com/article/0311disaster/fukushima/AJ201407070029

THE ASAHI SHIMBUN

The Sendai nuclear power plant in Kagoshima Prefecture could restart two reactors in autumn without a crucial emergency facility in place to deal with a possible nuclear accident and evacuations of host communities.

The Sendai plant, operated by Kyushu Electric Power Co., is expected to be the first to resume operations among all plants that have applied for safety screenings by the Nuclear Regulation Authority.

The Cabinet Office in September 2012 instructed all prefectures hosting nuclear power plants to ensure that off-site emergency centers be equipped with ventilation and other systems to prevent radiation contamination and be located between 5 and 30 kilometers from the nuclear plant.

It also mandated host prefectures to designate multiple backup facilities in case the functions of the off-site centers are crippled by a disaster, which is what occurred during the Fukushima nuclear disaster that started in March 2011.

The deadline for completion of the emergency off-site centers is September 2015.

Kagoshima prefectural government officials said construction of the off-site emergency center for the Sendai plant has lagged behind schedule due to delays in discussions with the central government.

“We know it is an issue to be resolved, and we plan to construct the facility at an early date,” an official said.

The prefecture plans to complete the installation of an anti-radiation ventilation system and an emergency power generator for the off-site center of the Sendai nuclear plant by **mid-March 2015.** One of backup facilities for the off-site center will be constructed by mid-October.

However, the Nuclear Regulation Authority is set to compile a draft of the safety screening results for the Sendai plant in Satsuma-Sendai as early as July 9. If the plant clears the NRA’s safety screening process, its two reactors will be restarted in autumn at the earliest.

Off-site emergency centers are supposed to function as the bases of operations for officials from the central government, local governments and utilities to combat a nuclear crisis and coordinate evacuations of residents.

An official of the Cabinet Office said the Sendai plant already has a backup off-site center and is thus capable of countering a nuclear accident.

The NRA's safety screening focuses on conditions of a nuclear power plant, not its off-site centers.

The Great East Japan Earthquake and tsunami in March 2011 led to radiation contamination and damaged communications equipment at the off-site center of the Fukushima No. 1 nuclear power plant, rendering the emergency facility unusable.

Its functions were relocated to the Fukushima prefectural office about 60 km from the plant, leading to confusion in communications and counter-accident measures, including ways to prevent residents from being exposed to radiation.

The government's Investigation Committee on the Accident at the Fukushima Nuclear Power Stations has called for the prompt construction of off-site emergency centers.

But renovations and relocations of the emergency facilities are also behind schedule around Japan.

In addition to the Fukushima plant, off-site centers need to be relocated from the 5-km radius of four other nuclear power plants, including Shikoku Electric Power Co.'s Ikata nuclear plant in Ehime Prefecture.

An official of Ehime Prefecture said if an accident at the Ikata plant cripples the existing off-site center before September 2015, the front-line headquarters will be "relocated to a safe location like in the Fukushima crisis" in a stop-gap measure.

(This article was written by Toshio Kawada and Chikako Kawahara.)

Further evaluation needed

July 7, 2014

Japanese nuclear regulators to delay interim report on restart of Kyushu plant

Kyodo

The Nuclear Regulation Authority will delay unveiling an interim report on restarting two reactors at a plant in Kagoshima Prefecture, sources matter said Monday.

The NRA had planned to present the draft to its decision-making panel Wednesday, but regulators judged that further evaluation was needed for measures to deal with severe accidents proposed by the plant's operator, Kyushu Electric Power Co., the sources said.

Once finalized, the report is expected to give the green light to restart the two-reactor Sendai plant, which is the closest to meeting the new safety standards introduced after the 2011 Fukushima nuclear crisis.

All of Japan's 48 commercial reactors remain offline in the wake of the March 2011 debacle at Tokyo Electric Power Co.'s Fukushima No. 1 complex.

After compiling the draft, the agency will solicit comments from the public for a month. The final version will be completed when the comments are collated.

July 4, 2014

2 Kyushu reactors expected to go back online this fall

http://mainichi.jp/english/english/newsselect/news/20140704p2a00m0na001000c.html

The Nuclear Regulation Authority (NRA) will give a stamp of safety approval as early as July 9 to two idled reactors at the Sendai Nuclear Power Plant in Kagoshima Prefecture, paving the way for Kyushu Electric Power Co. to restart the reactors this autumn, the Mainichi Shimbun has learned.

Sources say the NRA will present a report on its safety review of the No. 1 and 2 reactors of the power plant in Satsumasendai, Kagoshima Prefecture, as early as July 9 -- a move tantamount to giving the utility the go-ahead to restart the two reactors. The two reactors are likely to resume operations after public opinions are solicited and procedures for local consent are completed.

New nuclear power standards featuring tougher measures against earthquakes, tsunami and severe accidents went into effect in July last year in the aftermath of the crisis at the Fukushima No. 1 Nuclear Power Plant triggered by the 2011 Great East Japan Earthquake and tsunami. At present, 19 reactors at 12

nuclear power plants in Japan are undergoing safety reviews. The two reactors at the Sendai power plant in southwestern Japan are expected to be the first among the 19 reactors to meet the new standards.

The NRA had initially projected that a safety review of each reactor would last about six months, but many electric power companies were slow in complying with the tougher standards, delaying safety reviews. Kyushu Electric raised its estimated figure for peak ground acceleration in the event of an earthquake from 540 gals to 620 gals, leading the NRA to preferentially conduct its safety reviews of the two reactors.

Kyushu Electric submitted revised documents for applying to change the reactor facilities with new safety measures at the end of April but the documents contained 42 flaws, delaying the NRA's safety screening by about one month.
July 04, 2014(Mainichi Japan)

Sendai to clear initial safety hurdle

July 14, 2014

Sendai nuclear plant to clear safety hurdle Wednesday, regulator says

Reuters
http://www.japantimes.co.jp/news/2014/07/14/national/sendai-nuclear-plant-to-clear-safety-hurdle-wednesday-regulator-says/#.U8Qd1LHi91s

The Sendai nuclear plant in Kagoshima Prefecture is to clear an initial safety hurdle Wednesday, a key step in what is likely to be the gradual restart of an industry idled by the 2011 Fukushima disaster.

As Japan swelters through its first summer without any nuclear power in 40 years, Prime Minister Shinzo Abe's administration is keen to start bringing the nation's 48 reactors back online as the prolonged shutdown forces reliance on expensive fossil fuel imports.

All reactors have been shut for safety overhauls since the 2011 disaster.

The Nuclear Regulation Authority said Monday it will approve the upgraded design and safety features of the Kyushu Electric Power plant at a Wednesday meeting.

After this initial approval, the NRA will seek public comments for a month. Further on-site operational checks will be required, followed by the approval of local communities.

Experts largely expect the two-reactor plant to come online by the end of the year. The plant was fast-tracked for safety approval by the NRA in March.

The likely restart will be a key boost to the nuclear industry and to Abe, who despite widespread public opposition to nuclear power calls for the restart of reactors deemed safe by regulators. He reversed the previous administration's plan to eventually mothball all units.

The NRA, an independent nuclear regulator set up after the Fukushima disaster, has been vetting restart applications from regional electric utilities for more than a year. Nine companies have applied to restart 19 reactors.

The blackout of nuclear plants, which supplied about one-third of Japan's electricity before Fukushima, has pushed several utilities to post three straight years of losses and has contributed to a record string of 23 months of trade deficits.

Kyushu Electric was forced to seek a ¥100 billion bailout from the government-backed Development Bank of Japan this year to shore up its battered finances.

Even after the Sendai plant's restart, at most about two-thirds of Japan's 48 reactors will eventually pass the regulator's stringent safety checks and clear the other hurdles needed to restart, a Reuters analysis in April showed.

NRA approves Sendai restart

Japan nuclear plant clears safety hurdle toward restarting

http://mainichi.jp/english/english/newsselect/news/20140716p2g00m0dm035000c.html

TOKYO (Kyodo) -- Regulators said Wednesday a nuclear plant in southwestern Japan cleared an initial safety hurdle, in what is seen as a major step for it to become the first nuclear facility to restart among the country's 48 offline commercial reactors since the 2011 Fukushima nuclear crisis.

The Nuclear Regulation Authority's decision-making panel approved a draft report required to resume the operations of two reactors at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture.

The 420-page report -- which concluded that the plant's proposed countermeasures against earthquakes, tsunami and other possible risks meet the standards -- will be finalized after a monthlong public consultation period through Aug. 15. The new standards were introduced in July last year.

But the regional utility is not expected to reactivate the plant before this fall as it still needs to secure local consent and complete some other procedures.

With Japan experiencing its first summer without nuclear power in nearly half a century and utilities' fuel costs for thermal power generation surging, the government of Prime Minister Shinzo Abe is keen to restart reactors after their safety is ensured.

At a press conference Wednesday morning, Chief Cabinet Secretary Yoshihide Suga reconfirmed the government's stance on promoting nuclear power generation, which supplied some 30 percent of the country's electricity before the Fukushima crisis.

More than half of respondents in a Kyodo News survey conducted last month, however, said they oppose the reactivation of nuclear plants.

Currently, all 48 commercial reactors in Japan remain offline, as the nuclear crisis at Tokyo Electric Power Co.'s Fukushima Daiichi complex, the worst since the 1986 Chernobyl disaster, has made it difficult for utilities to resume their operation after mandatory regular checks.

To be restarted, reactors need to pass the regulatory body's safety assessments based on the new standards.

Kyushu Electric was among the first utilities to apply for the agency's safety screening when the new regulations took effect. The Sendai plant emerged as the leading candidate for resumption after clearing key hurdles for earthquake and tsunami hazards that could affect the coastal complex.

The new regulations require plant operators to implement measures in light of the lessons learned from the Fukushima nuclear disaster, triggered by a massive earthquake and tsunami on March 11, 2011.

Under what the government calls the world's toughest nuclear regulations, utilities are obliged to put in place countermeasures against possible severe accidents such as reactor core meltdowns and huge tsunami, as well as terrorist attacks.

While some experts have argued that Kyushu Electric is underestimating possible volcanic eruptions that could affect the plant, the agency supported the utility's claim that such risks are "small enough."

Kyushu Electric and eight other utilities have applied for safety screenings for a total of 19 reactors so far.

July 16, 2014(Mainichi Japan)

Regulators approve draft nuclear assessment
http://www3.nhk.or.jp/nhkworld/english/news/20140716_80.html

Japan's Nuclear Regulation Authority has approved a draft safety plan for restarting reactors at the Sendai nuclear plant in Kagoshima Prefecture.

The facility in southern Japan is operated by Kyushu Electric Power Company. It could be the first nuclear plant in the country to get the go-ahead to resume operation.

NRA officials unanimously approved the draft plan on Wednesday. They said the utility has satisfied their stricter safety requirements for nuclear facilities.

The NRA will issue their final assessment of the plan after 30 days of public hearings, starting on Thursday.

The focus will then shift to whether the government and the utility can convince local residents and municipalities to agree.

Kyushu Electric must also clear procedures for restarting the reactors. These include inspections, and getting the NRA to approve the design of equipment at the plant.

Observers say the reactors are unlikely to be back online until October at the earliest.

Japan introduced new safety guidelines for nuclear reactors last year after the meltdowns at the Fukushima Daiichi plant in March 2011.

The guidelines require nuclear plants to come up with stricter measures against natural disasters including earthquakes and tsunami.

Utilities must also come up with a plan of action against serious nuclear accidents at their plants. The

action plan had been voluntary in the past.

All 48 nuclear reactors across Japan are currently offline. They must be screened by the Nuclear Regulation Authority before being restarted.

A total of 19 reactors at 12 plants, including the Sendai Plant, have been undergoing screening since last July.

The nuclear regulator set up two teams. One is in charge of estimating the scale of possible natural disasters for the reactor in question, and the other checks the facility's safety measures. The teams have conducted screening meetings open to the public.

So far, screening for pressurized water reactors at 6 nuclear plants is preceding other applications.
Jul. 16, 2014 - Updated 04:26 UTC

Regulators approve draft nuclear assessment

Japan's Nuclear Regulation Authority has approved a draft safety plan for restarting reactors at the Sendai nuclear plant in Kagoshima Prefecture.

The facility in southern Japan is operated by Kyushu Electric Power Company. It could be the first nuclear plant in the country to get the go-ahead to resume operation.

NRA officials unanimously approved the draft plan on Wednesday. They said the utility has satisfied their stricter safety requirements for nuclear facilities.

The new standards were introduced last year in response to the nuclear disaster in Fukushima 3 years ago.

The NRA will issue their final assessment of the plan after 30 days of public hearings, starting on Thursday.

The focus will then shift to whether the government and the utility can convince local residents and municipalities to agree.

Kyushu Electric must also clear procedures for restarting the reactors. These include inspections, and getting the NRA to approve the design of equipment at the plant.

Observers say the reactors are unlikely to be back online until October at the earliest.
Jul. 16, 2014 - Updated 04:04 UTC

Nuclear regulators present draft safety assessment

http://www3.nhk.or.jp/nhkworld/english/news/20140716_15.html

Japan's Nuclear Regulation Authority has compiled a draft safety assessment that paves the way for Kyushu Electric Power Company to restart 2 of its nuclear reactors.

Regulators on Wednesday presented the draft assessment, which effectively approves safety measures carried out by the utility to restart the No.1 and No.2 reactors at its Sendai nuclear power plant in Kagoshima Prefecture.

Regulators say the measures meet the stricter safety standards introduced in response to the nuclear crisis in Fukushima in 2011. They noted that the utility has raised the estimated strength of an earthquake that could hit the plant and has put in place adequate measures to deal with serious accidents.

The regulators are expected to approve the draft later on Wednesday.

Before issuing a final assessment, they will hear comments from the public. The Sendai plant would be the first in Japan to satisfy the revised safety requirements.

The focus will then shift to whether the government and the utility can convince local residents and municipalities that the reactors are necessary and safe.

Kyushu Electric must also clear other procedures, which include obtaining approval from the NRA on the design of equipment at the plant. Observers say the earliest the reactors are likely to go back online is in October.
Jul. 16, 2014 - Updated 02:54 UTC

Happy about the restart (some are)

July 16, 2014
Abe, residents near Sendai Plant comment

http://www3.nhk.or.jp/nhkworld/english/news/20140716_23.html

Prime Minister Shinzo Abe says regulatory approval of a draft safety plan to restart nuclear reactors at the Sendai power plant is one step forward.

Abe said regulators have more work to do to finalize their assessment that the plant is safe. He said if the plant clears what are now the world's toughest safety standards, the government will work to restart it with the consent of local residents.

Opinions are varied among people living near the country's nuclear plants about restarting reactors.

A 70-year-old woman in the city hosting the Sendai plant said she hopes the reactors are never restarted.

She said she sees no benefit to restarting the plant in her city when the population is shrinking.

But a 52-year-old resident welcomed the possibility of the plant restarting. She said it benefits some people and is indispensable to the community.

Another woman of the same age complained that residents had not been adequately briefed on the issue.

A 37-year-old man said if the government wants to restart the plant, it should show it has a clear vision about energy resources and how to decommission nuclear plants.
Jul. 16, 2014 - Updated 07:15 UTC

Operator, Suga comment on approval
http://www3.nhk.or.jp/nhkworld/english/news/20140716_22.html

Kyushu Electric Power Company says it will respond carefully and sincerely to regulators' assessments of its nuclear facilities.

The company said in a statement it will also work continuously to boost the safety and credibility of the Sendai plant.

Chief Cabinet Secretary Yoshihide Suga says the Nuclear Regulation Authority is working hard to assess the safety of the plant. He said their analysis is based on safety guidelines considered among the toughest in the world.

Asked whether the government takes final responsibility for the safety of the plant, Suga said judgments about safety must be objective and exclude political concerns.

He said the government will rely on the judgment of the Nuclear Regulation Authority.
Jul. 16, 2014 - Updated 05:35 UTC

Restarting Kyushu reactors

July 16, 2014
Kyushu plant reactors certain to be first to restart since Fukushima accident
http://ajw.asahi.com/article/0311disaster/fukushima/AJ201407160060

By TOSHIO KAWADA/ Staff Writer

The Nuclear Regulation Authority announced on July 16 that the Sendai nuclear power plant No. 1 and No. 2 reactors meet its new tougher safety standards, allowing them to be the first to be restarted in Japan since the Fukushima No. 1 nuclear plant disaster.

Because local residents and officials have expressed support for restarts of the two reactors at the Kyushu Electric Power Co. plant, located in Satsuma-Sendai, Kagoshima Prefecture, operations are expected to be resumed as early as this fall.

The Abe administration had declared that it will allow now-idle reactors to resume operations if they are assessed as meeting stricter criteria introduced by the NRA after the March 2011 Great East Japan Earthquake and tsunami triggered the Fukushima nuclear accident.

The new standards demand nuclear operators develop countermeasures against severe accidents as well as impose more rigorous criteria to assess safety measures designed to prevent an earthquake and tsunami from critically damaging reactors. Effectiveness of resident evacuation plans and other factors are not taken into account in the screening process.

Only facilities that are deemed safe based on the new standards will be allowed to resume operations. Kyushu Electric submitted applications for restarts of the reactors immediately after the new regulations took effect in July last year.

Since March, the NRA has given priority to examining the Sendai reactors, which quickly passed screenings on major safety points, such as countermeasures against a massive earthquake and tsunami. The NRA has received applications to restart an additional 17 reactors at 11 nuclear plants, but the Sendai plant is the first to receive its blessing.

The nuclear watchdog intends to make the Sendai plant a model case for approving restarts of the country's reactors, all 48 of which remain offline in the aftermath of the Fukushima crisis.
The NRA will invite public opinions on technical issues for 30 days from July 17, and later finalize the decision to allow Kyushu Electric to resume operations at its Sendai plant.

At the same time, the nuclear watchdog will examine the utility's construction plans that include detailed designs of equipment and the company's new safety regulations detailing operation procedures and accident responses.

Based on those screening results, Kyushu Electric will discuss reactor restarts with local governments in a campaign to win their consent.

Although some planned safety features were set to be installed in the latest stages of the screening process, the utility is looking to complete construction of all anti-disaster equipment by the end of July. Completed facilities are expected to be screened by the NRA before Kyushu Electric restarts the reactors.

The NRA has been concentrating on examining the reactors at the Sendai plant, but it will shortly resume full-scale screenings of the other reactors at nuclear plants across the nation that have applied for restarts.

Restarting Kyushu reactors (2)

July 16, 2014

NRA poised to greenlight restart of two Kagoshima reactors

AFP-JIJI

The Nuclear Regulation Authority was expected Wednesday to approve the restart of two atomic reactors, in a move likely to ignite fresh protests over returning to the technology more than three years after the Fukushima meltdown crisis started.

NRA officials were to make public their safety review of the Sendai nuclear plant in Kagoshima Prefecture, which would technically give Kyushu Electric Power Co. the green light to switch on the reactors — the first since Japan ushered in stricter safety guidelines last year.

But Tokyo has agreed to a month-long public consultation period and winning agreement from local officials before giving a final nod, so an actual restart is unlikely before the autumn.

The review comes as Prime Minister Shinzo Abe tries to persuade a wary public that Japan needs to return to an energy source that once supplied more than a quarter of its power, a push backed by business groups.

The country's reactors were switched off after the March 2011 quake-tsunami disaster triggered three meltdowns at Tokyo Electric Power CO.'s Fukushima No. 1 nuclear power plant, the worst atomic accident since Chernobyl.

Abe has seen regular protests in front of his office over plans to restart reactors deemed safe by the nuclear agency.

The regulator's clearance for the Sendai plant comes after at least one local assembly adopted a resolution for the site to be decommissioned, and just days after the election of an anti-nuclear politician underscored opposition to the plans.

Former parliamentarian Taizo Mikazuki, 43, squeaked out a Sunday election win to become governor of Shiga Prefecture, beating out a candidate backed by Abe's ruling Liberal Democratic Party.

The prefecture borders on Fukui Prefecture, host to 13 idled reactors, and where the battle over nuclear could see its biggest fight.

Mikazuki has demanded that the central government get his approval before any reactor restarts over the border in Fukui.

Worries about whether Japan's nuclear plants could withstand another disaster came into focus at the weekend as an earthquake struck near the crippled Fukushima nuclear site.

No major damage was reported, but seismologists said the quake was an aftershock of the temblor that sparked 2011's deadly tsunami, and **warned of more to come.**

A 9.0-magnitude earthquake in March 2011 saw monster tsunami slam into the Pacific coastline, leaving about 18,000 dead or still missing.

The huge waves swamped the Fukushima plant, sending reactors into meltdown and spewing radioactivity across the adjacent farming region.

No one died as a direct result of the atomic disaster, but experts warn that decommissioning of the plant could take decades and many evacuated residents may never be able to return to their homes in the shadow of the plant.

Restart procedures for Sendai

July 16, 2014

Procedures for restarting Sendai plant

http://www3.nhk.or.jp/nhkworld/english/news/20140717_02.html

Kyushu Electric Power Company in southern Japan still has many steps to clear before becoming the first utility in the country to restart a nuclear power plant.

The Nuclear Regulation Authority will hold 30 days of public hearings starting on Thursday on the draft safety assessment for the Sendai nuclear plant.

The NRA will then finalize the assessment and give permission for the utility to replace its current equipment. Meeting new stricter safety standards is required for resuming operations.

Kyushu Electric will then seek agreement for a restart from Kagoshima Prefecture and the hosting municipality of Satsuma Sendai.

The prefectural government plans to hold town meetings in the city and 4 other municipalities within 30 kilometers from the plant to hear explanations from NRA officials on the assessment.

Then the governor of the prefecture is to confirm the views of Satsuma Sendai city and prefectural assembly members, and decide whether to agree to the restart.

Kyushu Electric will also be required to submit quake-resistance data for its equipment and safety devices to the NRA for its approval.

The utility must also present arrangements to deal with serious accidents, including personnel training programs to ready them for such contingencies.

The company will need to have newly installed equipment checked before ultimately resuming operations at the plant.

But some local residents have already voiced criticism, saying that local municipalities have not yet set up sufficient measures to counter nuclear contingencies.

They point out that facilities for evacuation have been designated in locations which are likely to be downwind from the plant. They also demand feasible evacuation plans for hospitals and nursing-care facilities for the elderly.

They say that in the US, reactor operation needs federal government approval of evacuation plans submitted by local municipalities. They call for a similar system in Japan.
Jul. 16, 2014 - Updated 21:24 UTC

NHK video Nuclear Watch

http://www3.nhk.or.jp/nhkworld/newsline/201407161805.html

Nuclear Plant Closer to Restart

Aired on Jul. 16

There are still safety concerns to be addressed. How earthquake-resistant can the plants be?

Demonstrators outside the NRA's office claim the screening of Sendai plant was "fast and sloppy". The NRA's decision is not final: A month is left to collect opinions.

No restart for Ikata

July 25, 2014

Poor quake resistance to keep Ikata plant offline

http://www3.nhk.or.jp/nhkworld/english/news/20140725_29.html

The restart of a nuclear power plant in western Japan has been put off until at least early next year after its emergency control room failed to pass a more rigorous quake resistance review.

Shikoku Electric Power Company made the announcement about its Ikata nuclear power plant in Ehime Prefecture on Friday.

The room failed the review when the utility raised the estimated peak ground acceleration from a potential earthquake at the plant to 620 gals.

The review was part of the ongoing safety screening of the No. 3 reactor being undertaken by the Nuclear Regulation Authority.

The reactor must pass the screening before it can be restarted.

Officials say they will build a new operations control center inside the compound. Construction will start in September and take up to 6 months to complete.

Kazutaka Kakinoki, the head of Shikoku Electric's nuclear power division, says it's the company's responsibility to take every step necessary to ensure the plant is safe.

He also says officials will do everything they can to win the authority's approval to get the reactor back online.

Jul. 25, 2014 - Updated 08:14 UTC

59% against Sendai restart

July 28, 2014
ASAHI POLL: 59% oppose planned restart of Kyushu reactors

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201407280043

THE ASAHI SHIMBUN

Nearly 60 percent of citizens are opposed to the planned restart of reactors at the Sendai nuclear power plant in Kagoshima Prefecture, the first such restart under tougher standards introduced after the Fukushima crisis, according to an Asahi Shimbun survey.

The Nuclear Regulation Authority on July 16 concluded that reactors at the Kyushu Electric Power Co. plant meet the safety standards introduced after the March 2011 Great East Japan Earthquake and tsunami triggered the nuclear crisis at the Fukushima No. 1 nuclear power plant.

It is the first time since the Fukushima nuclear disaster began that a nuclear plant has passed the NRA's stricter inspections.

The Sendai plant is expected to be allowed to resume operations as early as October, after Kyushu Electric obtains the consent of local residents and officials.

According to survey results, 59 percent of respondents said they are opposed to the restart of the nuclear facility, while 23 percent said they agree with the resumption of operations there.

The nationwide telephone survey, conducted between July 26 and 27, received 1,590 valid responses, or 45 percent of those contacted.

Asked whether the Japanese economy will be negatively affected by keeping the nation's suspended reactors offline, 42 percent said they think so. Those who said reactor suspension will not have a negative impact on the economy accounted for 43 percent.

Twenty-five percent of respondents said they believe it is possible to ensure the safety of nuclear reactors if appropriate techniques and management mechanisms are introduced, while 63 percent said nuclear technology poses risks that are beyond the control of humans.

Although the Abe administration is currently moving toward restarts of suspended reactors across Japan, 61 percent said the government has not sufficiently applied lessons learned from the Fukushima crisis. Only 19 percent said the Abe administration's nuclear policy has taken into account lessons from the disaster.

Meanwhile, the latest support rate for the Abe Cabinet was 42 percent, the lowest since Prime Minister Shinzo Abe returned to power in December 2012. The nonsupport rate, at 36 percent, marked a record high as well.

The Abe Cabinet has long enjoyed high public approval ratings. As recently as May, the support rate for the Cabinet was 49 percent.

But in June, when full-fledged discussions about lifting the long-standing self-imposed ban on the exercise of the right to collective self-defense started, the support rate hit a record low of 43 percent. In a special poll carried out July 4-5, the Cabinet approval rate was 44 percent.

The nonsupport rate reached a previous record high of 34 percent in December last year, immediately after the controversial state secrets protection law passed the Diet. In surveys conducted in June and early July, the rate was 33 percent.

No restart for Ikata (2)

July 26, 2014
Restarts of reactors in Ehime delayed due to insufficient safety standards
http://ajw.asahi.com/article/behind_news/social_affairs/AJ201407260039

THE ASAHI SHIMBUN
Restarts of reactors at the Ikata nuclear power plant in Ehime Prefecture will be delayed until at least next year because the site does not meet safety standards.

Its operator, Shikoku Electric Power Co., is being forced to construct a new emergency headquarters building at the facility as the current one, which was completed after the March 2011 Fukushima nuclear disaster, fails to meet the new criteria.

The new building is scheduled to be completed in January 2015 at the earliest. Given that procedures for safety screening take time, the utility said it was doubtful the reactors could be reactivated this fiscal year, which ends in March 2015.

Shikoku Electric is not the only electric power company that has been obliged to construct new emergency headquarters buildings in their nuclear power plants.

Such facilities are expected to serve as command centers in the event of a nuclear accident. Thus, the buildings are required to withstand strong earthquakes and serve as a shield against radiation under stringent safety standards imposed by the Nuclear Regulation Authority (NRA) in July 2013.

Before the introduction of the more vigorous standards, some electric power companies built quake-resistant emergency headquarters buildings based on lessons from the offshore Niigata Chuetsu-oki earthquake in 2007.

The earthquake rendered one of the rooms for emergencies in Tokyo Electric Power Co.'s Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture temporarily unusable.

Shikoku Electric, based in Takamatsu, constructed its emergency headquarters building at a cost of some 4 billion yen ($40 million).

The quake-proof building accommodates the emergency headquarters in the Ikata nuclear power plant and has a total floor space of about 600 square meters. It became operational in December 2011.

In the NRA's screening to decide whether the Ikata plant is safe to resume operations, the assumed intensity of a future earthquake is likely to be raised. That will require strengthening parts of concrete pillars in the foundations of the emergency headquarters building.

Shikoku Electric decided it would be better to construct a new structure, one that will be one-story high and made of reinforced concrete. It will have a total floor space of about 200 square meters.

Construction is set to start in September and take five to six months to complete.

A number of other nuclear power plants are faced with a similar problem.

For example, the emergency headquarters building of Tohoku Electric Power Co.'s Onagawa nuclear power plant in Miyagi Prefecture was deemed to be insufficient to shield people from radiation under the new safety standards. The building was completed in October 2011.

The same problem applied to the building at Japan Atomic Power Co.'s Tokai No. 2 nuclear power plant in Ibaraki Prefecture, which was completed in March 2011.

The emergency headquarters building at Chubu Electric Power Co.'s Hamaoka nuclear power plant in Shizuoka Prefecture, which was completed in August 2010, was also deemed to be unable to withstand major earthquakes or shield workers from radiation.

Electric power companies that did not construct emergency headquarters buildings after the Niigata Chuetsu-oki earthquake were spared the expense of having to construct emergency headquarters buildings.

Those utilities include Kyushu Electric Power Co. and Kansai Electric Power Co. They are currently constructing emergency headquarters buildings under the new safety standards.

(This article was written by Ryuta Koike and Toshio Kawada.)

Restart of Sendai plant won't be immediate

August 6, 2014
Paperwork forces Kyushu Electric to delay reactor restarts
http://ajw.asahi.com/article/behind_news/social_affairs/AJ201408060038

By RYUTA KOIKE/ Staff Writer

Kyushu Electric Power Co.'s failure to submit paperwork will postpone the resumption of operations at its Sendai nuclear plant, despite the reactors having cleared tougher safety standards last month.

The utility announced the delay at an examination board meeting with the Nuclear Regulation Authority on Aug. 5.

The Sendai plant reactors in Satsuma-Sendai, Kagoshima Prefecture, in July became the first to meet the NRA's new safety standards designed to prevent critical damage from earthquakes and tsunami. The company was expected to restart the two reactors in autumn.

However, the restarts are unlikely to happen this year because the NRA needs time to review the paperwork and inspect the plant's equipment.

Kyushu Electric has yet to submit to the NRA documentation on the "construction plans" that recalculate the plant's structural strength.

That report is expected to be tens of thousands of pages long, covering precise details of the nuclear plant's design.

"There is much more to do than we originally expected, and it's taking a lot of time," said Akira Nakamura, a managing executive officer of the power company.

In April, Kyushu Electric expressed its intentions to have the paperwork ready by the end of May. The company later pushed back the date to sometime after July, and delayed it once again. The documentation is now expected to be submitted in late September at the earliest.

The NRA came up with the stricter standards after the meltdowns at the Fukushima No. 1 nuclear plant caused by the Great East Japan Earthquake and tsunami in March 2011. All reactors, including the ones at the Sendai plant, were shut down following the disaster. Currently, no reactors are operating in Japan.

Kyushu nuclear plant may not be restarted before winter

TOKYO (Kyodo) -- The operator of a nuclear power plant on the main island of Kyushu said Tuesday that documents required to be filed before obtaining final safety clearance for the facility's restart will not be ready before late September, possibly delaying the planned restart at least until winter.

Two reactors at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture were expected to go back online around this fall, after the units last month became the first in the country to clear a safety hurdle based on new regulations introduced following the 2011 Fukushima nuclear disaster.

The utility, which serves the Kyushu region, still needs to submit to the Nuclear Regulation Authority additional documents detailing plant equipment and construction work that are needed to enhance the plant's safety measures against future earthquakes and tsunami, but preparations are taking more time than expected, it said.

The submission of the documents could even be pushed back to October, Managing Executive Officer Akira Nakamura told reporters after attending a meeting of the Nuclear Regulation Authority in Tokyo in which he said the documents will not be ready for submission before September.

Kyushu Electric had planned to file the documents with the regulators at the end of May.

The Nuclear Regulation Authority is seeking technical comments from the public on its July 16 draft report, which effectively acknowledged the Sendai plant is safe enough in light of the new standards. The report is expected to be finalized after the month-long public consultation period through mid-August.

Before restarting the reactors, however, Kyushu Electric also needs to obtain consent from local communities and undergo on-site operational checks.

The Nos. 1 and 2 reactors at the seaside plant in Satsumasendai, Kagoshima, were suspended for routine checks after the March 2011 disaster at Tokyo Electric Power Co.'s Fukushima Daiichi nuclear power plant, and they remain offline.

August 06, 2014(Mainichi Japan)

No need to rush restart

August 9, 2014

As I See It: Don't rush decision to put Sendai nuclear plant back online

http://mainichi.jp/english/english/perspectives/news/20140810p2a00m0na004000c.html

The Nuclear Regulation Authority (NRA) on July 16 approved the upgraded safety features of Kyushu Electric Power Co.'s Sendai Nuclear Power Plant in Kagoshima Prefecture as meeting the agency's new standards. The focus will now fall on whether local governments will approve of restarting the plant. Because Kagoshima Gov. Yuichiro Ito has shown enthusiasm to push ahead, it appears almost certain that the Sendai plant will be the first nuclear plant to be put back online since the new NRA regulations were put in place.

However, a myriad of problems -- including questions about the efficiency of evacuation plans and the sufficiency of measures against volcanic eruptions -- surrounding the Sendai nuclear plant have been brought up. As such, approval of reactivation under current circumstances would undoubtedly be criticized as **a snap decision.**

In response to the NRA's approval of Kyushu Electric's upgraded safety features, Ito said at a regularly scheduled press conference on Aug. 1, "I believe it means that safety has been guaranteed from the perspective of the general public." While he did not directly discuss whether he would approve of restarting the plant, his pro-reactivation stance is evident from his remarks referring to "the existence of environmental and energy issues, as well as the government's current-account balance." **The willingness to go forward with reactivation based on the NRA's initial safety approval is a revival of the safety myth of nuclear power.**

Nine municipalities within a 30-kilometer radius of Sendai Nuclear Power Plant have designed evacuation plans for residents based on the guidelines for measures against nuclear disaster that were revised after the onset of the Fukushima No. 1 Nuclear Power Plant disaster. According to calculations made by the prefectural government based on these plans, it will take 28 hours and 45 minutes for the approximately 215,000 residents within 30 kilometers of the plant to leave that area by car.

The estimates operate on the premise that residents within five kilometers from the plant will evacuate first, followed by those living within five to 30 kilometers. But a staff member of the Namie Municipal Government in Fukushima Prefecture who experienced the Fukushima disaster first hand says that such a proposal is unlikely to be carried out as planned. It's hard to imagine that those living in areas over five kilometers from the plant will remain put until those closer to the plant are finished evacuating**; people will likely try to evacuate at once,** including those living more than 30 kilometers from the plant. **Moreover, the possibility that main roads and bridges may be out of commission has not been considered in the calculations**, leading experts to criticize the estimates as being much too rosy.

Evacuation plans for people in medical and nursing care facilities who require extra assistance have not been completed. Plans for 17 facilities (826 people) within a 10-kilometer radius were drawn up in July. Ito has said he believes that laying down plans for the 10-kilometer radius is sufficient, and that devising plans for all facilities within 30 kilometers of the plant is unrealistic.

Indeed, securing evacuation sites for the approximately 10,000 people at all 244 facilities within 30 kilometers of the plant is not an easy task. There hasn't been sufficient planning for the evacuation of those who live at home and require extra assistance, either. That's precisely why we shouldn't rush to restart the Sendai nuclear plant.

Evacuation plans are not subject to the NRA's safety assessment, so their effectiveness goes unchecked. The governor, too, has said that evacuation plans are not part of the criteria that must be met to restart the plant. But implementing effective evacuation plans should be a prerequisite for plant reactivation if one looks at the situation from the perspective of protecting residents.

The NRA's acceptance of Kyushu Electric's conclusion that "it is sufficiently unlikely that a massive volcanic eruption will take place while the Sendai plant is in operation" is also questionable. The Sendai

plant is surrounded by multiple volcanoes, and is said to have the highest risk of being affected by a massive eruption among the country's nuclear plants. The NRA says it's possible to detect the warning signs of volcanic eruptions through close monitoring, but many volcanologists point out that it is incredibly difficult to predict massive eruptions.

Despite the many problems that remain, the governor maintains that only the consent of the prefectural government and the Satsuma-Sendai Municipal Government, where the Sendai plant is located, is required for the plant's reactivation. However, **the Fukushima crisis has shown that damage caused by a nuclear disaster can span far beyond the boundaries of a nuclear plant's host municipality.** The national government has not stipulated the parties that must provide consent for reactivation, but according to a Mainichi Shimbun poll taken of municipalities within 30 kilometers of the 16 nuclear power plants nationwide, 48 said that municipalities within 30 kilometers of a plant should have to provide consent before plant reactivation, as opposed to 18 municipalities, which said only the host municipality should have to provide consent.

In the Kagoshima Prefecture city of Ichikikushikino, located next to Satsuma-Sendai, a petition with the signatures of over half the city's population of 30,000 was submitted in protest of reactivating the Sendai plant.

"The voices of residents, who will suffer the most damage in the case of an accident, should be heard," says Koji Ueno, 61, who signed the petition and lives within 10 kilometers of the plant. But as of now, Ichikikushikino does not have any rights regarding the Sendai plant. **It's unclear how the governor expects to reflect the will of the prefecture's residents in his final decision.**

Hideyuki Hirakawa, a professor of science and technology studies at Osaka University, says there is a need to take more deliberate steps before making a decision on plant reactivation.

"It is important to carry out a careful process of gathering residents' opinions and wishes," he says. "There should be a forum in which experts who argue that the plant is safe and those who are critical of those claims can exchange their views, and assist residents in their decision making."

I agree. **There is absolutely no reason to rush to a conclusion. It will take time, but the governor must present diverging views on the issue and provide a forum where debate can be carried out. And once that's done, there should be a referendum or other method for residents to express their will**. That, I'm convinced, is the shortest route to extricating ourselves from the safety myth. (By Kenta Somatani, Kagoshima Bureau)

August 10, 2014(Mainichi Japan)

Shika applies for screening

August 13, 2014

Hokuriku Electric submits documents for reactor safety checks

http://mainichi.jp/english/english/newsselect/news/20140813p2g00m0dm045000c.html

KANAZAWA, Japan (Kyodo) -- Hokuriku Electric Power Co. submitted documents to nuclear regulators Tuesday required for safety reviews of a reactor at its nuclear power plant in Shika, Ishikawa Prefecture.

Among Japan's 10 entities which own nuclear power plants, Hokuriku Electric is the last to file such documents on the No. 2 reactor at the plant, the 20th reactor at 13 plants across the country subject to safety reviews under new safety standards introduced following the 2011 Fukushima nuclear crisis.

The utility aims to complete seismic strengthening work for the reactor building by the end of next March but it is undecided over when it plans to restart the reactor.
The Shika plant has two reactors -- a 540,000-kilowatt boiling-water reactor and a 1,358,000-kw advanced boiling-water reactor. The utility submitted documents for safety checks on the advanced reactor which started commercial operations in 2006.
The utility has decided to postpone safety reviews for another reactor in consideration of discussions over the "S-1 fault" lying under the reactor building.
The Nuclear Regulation Authority conducted an on-site survey over the fault and called for more information to make a decision on it. The utility briefed the NRA about its additional research on the fault in July, reiterating its denial of any activity in the fault.
In July, the NRA approved a draft report required to resume the operations of two reactors at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture, in a major step for the plant to become the first nuclear facility to restart under the new safety standards.
August 12, 2014

Shika nuclear plant operator applies for screening

http://www3.nhk.or.jp/nhkworld/english/news/20140812_26.html
Aug. 12, 2014 - Updated 09:07 UTC+2
The operator of the Shika nuclear power plant in central Japan has applied for a government safety screening as a step toward restarting its No.2 reactor.

Managing Director Akizumi Nishino of Hokuriku Electric Power Company submitted the papers to Japan's Nuclear Regulation Authority on Tuesday.

The utility has increased the estimated strength of an earthquake that could hit the Shika plant from 600 to 1,000 gals, and the possible height of a tsunami from 5 to 7.1 meters. Accordingly, it has been reinforcing the plant's piping system and has built a 15-meter-high seawall.

Experts are still debating the possibility of faults running through the plant's compound moving in the future, including one directly beneath the No.1 reactor.
Government safety rules ban the installation of reactors and other key facilities above faults that are at risk of shifting.

The nuclear regulatory body will therefore postpone the screening of the No.2 reactor until the experts reach a conclusion.

Hokuriku Electric Power is the 10th and last Japanese utility with nuclear power plants to formally seek to restart its reactors.

Thousands of commentson restart

August 17, 2014

Thousands of opinions on nuclear restart put

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Nuclear regulators say they have received thousands of comments from the public over their draft assessment on restarting a nuclear power plant in southwestern Japan.

The Nuclear Regulation Authority said on Friday it has now stopped accepting comments on the Sendai nuclear plant, operated by Kyushu Electric Power Company.

Regulators say the Sendai station is the first since the Fukushima Daiichi accident to meet enhanced government regulations.

By early August, the regulators had counted more than 4,000 comments from the public - a number they say is likely to have grown by Friday.

The comments have not been disclosed but a civic group says some call for stricter accident measures, including raising the maximum strength of earthquakes that might hit the plant.

They say other comments demand the NRA take charge of local disaster prevention measures including evacuation programs - not included in its current remit.

The regulators are being watched carefully to see how they respond to these opinions since the Sendai plant would be the first to restart based on the new regulations.

The operator needs to submit additional documents to the regulators, as well as approval from local municipalities. The restart is likely to be in December at the earliest.

Sendai restart plan attracts lots of comments

August 20, 2014

Sendai nuclear plant safety approval attracts 17,000 public comments

JIJI
http://www.japantimes.co.jp/news/2014/08/20/national/sendai-nuclear-plant-safety-approval-attracts-17000-public-comments/#.U_ScT2Onq1s
The Nuclear Regulation Authority said Tuesday it has received some 17,000 comments from the public on a draft paper that claims two reactors at Kyushu Electric Power Co.'s Sendai nuclear power station satisfy new safety standards.
Public comments must be included in the final paper on the outcome of the NRA's safety screening of the Nos. 1 and 2 reactors at the power station in Kyushu. The final version is due out as early as September.
The NRA announced its draft report on July 16 and accepted public comments for 30 days through Friday.
The report covers a basic plan about changes to the reactors that would bring them in line with the new safety standards, which are designed to prevent crises like the March 2011 triple meltdown at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power station.
The two reactors at the Sendai plant will clear NRA examinations if the regulator approves Kyushu Electric's construction and engineering plans for implementing the changes to the reactors and revision of its safety procedures in the event of a severe accident.

But approval is unlikely to come anytime soon, because the power company cannot submit revised construction and engineering plans earlier than the end of Septem

August 19, 2014

NRA receives 17,000 comments about plant restart

Aug. 19, 2014 - Updated 12:44 UTC+2

http://www3.nhk.or.jp/nhkworld/english/news/20140819_30.html

Japan's nuclear regulator has received about 17,000 comments from the public on restarting a nuclear plant in southwestern Japan.

Last month, the Nuclear Regulation Authority approved a draft safety plan for restarting the reactors at the Sendai plant in Kagoshima Prefecture. The NRA said the assessment prepared by Kyushu Electric Power Company satisfied its stricter safety requirements for nuclear facilities.

The NRA invited the public to send comments on the draft for 30 days until last Friday. NRA officials said some people complained that the regulator's measures for dealing with earthquakes and volcanic eruptions are inadequate.

They said some people also commented that the NRA should look into evacuation plans for residents although these are not included in its current remit.

Officials are studying the opinions to reflect them in the final report. But a senior official at the NRA's secretariat said on Tuesday that he can't predict when they will finish the work as there were so many responses.

The plant is unlikely to be restarted before December due to Kyushu Electric's delay in submitting some of the necessary documents. The operator must also obtain the approval of local municipalities to restart the reactors.

Dont' bank on it

August 24, 2014

Don’t bank on nuclear restarts

http://www.japantimes.co.jp/opinion/2014/08/24/editorials/dont-bank-nuclear-restarts/#.U_oQyGOnrIU

Power companies are moving again to raise their electricity rates to get out of dire financial straits caused by the increased cost of importing fuel to run more thermal power plants while their nuclear power reactors remain idled. Hokkaido Electric Power Co. is the first among the nation’s regional utilities to apply for government approval of a plan to raise its rates for the second time since the shutdown of nuclear power plants following the March 2011 triple meltdowns at Tokyo Electric Power Co.’s Fukushima No. 1 plant.

Other utilities including Kansai Electric Power Co. and Tepco may follow suit in the coming months. Electricity charges are estimated to have already increased by roughly 20 percent for households and nearly 30 percent for businesses compared with 2010 levels.

Additional hikes could weigh heavily on households and businesses alike, and for that reason many are calling for a quick restart of the idled nuclear reactors — to remove an obstacle to Japan's economic growth. That, however, does not warrant a return to business as usual for nuclear power in Japan.

While minimizing the inevitable rate hikes by introducing more streamlining and efficiency in their operations, the utility firms should begin an effort to change their cost structure and reduce their reliance on nuclear power by taking a more realistic view of the situation since the Fukushima disaster.

The Abe administration also needs to set down more specific goals in Japan's energy policy that will incorporate efforts to reduce "as much as possible" the nation's dependence on nuclear power — as it says in the government's latest basic energy plan — to set a clear direction for the utility industry.

Hokkaido Electric applied to the Ministry of Economy, Trade and Industry in late July for a bid to raise household rates by an average of 17 percent. It also plans to hike rates for corporate users by 22.6 percent, which does not require the government's nod. These plans come on the heels of a 7.7 percent and 11 percent hike in household and business rates, respectively, introduced just last September. The latest hikes could take effect in November at the earliest.

Since 2011, seven power companies have introduced hefty rate hikes to reflect rising imported fuel costs. The government estimates that Japan's reliance on fossil fuels for its electricity generation hit 88 percent in 2013, topping the 80 percent at the time of the first oil crisis in 1973.

With import costs also driven up by the yen's fall since 2012, fuel imports amounted to ¥27 trillion in 2013, ¥10 trillion higher than in 2010 according to the government's white paper on energy.

Six power firms reported losses for the business year to March, with Hokkaido Electric's consolidated pretax loss hitting ¥95.3 billion — its third straight year of being in the red. When it raised its rates 11 months ago, Hokkaido Electric assumed that its Tomari Nuclear Power Plant would resume operations by June this year.

When Kansai Electric raised its electricity charges in the spring of 2013, it similarly calculated that its Oi and Takahama nuclear plants in Fukui Prefecture would be up and running.

In its reconstruction plans approved by the government last December, Tepco also assumed that it would start reactivating reactors at its Kashiwazaki-Kariwa Nuclear Power Plant in Niigata Prefecture by July this year — adding that it might need to raise its rates again by up to 10 percent if the restart of the plant was delayed.

All of these forecasts by utilities have proven too optimistic. Of the 20 reactors at 13 nuclear power plants under safety review by the Nuclear Regulation Authority since July last year, the two reactors at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture have effectively cleared the NRA screening, but their actual restart is not likely before the end of this year due to pending procedures.

It is not known how soon the NRA screening — based on tightened standards for plant resistance to natural disasters and severe accidents, and on more rigorous checks of on-site earthquake risks — will proceed.

In rushing to get the NRA's nod to restart their reactors, the power companies appear oblivious to citizens' strong safety concerns over nuclear power since the Tepco plant disaster disrupted the lives of tens of thousands of Fukushima residents. More than three years afterward, opinion surveys still show that many people remain concerned about the restart of idled nuclear power plants.

The entire process for restarting the nuclear plants, including the necessary approvals from host municipalities and prefectures, is going to be tough and will take a long time. At present, only 20 of the nation's 48 reactors are under NRA review.

There will be limitations on what the power companies can do in their efforts to further trim costs and streamline operations, such as more fuel-efficient power generation.

Additional hikes in electricity charges may be unavoidable to some extent. But as long as the power companies keep drawing up business plans based on the hope of once again being be able to operate nuclear power plants as they did before 2011, consumers and businesses can bet on the certainty of more hikes in the future.

Tsuruga: Restart or scrap?

September 4, 2014

NRA's final ruling on fault to force scrapping of Tsuruga reactor

http://www.japantimes.co.jp/news/2014/09/04/national/nras-final-ruling-on-fault-to-force-scrapping-of-tsuruga-reactor/#.VAizfGOnq1s
Kyodo
A panel convened by the Nuclear Regulation Authority said Thursday its opinion that a fault beneath a reactor at the Tsuruga nuclear power plant is active has not been swayed by the additional data provided by its manager.
The move leaves Japan Atomic Power Co. no choice but to scrap the No. 2 reactor at the two-unit Tsuruga complex, which sits on the Sea of Japan coastline of Fukui Prefecture.
The NRA acknowledged last year that the fault is active, but Japan Atomic later submitted additional data to overturn the regulator's judgment, which the panel rejected at its meeting on Thursday.
Taiki Ichimura, vice president of Japan Atomic Power, called for more discussions on the issue, but NRA Commissioner Kunihiko Shimazaki brushed it off, saying that its ruling was final.
"Enough scientific debates have been held," he said.
The nuclear regulator might compile an amended version of its report as early as in October to reflect changes in details.
September 4, 2014

Utility defends safety of Tsuruga power plant

http://www3.nhk.or.jp/nhkworld/english/news/20140904_32.html
Sep. 4, 2014 - Updated 12:13 UTC+2
The operator of the Tsuruga nuclear power plant in Fukui Prefecture has presented new data to challenge the finding by Japan's Nuclear Regulation Authority that a fault beneath the plant could move in the future.

The authority determined in May of last year that the fault beneath the plant's No.2 reactor has the potential to shift in the future. The finding has prevented the restart of the reactor and may lead to its decommissioning.

Utility officials explained at a meeting with experts from the authority on Thursday that a new analysis of deposits in a geological formation in the compound shows that the fault has not shifted over the past 120,000 years or so.

The utility also explained there is no possibility that the fault under the reactor will shift together with another fault located some distance away within the plant compound.

Many experts at the meeting said the utility has yet to produce enough objective data to support its

claims.

Kunihiko Shimazu of the Regulation Authority has said it will start drawing up conclusions as to whether to allow the restart of the reactor at the next meeting.

Local Govts not so happy about restart

September 8, 2014

Local govts wary of nuclear plant restart

http://www3.nhk.or.jp/nhkworld/english/news/20140908_28.html
Sep. 8, 2014 - Updated 12:14 UTC+2
An NHK survey shows that more than 60 percent of local governments that host or surround a nuclear power plant are cautious about restarting idled reactors even if they meet new safety guidelines.

Last month, NHK polled 146 prefectures and municipalities within a 30-kilometer radius of a nuclear power plant.

The survey asked whether they will approve restarting plants nearby if authorities find they satisfy new safety requirements.

About 12 percent said they will approve or hope to approve in the future, while 8 percent said they will not approve or will never approve. About 67 percent said they were undecided for now.

Of the respondents, 44 percent of the municipalities that host a plant gave a positive answer. Only 8 percent of municipalities surrounding a plant did so.

Asked why they are against or cautious about restarting a plant, 30 percent replied that it's because inspections by Japan's nuclear regulating body have not yet finished. About 25 percent said the central government has not yet dealt with the issue. Another 23 percent said residents are wary of a restart.

There is currently no legal framework for the central government to obtain approval from local municipalities to restart reactors. When asked what they thought of this, 42 percent said local governments should be asked for approval, while 9 percent said it was not necessary.

University of Tokyo Graduate School Professor Hideaki Shiroyama says it is necessary to create a framework where the state comes to the forefront to explain the safety of nuclear plants, as well as measures to avoid accidents.

He also says that local governments must confirm residents' understanding and be able to refuse a restart unless they get a full explanation and support from the central government.

Sendai gets safety clearance

September 10, 2014

Kagoshima nuclear plant gets safety OK, moves closer to resumption

http://www.japantimes.co.jp/news/2014/09/10/national/kagoshima-nuclear-plant-gets-safety-ok-moves-closer-to-resumption/#.VA_vx2Onq1s

Kyodo, JIJI

A nuclear plant operated by Kyushu Electric Power Co. obtained a safety clearance from regulators Wednesday, becoming the first to meet new regulations imposed following the M ith the approval from the Nuclear Regulation Authority, the two reactors at the Sendai power plant in Kagoshima Prefecture moved a step closer to restarting. Currently all of the nation's 48 commercial reactors are offline.

The pro-nuclear government of Prime Minister Shinzo Abe is eager to bring reactors back online amid a surge in fossil fuel costs for thermal power generation, which has made up for the absence of atomic power.

A restart of the Sendai plant, however, is not likely to happen before December, as Kyushu Electric must still finish paperwork needed to complete the NRA screening process.

The regional utility must also obtain consent from local authorities and undergo on-site operational checks.

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The regional utility must also obtain consent from local authorities and undergo on-site operational checks.

n Wednesday, the watchdog's decision-making panel approved the final version of its screening report, which included public comments.

The NRA said Aug. 19 that it had received some 17,000 comments from the public on the draft version of the report the panel completed on July 16.

The nation's 48 commercial reactors, including the two at the Sendai complex, have not been allowed to resume operating amid safety concerns after being shut down for mandatory regular checkups or other reasons.

The new, more stringent safety standards introduced in July last year set a higher hurdle for reactors to operate in the wake of the Fukushima disaster, which was triggered by a massive earthquake and tsunami.

The Sendai plant, located on the southwestern coast of the main island of Kyushu, emerged in March as the leading candidate for resumption after clearing key hurdles related to earthquake and tsunami hazards that could affect the plant.

So far, power companies have applied for regulator's safety screening of a total of 20 nuclear reactors at 10 nuclear power plants.

September 10, 2014

Nuclear regulator: Sendai plant meets safety plan

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Sep. 10, 2014 - Updated 07:55 UTC+2
Japan's nuclear regulator has officially approved an assessment that says safety measures for the Sendai power plant in southwestern Japan compiled by its operator meet government safety guidelines.

The plant is located in the city of Satsumasendai in Kagoshima Prefecture and is operated by Kyushu Electric Power Company. It became the first nuclear plant to meet the more stringent standards introduced after the 2011 Fukushima Daiichi power plant accident.

The Nuclear Regulation Authority unanimously approved the assessment on Wednesday.

The document was revised based on some of the more than 17,000 public comments the authority received since it released its draft assessment in July.
The draft assessment approved a plan by the operator to restart the No. 1 and No. 2 reactors at the Sendai plant.

Many members of the public urged Kyushu Electric to implement stricter measures against possible earthquakes, volcanoes and serious accidents. But the authority said such factors won't affect its conclusions.

The authority also said it will deal with opinions about the plant's disaster-preparedness measures that were not included in the instructions for public comments, separately from the current assessment.

Observers made comments such as "unconvincing" and "discuss countermeasures against volcanic eruptions" at the regulator's meeting on Wednesday.

Attention will now be focused on necessary procedures, such as approval by local municipalities, before the plant can restart.

Kyushu Electric hopes to obtain approval from the prefecture and Satsumasendai based on safety agreements voluntarily signed by the utility.

The plant also has to gain approval from the authority regarding detailed designs of related equipment and its operational system before it can go back online.

The plant is expected to resume operation in December at the earliest.

All of Japan's nuclear reactors are now offline.

Japan nuclear plant gets safety OK, moves closer to resumption
http://mainichi.jp/english/english/newsselect/news/20140910p2g00m0dm037000c.html
TOKYO (Kyodo) -- A nuclear plant operated by Kyushu Electric Power Co. obtained a safety clearance from regulators on Wednesday, becoming the first to meet new regulations imposed following the 2011 Fukushima nuclear disaster.

With Nuclear Regulation Authority approval, two reactors at the Sendai power plant in Kagoshima Prefecture, southwestern Japan, achieved the first step toward restarting the country's nuclear power industry.
The pro-nuclear government of Prime Minister Shinzo Abe is eager to bring reactors back online amid a surge in fuel costs for thermal power generation, which has made up for the absence of atomic power.
A restart of the Sendai plant, however, is not likely to happen before December, as Kyushu Electric still needs to get some paperwork done to complete the NRA screening process.
The regional utility also needs to obtain consent from local authorities and undergo on-site operational checks.
On Wednesday, the five-member decision-making panel of the nuclear safety regulator unanimously approved the final version of its screening report. Reflected in the document were some of more than 17,800 comments received from the public after the panel approved a draft version on July 16.
The comments included those criticizing the regulator's judgment that the chance of volcanic eruptions affecting the Sendai plant -- located in the region of active volcanic sites -- were small, while others conveyed technical concern that safety measures against a variety of possible hazards such as tsunami and cyberattacks are inadequate.
Major amendments, however, were not made to the report.
All 48 commercial reactors in Japan, including the two at the Sendai complex, currently remain offline as they have not been allowed to resume operating amid safety concerns after shutting down for mandatory regular checkups or other reasons.
The new, more stringent safety standards introduced in July last year set a higher hurdle for reactors to operate in the wake of the Fukushima disaster, which was triggered by a massive earthquake and tsunami.
The Sendai plant, located on the southwestern coast of the main island of Kyushu, emerged in March as the leading candidate for resumption after clearing key agendas related to earthquake and tsunami hazards that could affect the plant.
So far, power companies have applied for regulator's safety screening of a total of 20 nuclear reactors at 10 nuclear power plants.
September 10, 2014(Mainichi Japan)

Reactions to NRA's decision

September 10, 2014

NRA approves safety at Kagoshima nuclear plant; paperwork next step

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201409100050

By TOSHIO KAWADA/ Staff Writer
The Sendai nuclear plant in Kagoshima Prefecture formally passed tougher safety checks on Sept. 10, but the plant operator must submit a mountain of paperwork before it can restart its reactors.
The Nuclear Regulation Authority’s approval is the first since new safety standards were established following the Fukushima nuclear disaster in March 2011. That means safety checks have effectively been completed for a resumption of operations of the Sendai plant’s No. 1 and No. 2 reactors.

As the next step, Kyushu Electric Power Co., the operator of the Sendai plant, will have to submit to the NRA construction plans that include designs of equipment and the company's new safety regulations detailing operation procedures and accident responses.
The utility is expected to submit that paperwork after late September, or about four months later than initially planned.
After those documents are certified, another month or two will be needed to inspect the equipment.
The time needed to complete all those procedures means the resumption of reactor operations is not expected until early next year.
Kyushu Electric will also have to gain the consent of local governments. The Satsuma-Sendai municipal government and the Kagoshima prefectural government have both indicated a willingness to go along with resumption of operations.
However, concerns have been raised about the effectiveness of the prefectural and municipal government's evacuation plans in the event of an emergency at the plant. The Ministry of Economy, Trade and Industry plans to dispatch employees to the local governments to strengthen central government involvement in the process.
The NRA on July 16 announced that the Sendai nuclear plant's two reactors met the new tougher safety standards and gathered public opinions over the next 30 days.
On Sept. 10, the NRA released a summary of the 17,819 opinions submitted. Those opinions were the basis for a partial correction of wording in the safety document as well as adding items that were not initially included.
Kyushu Electric may have to address other potential problems.
The utility has said it would use the current observation system to detect signs of a major volcanic eruption in the vicinity of the Sendai plant. However, volcanologists have raised opposition to Kyushu Electric's policy.
The NRA has asked experts to consider the issue more thoroughly, and Kyushu Electric may be asked to take additional measures against possible eruptions.
Twelve other nuclear plants with a total of 18 reactors have submitted applications for safety checks to allow for a resumption of operations. The NRA intends to use the Sendai process as a model case in dealing with the other applications.

Reactions to NRA assessment of Sendai plant

http://www3.nhk.or.jp/nhkworld/english/news/20140910_30.html

Sep. 10, 2014 - Updated 10:11 UTC+2
Sendai nuclear plant operator Kyushu Electric Power Company has pledged to operate with dependability, saying it will aim to upgrade safety and transparency.

The utility said it will continue to respond truthfully to the Nuclear Regulation Authority's screening of its other applications.

Public reaction in the plant's host city of Satsumasendai was mixed.

A 78-year-old man said he does not know how to explain to future generations why the plant resumed

operation at a time when problems at the damaged Fukushima Daiichi nuclear plant remain unresolved.

He said he is against restarting the reactors because safe evacuation would be impossible in case of an accident.

A woman in her 20s said she has lived all her life in the city and has never felt unsafe. She said she's hoping for an early restart, because the plant has helped the local economy.

In Tokyo, some 80 people opposed to bringing the Sendai plant back online protested in front of the building where the NRA met on Wednesday.

They delivered to the NRA secretariat a petition signed by about 5,000 people urging the body to retract the assessment report.

They cited a lack of debate on the risk of a volcanic eruption as well as problems with resident evacuation plans.

The protesters agreed to urge Satsumasendai City and Kagoshima Prefecture not to approve the Sendai plant's restart. They also agreed to demand that plant resumptions require consent not only from the host municipality and prefecture but also neighboring municipalities and prefectures.
<image: http://img.over-blog-kiwi.com/1/22/53/68/20140911/ob_19dd32_protests-nra-sendai.jpg>

Restart likely in 2015

September 11, 2014

NRA approves Sendai nuke plant retrofit; restart likely in 2015

http://mainichi.jp/english/english/newsselect/news/20140911p2a00m0na006000c.html
The Nuclear Regulation Authority (NRA) approved design changes to the two reactors at Kyushu Electric Power Co.'s Sendai Nuclear Power Plant on Sept. 10, paving the way for a 2015 restart.
The Sendai plant in Satsumasendai, Kagoshima Prefecture, is the first to get a passing grade from the NRA under the new safety standards adopted in the wake of the March 2011 Fukushima No. 1 nuclear plant meltdowns. With NRA approval now official, Kagoshima Gov. Yuichiro Ito plans to open a series of information sessions for prefectural residents beginning on Oct. 9.
Kyushu Electric will now begin a serious push to get local approval for the reactor restarts. The utility, however, has been late in obtaining NRA approval for two more major steps in the Sendai plant's refit, including the construction schedule, meaning the plant likely will not go back into operation until sometime after the New Year.
"We have confirmed that (the Sendai plant) will maintain the level of safety demanded for reactor operations," NRA Chairman Shunichi Tanaka told reporters after the committee's Sept. 10 meeting. However, "This does not mean there is zero risk" with restarting the reactors, he added.
Chief Cabinet Secretary Yoshihide Suga told a news conference on the same day, "It's been confirmed that safety can be maintained. As the government, we will move forward with restarting the reactors based on our basic energy plan." He went on to say, "The governor of Kagoshima has requested that we provide him

with the government's plans (regarding the Sendai plant) in writing, so we will do so. The government will explain the situation carefully and clearly to gain the understanding and cooperation of local stakeholders."
Kyushu Electric Managing Executive Officer Akira Nakamura stated on the afternoon of Sept. 10, "We will do our best to explain the situation thoroughly to local residents to gain their understanding."
The NRA opened the Sendai plant restart issue to public comment before it made its decision, and received 17,819 messages. The majority of the comments were critical of any restart, including some stating that "it's impossible to predict major volcanic eruptions, so there is not enough information to make a decision on the reactors." Others pointed out that "emergency evacuation plans were not part of the (NRA) inspection process."
However, the NRA rejected most of the comments for various reasons, including that the mountains near the Sendai plant "are not currently in danger of a major eruption anytime in the near future."

Suga: Govt. to work to restart Sendai plant

http://www3.nhk.or.jp/nhkworld/english/news/20140910_37.html
Sep. 10, 2014 - Updated 12:40 UTC+2
Chief Cabinet Secretary Yoshihide Suga says the government will assist the operator of the Sendai nuclear power plant to restart it.

He told reporters that assistance will be given in line with the government's basic energy plan. The plan designates nuclear power as a key energy source.

He said the government will seek the understanding and cooperation of local governments.

He also said the government will help improve the regional disaster preparedness plan.

Suga said that the industry minister will present a document requested by the governor of Kagoshima prefecture clearly outlining the measures the government is taking.

Before starting again,"unpredicatable" should be turned into "predictable"

September 15, 2014

EDITORIAL: Plans to restart Sendai nuclear plant leave a multitude of unresolved questions

http://ajw.asahi.com/article/views/editorial/AJ201409150035
Last week, the government implemented several procedural steps toward restarting the Sendai nuclear plant's No. 1 and No. 2 reactors, operated by Kyushu Electric Power Co.
First, the Nuclear Regulation Authority officially adopted Kyushi Electric's assessment report which certifies that the reactors meet the new regulatory standards. The Nuclear Emergency Preparedness Council followed up by approving an evacuation plan for local residents in the event of an accident. Then Yuko Obuchi, the minister of economy, trade and industry, gave written notification to the governor of Kagoshima Prefecture and the mayor of Satsumasendai stating that the government will proceed with steps to restart the Sendai plant.
Are they being a bit too eager?

The NRA's Sendai assessment report ignores warnings made by volcanologists about the potential for a major eruption and the questions they posed on how and by which means signs of such an event will be detected. Nothing has been decided about how to observe those signs, nor has any decision been reached on where to move the fuel rods if and when signs of an eruption are detected.

Previously, evacuation plans were left up to local governments. Enhancing the involvement of the national government in the **evacuation plans**, including the emergency dispatch of Self-Defense Forces personnel, is to be expected. However, there is the question of just how applicable the new evacuation plan is. Under the current plan, the authorities intend to use buses for evacuation if high radiation levels are detected. But is it ethical to put evacuees and drivers in greater risk of radiation exposure?

Also last week, the government partially released the testimonies given to its investigative committee from those involved in the nuclear disaster at the Fukushima No. 1 nuclear plant operated by Tokyo Electric Power Co.

With regard to the testimonies of the late plant manager Masao Yoshida, who died in July 2013, together with those of politicians, we realize there was poor communication between the people at the plant and those on the ground, TEPCO's headquarters in Tokyo and the prime minister's office. As Yoshida said, "No one came to help." We get a sense of the extraordinary efforts made by the workers at the plant, despite the feeling of isolation and despair.

Attempts to overcome the **problems of communication** were partly reflected in the new NRA guidelines, which call for better communication tools.

However, there is not enough improvement in areas where the NRA's regulatory authority does not reach, such as in fine-tuning the separate roles of the utilities and the government, and improving the collaboration between the SDF and the fire department. Now that the timeline for the reactors' restart is on the table, these glaring issues need to be dealt with as soon as possible.

Another major lesson to be learned from the testimonies is that **just making how-to documents, be it nuclear accident handbooks or evacuation plans, will be of little use in an actual crisis, unless we implement repeated training drills to make sure they will really work when the time comes**. This is an essential step before and after the restart of nuclear power plants.

The government plans to continue releasing the testimonies gathered by its investigative committee. It should explain what it learned from the testimonies and how those findings were reflected in the detailed handbook dealing with future accidents.

There is still much to be done in order to turn the "unpredictable" into the "predictable" before the Sendai plant restarts its operations.

--The Asahi Shimbun, Sept. 14

Push ahead with restart despite volcanoes

September 29, 2014

Japan vows to push ahead with reactor restarts after volcanic eruption highlights risks

http://ajw.asahi.com/article/behind_news/politics/AJ201409290089

REUTERS

Japan's government said the sudden deadly eruption of a volcano in central Japan won't derail its push to restart two reactors located near active volcanoes, even though the public remains opposed to nuclear power after the Fukushima crisis.

The government on Sept. 29 said the latest eruption in one of the world's most volcanically active countries was hard to predict, but critics were quick to note that the same was said about the tsunami and earthquake that caused the Fukushima nuclear disaster in 2011.

Thousands of people gathered in Kagoshima on the island of Kyushu after the eruption of Mount Ontake, about 800 kilometers away, to protest against plans to restart two reactors at Kyushu Electric Power Co's nearby Sendai nuclear plant, according to one of the organizers.

The Sendai plant is located about 50 kilometers from Mount Sakurajima, an active volcano that erupts frequently. Five giant calderas, crater-like depressions formed by past eruptions, are also in the region, the closest one 40 km from the Sendai plant.

"No one knows when natural disasters, including earthquakes and tsunamis will strike. The fact that they could not predict the Mt. Ontake eruption highlights that," said Yoshitaka Mukohara, a candidate in the 2012 elections for the governorship of Kagoshima who helped organize the demonstration on Sept. 28.

"There were plumes above Sakurajima yesterday and today. We have no idea when something might happen," he said.

Japan lies on the "Ring of Fire"--a horseshoe-shaped band of fault lines and volcanoes around the edges of the Pacific Ocean--and is home to more than 100 active volcanoes.

Mount Ontake, located about 200 kilometers west of Tokyo, erupted on Sept. 27, with 10 confirmed dead and more presumed to have perished as hikers near the summit were caught by belching ash and steam.

"This was a steam-driven (eruption) and it has been said it was extremely difficult to predict," Chief Cabinet Secretary Yoshihide Suga told a news conference.

Asked whether the eruption would require careful assessment of the restart at Sendai, Suga said: "I don't think so."

Japan's nuclear regulator on Sept. 10 said the Sendai nuclear power station met its new safety standards, the first step to reopening an industry that was idled by the Fukushima disaster.

The plant still needs to pass operational safety checks as well as gain the approval of local authorities and may not restart till next year.

Before giving its initial green light in July, the Nuclear Regulation Authority (NRA) said the chance of a major volcanic activity during the lifespan of the Sendai nuclear plant was negligible.

Critics of the restarts, including some scientists consulted by the NRA, said regulators are turning a blind eye to the kind of unlikely but potentially devastating chain of events that led to three meltdowns at the Fukushima No. 1 nuclear power plant north of Tokyo after an earthquake and tsunami in March 2011.

The NRA has also formed another panel of experts to look further into mitigating the risk from volcanoes.

The issue of volcanoes was repeatedly raised by members of the public during a consultation phase after the NRA's initial assessment.

Most Japanese remain opposed to nuclear power more than three years after the Fukushima disaster even though the shutdown of the country's reactors has forced utilities to import expensive fossil fuels, pushing electricity bills higher.

More than 10,000 people gathered in Tokyo Sept. 23 to protest the plans to restart the Sendai reactors, according to local media.

Tokai reprocessing plant to be shut

September 29, 2014

Tokai reprocessing plant to be scrapped

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Sep. 29, 2014 - Updated 10:59 UTC+2
The Japan Atomic Energy Agency says it will scrap its Tokai nuclear fuel reprocessing plant north of Tokyo by April 2017 at earliest.

The decision to close the facility, announced on Monday, comes after stricter regulatory standards established following the 2011 Fukushima nuclear disaster.

The cost of revamping the Tokai plant to meet the new standards has been estimated at over 900 million dollars, masking it too expensive to maintain.

The plant extracts uranium and plutonium from spent nuclear fuel. It has processed about 1,140 tons of spent fuel since operations began in 1977.

Authorities say the transfer of the plant's functions to a reprocessing plant in Rokkasho Village, Aomori Prefecture, is almost complete.

The Tokai facility was expected to treat spent fuel from the Monju fast-breeder reactor in Fukui Prefecture, so its closure may negatively impact the government's policy to reuse spent nuclear fuel.
Source : World Nuclear News
http://www.world-nuclear-news.org/WR-Tokai-reprocessing-plant-to-shut-2909144.html

Tokai reprocessing plant to shut

29 September 2014
The Japan Atomic Energy Agency (JAEA) will shut its reprocessing plant in Tokai, reportedly due to the costs of modifications required under post-Fukushima safety regulations.
Following a meeting today of JAEA's reform commission, the agency announced that it will permanently shut down the Tokai facility in Ibaraki prefecture.
The Tokai plant is Japan's oldest reprocessing plant. Construction of the plant began in 1971, with trial operation starting in 1977. The plant entered full operation in 1981 but has stood idle since 2006 when a contract for reprocessing used fuel from commercial power reactors came to an end. The plant was mainly used for processing mixed-oxide (MOX) fuel from the Fugen experimental Advanced Thermal Reactor (ATR), which ceased operating in 2003.
The plant has reprocessed a total of some 1052 tonnes of used fuel comprising 88 tonnes of fuel from the Fugen ATR, 644 tonnes of boiling water reactor fuel, 376 tonnes of pressurized water reactor fuel and 9 tonnes of fuel from the Japan Power Demonstration Reactor (JPDR).
A JAEA spokesman told the Kyodo news agency that it had decided to shut the plant as it would cost too much to upgrade it to meet new safety rules. He said more than Y100 billion ($915 million) would be required to upgrade equipment and enhance safety for the Tokai plant to continue operating.

New safety rules for Japanese fuel cycle facilities came into force in late 2013. The requirements vary from facility to facility, but generally include reinforcement measures against natural threats such as earthquakes and tsunamis, and in some cases tornadoes, volcanoes and forest fires. At fuel fabrication plants, proper confinement of radioactive material is required, as are severe accident countermeasures for potential criticality accidents. Reprocessing plants need to demonstrate these as well as countermeasures specifically for terrorist attacks, hydrogen explosions, fires resulting from solvent leaks and vaporization of liquid waste.

JAEA said that the first part of the reprocessing process at Tokai, where used fuel is made into solution, will be shut soon. However, the second part, where these solutions are treated, will continue operating for about the next 20 years in order to treat used fuel solution currently stored at the facility.

Some 110 tonnes of unprocessed used fuel is also at the plant. The JAEA spokesman said that this fuel is likely to be sent overseas for reprocessing.

Researched and written
by World Nuclear News

Tokai to close because for economic reasons

September 30, 2014

Tokai nuclear fuel processor to close due to cost of meeting new standards

http://mainichi.jp/english/english/newsselect/news/20140930p2a00m0na009000c.html

The Japan Atomic Energy Agency has announced that it will shut down a spent nuclear fuel processor in Tokai, Ibaraki Prefecture, as the cost to prepare the facility for new regulation standards established after the Fukushima nuclear plant crisis is predicted to top 100 billion yen.

The agency reported the decommission plan of the existing nuclear fuel processor at a meeting of its reform committee held on Sept. 29.

According to the agency, the nuclear fuel processing technology that has been under development at the Tokai facility has almost been completely moved to another processing station in Aomori Prefecture operated by Japan Nuclear Fuel Ltd.

The new regulation standards for running a nuclear fuel reprocessing facility require operators to take the same level of safety and anti-disaster measures against earthquakes and tsunami as nuclear power stations. The agency's executive director Shigeo Nomura told the meeting that continuing the spent fuel recycling project will not be approved by the public in terms of economic rationality.

The agency will include the decommission plan in its medium-term operational policy, which comes into effect in the next fiscal year, and file a decommission plan with the Nuclear Regulation Authority as early as fiscal 2017.

The Tokai plant came into full operation in 1981. Since 2006, it had reprocessed spent nuclear fuel from the now-decommissioned converter-type nuclear reactor Fugen in Fukui Prefecture.

There are some 110 metric tons of spent nuclear fuel left in the Tokai plant, and the agency plans to commission France to treat the remaining fuel.

September 30, 2014(Mainichi Japan)

Sendai may not restart straight away

October 1, 2014

Kagoshima reactor restarts unlikely before January

http://www.japantimes.co.jp/news/2014/10/01/national/restart-kagoshima-plant-reactors-unlikely-january/#.VCvi5Banp1s

Kyodo

The restart of reactors at the Sendai nuclear power plant in Kagoshima Prefecture appears unlikely before January, as the plant's operator only submitted the necessary documentation to regulators on Tuesday, months later than originally planned.

Kyushu Electric Power Co. submitted roughly 600 pages of documents concerning reactor 1 — one of two reactors at the complex that have obtained safety clearance by the Nuclear Regulation Authority — but that accounts for only a fraction of the operator's 20,000-page construction plan, which needs to be submitted for the plant to be restarted.

Kyushu Electric had originally planned to submit the documentation to the NRA in late May. It plans to submit the remaining documents, including those regarding reactor 2, later this month, company officials said.

Given the time required to screen the construction plan, which includes building and equipment specifications, and for obtaining local consent for the restart, the Sendai plant is unlikely to come back online before January.

Also on Tuesday, **the cities of Ichikikushikino and Hioki, which are located within a 30-km radius of the Sendai plant, demanded that the Kagoshima Prefectural Government seek their consent for the plant's restart.**

The move by the two localities comes as Kagoshima Gov. Yuichiro Ito has taken the position that approval by the prefectural government and the city of Satsumasendai, which hosts the nuclear power plant, would be sufficient to allow Kyushu Electric to restart the plant.

The municipal assembly of Ichikikushikino, which lies just 5 km from the facility, adopted a written statement by a majority vote urging the governor to also seek the city's approval, saying a number of residents had signed petitions against restarting the plant following the start of the 2011 Fukushima nuclear crisis.

The governor should "fully respect" the opinions of the residents, the statement said.

The municipal assembly of Hioki unanimously adopted a similar statement the same day, stating "It is unacceptable to restart (the plant) without the city assembly and the mayor" approving it, as the municipality could also be held responsible in the event of a severe nuclear accident.

At a press conference on Tuesday, industry minister Yuko Obuchi, who oversees the power industry, said "Obtaining consent from local communities is not a legal requisite for a restart."

Currently, all of Japan's 48 commercial reactors remain offline due to safety concerns following the triple meltdown in Fukushima. The two-reactor Sendai plant is the closest to resumption after the NRA in September said it meets new, tighter safety regulations adopted in the wake of the nuclear disaster.

With only some of the documentation submitted to regulators on Tuesday, Kyushu Electric has missed its end-of-September deadline, set after it failed to meet its original end-of-May deadline.

“In addition to a heavy workload, we’ve had countermeasures for severe accidents and other new items to deal with, so there really is no precedent we can look to for a guide,” a company official said about the delay.

Paperwork delays snarl restart of Sendai nuclear plant to next year

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201410010049

By TOSHIO KAWADA/ Staff Writer
Kyushu Electric Power Co. jumped through all hoops but one to get its Sendai nuclear power plant in Kagoshima Prefecture back online this year.
Its failure to submit all the necessary paperwork means the reactors are unlikely to be reactivated until 2015, even though the facility cleared tougher safety standards.
Kyushu Electric had planned to submit the paperwork to the Nuclear Regulation Authority by the end of September, but it did not get around to completing the procedures by Sept. 30.
The utility said it will take two to four weeks to prepare the remaining documents required for restarts of the plant’s two reactors in Satsuma-Sendai.
Even after the company obtains the green light from the NRA, the reactors must clear on-site inspections of equipment. That almost certainly will rule out restarts by the end of this year.
The nuclear watchdog on Sept. 10 formally cleared the reactors, the first such approval under stricter safety standards established after the disaster at the Fukushima No. 1 nuclear power plant in March 2011.
The NRA will continue examining whether the utility’s application documents meet the watchdog’s conditions. The screening and equipment inspections will each take a couple of months.
On Sept. 30, Kyushu Electric submitted only a portion of the documents to make corrections to its previous application for approval of construction plans that list safety measurements.
In addition to the remaining paperwork, the company is required to present documents to make corrections to its applications for approval of manuals stipulating safety measures while the reactors are in operation or in case of accidents.
The utility initially planned to submit all the necessary documents by the end of May. As the company installed new equipment and took steps to raise the plant's ability to withstand strong earthquakes, the documents have increased to more than 40,000 pages, causing a delay in its preparation.
Kyushu Electric officials expect to submit all relevant documents by the end of October.

September 30, 2014

Restart of Sendai plant may be delayed

http://www3.nhk.or.jp/nhkworld/english/news/20140930_37.html

Sep. 30, 2014 - Updated 12:23 UTC+2

A nuclear power plant in Japan's southwestern prefecture of Kagoshima may not be restarted before the end of the year.

This is due to a delay in procedures required for the restart.

The Nuclear Regulation Authority ruled earlier this month that 2 reactors at Kyushu Electric Power Company's Sendai plant meet the government's new requirements for restart. The plant became the first facility to meet the tougher standards introduced after the nuclear accident at Fukushima in 2011.

In order to bring the reactors online, the operator had intended to submit for NRA approval further details on the equipment and devices in use by the end of September.
On Tuesday, the operator submitted 600 pages of documents. These are part of about 40,000 pages involving the Number 1 reactor.

The utility says it will submit the remaining documents on the reactor within a week or two, and that it hopes to submit all the documents for the Number 2 reactor by the end of October.

The NRA will then assess the documents and check the new equipment and devices.

The utility also needs the consent of local communities in Kagoshima Prefecture for the restart.

Even if it obtains the local approval, the restart will not happen until December at the earliest, and probably not until early next year.

Restart of reactors not based on "scientific" jugement

October 6, 2014

Japan Political Pulse: Scientific uncertainty

http://mainichi.jp/english/english/perspectives/news/20141006p2a00m0na013000c.html

Distinguishing between a "scientific judgment" and an "unscientific judgment" can prove difficult at times. The recent eruption of Mount Ontake in central Japan has drawn attention to Kyushu Electric Power Co.'s Sendai Nuclear Power Plant in Satsumasendai, Kagoshima Prefecture. The reason is that the plant is located just 50 kilometers northwest of Mount Sakurajima, a prominent active volcano in Japan.
Nuclear Regulation Authority (NRA) Chairman Shunichi Tanaka, 69, told a news conference on Oct. 1 that it is "unscientific" to discuss Mount Ontake and Mount Sakurajima together. Volcanologists, meanwhile, say the logic behind countermeasures to protect the Sendai Nuclear Power Plant from volcanic eruptions is "unscientific." This gap is at the heart of discussions surrounding volcanic activity and reactivation of the Sendai plant.
Why does the government -- including the NRA -- view it as unscientific to link Mount Sakurajima with Mount Ontake? Confronting experts, we find the following explanation: While the eruption of Mount

Ontake resulted in many deaths, it was a phreatic eruption, involving the explosion of steam and rock. No magma was ejected. Meanwhile, the Sendai Nuclear Power Plant is made to withstand an eruption 10,000 times the size of the Mount Ontake eruption.

What's the basis for "10,000 times"? It's actually nothing complicated. The size of an eruption is measured by the amount of ejected matter, and the amount of ejected matter can be roughly determined based on the accumulation of ash and other ejecta.

In the Ontake eruption, the amount of ejected matter was estimated at 1 million tons, an amount comparable to that produced by Mount Sakurajima in a year. At the same time, the 1914 reaction of Sakurajima a century ago produced 100 times the ejecta normally seen in a year. Kyushu Electric Power Co., the operator of the Sendai Nuclear Power Plant, bases its guideline for safety countermeasures on the Sakurajima-Satsuma eruption held to have occurred in the Jomon period roughly 12,800 years ago. The scale of that eruption is believed to be about 100 times bigger than the 1914 eruption.

Multiplying 100 by 100, we get 10,000. If an eruption 10,000 times the size of the Ontake eruption occurred, the pyroclastic flow would not reach the nuclear plant. The amount of ash that would fall on the Sendai plant would reach an estimated 12.5 centimeters. Since it can withstand up to 15 centimeters, there is no problem.

That's what Kyushu Electric Power Co. has to say, and it's also the reason behind the government's judgment that the Sendai plant's countermeasures for a volcanic eruption are adequate.

We see, then, this is rational and scientific. But there is another point from the volcanologists who maintain this is "unscientific" that gives us cause for concern -- namely, the method of determining the possibility of a catastrophic eruption exceeding the scale of the Sakurajima-Satsuma eruption.

Government data based on Kyushu Electric Power Co.'s explanation says, "The space between periods of activity from catastrophic eruptions is about 90,000 years. The latest such eruption occurred about 30,000 years ago, so the possibility of one occurring while the Sendai Nuclear Power Plant is in operation is sufficiently low."

But doubts remain over this theory that a cycle lasts 90,000 years. The space between major eruptions should be evaluated on each caldera. However, Kyushu Electric Power Co.'s evaluation is based on a combination of the Aira caldera including Sakurajima and four other calderas in the area.

Ryusuke Imura, 50, an associate professor at Kagoshima University and an expert on volcanic geology, comments, "A hotchpotch of estimates cannot be called scientific. In terms of volcanology, it is a very rough discussion, on a level that couldn't pass the peer reviews of academic journals or specialist magazines abroad."

Of course, if there were ever to be a disaster on the scale that destroyed all of southern Kyushu, then it would not be a case of simply having to worry about a nuclear power plant. In the name of science, both the government and Kyushu Electric Power Co. share that clear stance.

But hold on -- we have witnessed one catastrophic eruption not just within the past few tens of thousands of years, but in the 19th century, in Indonesia.

From my various questions to people on the issue, **it does not seem that a scientific judgment will determine whether the nuclear power plant goes back into operation or not. In the end, it's a choice of values.** From Oct. 9 the NRA will start holding meetings to explain its screening results to residents living within 30 kilometers of the Sendai Nuclear Power Plant. (By Takao Yamada, Expert Senior Writer)

Do not restart until we have the answers

October 16, 2014

More answers about Fukushima disaster needed before reactor restarts, Niigata governor says

http://www.japantimes.co.jp/news/2014/10/16/national/niigata-governor-says-soon-reactor-restarts/#.VEC_xBanrIU

AP

Niigata Gov. Hirohiko Izumida said Japan should not restart any nuclear plants until the cause of the Fukushima meltdowns is fully understood and nearby communities have emergency plans that can effectively respond to another major disaster.

Izumida, whose prefecture is home to Tokyo Electric Power Co.'s seven-reactor Kashiwazaki-Kariwa plant, said on Wednesday that regulators look at equipment but don't evaluate local evacuation plans.

Prime Minister Shinzo Abe is pushing to restart two reactors in Kagoshima Prefecture that last month were the first to be approved under stricter safety requirements introduced after the Fukushima disaster started. Nuclear Regulation Authority Chairman Shunichi Tanaka has called the new standard one of the world's highest.

Abe has said he will restart all reactors deemed safe, reversing the previous government's policy of phasing out nuclear power.

Regulators are inspecting 18 other reactors, including two in Niigata operated by Tepco, which runs the Fukushima plant that experienced three meltdowns following the 2011 earthquake and tsunami. All 48 workable Japanese reactors are currently offline.

The nuclear authority's approval of the two Sendai reactors in Kagoshima paves the way for their restart within few months, considered a big boost for Japan's nuclear industry.

Its ots operator, Kyushu Electric Power Co., however, still faces an on-site operational inspection and must obtain the consent of local authorities. Residents are mainly concerned about five cauldron volcanos in the region, though regulators rule out a catastrophic eruption before the end of the reactors' functional lifespan of 30 years. Kagoshima's governor and town officials have generally welcomed a Sendai restart.

Izumida declined to comment on another prefecture's decision, but he said Tepco was responsible for the Fukushima crisis and has no qualifications to resume operating a nuclear plant in his region without fully clarifying unanswered questions about the disaster.

Resuming operations at the Kashiwazaki-Kariwa plant is crucial to Tepco, which is indebted and nationalized due to the astronomical cost of cleaning up Fukushima and compensating affected residents. But the safety inspection has been delayed due to a prolonged investigation into active seismic faults inside the compound, which experts say may affect safety.

Ensuring protection of nearby residents from radiation exposure as part of a multilayer safety measure is an international standard, but still not compulsory to pass safety inspection in Japan. Towns as far as 30 km from the plant, an expansion from the 20 km before the crisis, are now required to compile evacuation plans, but many have not. In some prefectures, the drills exposed that evacuating all residents from the no-go zones would take days. Niigata compiled its evacuation plan in June and is set to test it next month.

"Protecting the residents' lives and safety is the most important task for me as governor," Izumida told reporters in Tokyo. "I don't even want to discuss a restart."

Takaham revised safety plans

October 20, 2014

KEPCO to submit revised Takahama safety plan

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Oct. 20, 2014 - Updated 22:44 UTC+2
The operator of a power plant on the Sea of Japan coast says it will submit revised safety measures to the country's nuclear regulator as early as next week.

Officials of Kansai Electric Power Company say they have completed recalculations of the potential maximum height of a tsunami that could hit the Takahama plant.

The Nuclear Regulation Authority, or NRA, had pointed out to the utility that it underestimated the height in its first assessment. The company was obliged to conduct tsunami simulations for 2 reactors at the plant.

The 2 reactor's structural resilience against major earthquakes and other safety measures have been cleared by tests that began in July of last year.

If NRA officials find no shortcomings in the revised measures, they will draft a preliminary regulation plan that will pave the way for resuming operations at the plant.

The plan will be made public by the end of this year.

Takahama will be the second plant to receive a preliminary regulation plan from the nuclear regulator, following the Sendai plant in Kagoshima Prefecture, southern Japan.

All of Japan's nuclear reactors are currently offline.

Opponents to restart protest

October 20, 2014

Opponents scuffle with officials

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Oct. 20, 2014 - Updated 13:11 UTC+2
People opposed to the restart of the Sendai nuclear power plant in southern Japan scuffled with city officials when they tried to enter a room where the city assembly's special panel was meeting.

After the panel adopted a petition calling for the restart of the plant, people gathered in front of the Satsumasendai city hall to protest the decision.

Residents are divided over whether the Sendai nuclear plant should resume operations.

A hotel worker says she wants the plant to return online soon because it is the pillar of the local economy.

A man says nuclear plants need to be restarted to ensure a steady energy supply. He says he recently visited the plant and was impressed by the safety measures that have been implemented.

An 82-year-old woman says the assembly seems intent on restarting the plant soon. She says officials should take more time to ensure that future generations are able to live without worries.

Another woman says the officials are acting too hastily in making their decision before the prefecture concludes its public briefings.

She says more discussions are needed, but that she is worried because officials seem to be rushing to restart the plant.

Senai plant restart approved by city assembly

October 20, 2014

City assembly approves Sendai plant restart

http://www3.nhk.or.jp/nhkworld/english/news/20141020_32.html
Oct. 20, 2014 - Updated 10:20 UTC+2
A special panel at a city assembly in southern Japan has approved a petition to allow a local nuclear power plant to resume operations.

The panel at the Satsuma Sendai city assembly in Kagoshima Prefecture discussed petitions both for and against the restart of the Sendai plant on Monday.

The plant is operated by Kyushu Electric Power Company. Last month it became the first to pass new regulations for nuclear plants introduced after the 2011 Fukushima accident.

Panel members in favor of the restart argued that the local economy has been sluggish since the plant went offline. But others opposing the restart said the screening by the government's Nuclear Regulation Authority does not guarantee the plant's safety.
The panel rejected 10 petitions against the restart, and adopted one calling for the plant to return online.

The city assembly is likely to approve the same petition because a majority of the assembly members are in favor of the restart.

The assembly may hold a session as early as October 28th to discuss the matter.

The plant operator says it hopes to win approval from Satsuma Sendai City and Kagoshima Prefecture.

The utility must also obtain approval from the Nuclear Regulation Authority. The plant will then undergo inspection of the newly installed equipment before going online.

The restart is likely to be early next year.

No great surprise

October 21, 2014

New industry minister vows to restart idled nuclear plants

http://mainichi.jp/english/english/newsselect/news/20141021p2g00m0dm064000c.html

TOKYO (Kyodo) -- Japan's newly appointed industry minister Yoichi Miyazawa said Tuesday he will promote the restart of the country's idled nuclear reactors that clear safety checks, adhering to the basic stance of the pro-nuclear government.

In charge of overseeing the energy sector, Miyazawa has one of the toughest jobs in the government -- persuading the public to accept the restart of nuclear plants that have remained offline amid safety concerns following the 2011 Fukushima meltdowns.

"There is no doubt that nuclear power is our nation's important base-load power source," Miyazawa, 64-year-old nephew of the late former Prime Minister Kiichi Miyazawa, said at a press conference.

Miyazawa took office the day after Yuko Obuchi -- who had the highest profile among five female ministers in Prime Minister Shinzo Abe's revamped Cabinet -- stepped down over a money scandal less than two months after she assumed the post.

In comparison to the popular Obuchi, daughter of former Prime Minister Keizo Obuchi, Miyazawa has a low profile among voters. The sudden replacement could cause a delay in Abe's plan to revive the country's nuclear industry, some observers say.

During the press conference, Miyazawa also pledged to work toward the introduction of more renewable energy and reduce Japan's reliance on nuclear power generation "as much as possible," as stated in the national energy policy adopted in April.

Regarding the restart of a nuclear plant operated by Kyushu Electric Power Co. -- which will likely be the first to go back online under post-Fukushima, tougher safety regulations -- Miyazawa said he intends to visit Kagoshima Prefecture, the host community of the facility, "at the earliest possible date," to explain the government's stance and obtain consent from the locals.

Calls for Obuchi to resign had been growing over allegations that her support groups shouldered expenses for trips for voters to a theater in Tokyo. She also came under fire over spending from her political fund at a design office and clothing shop run by her relatives.

In addition to Obuchi, Justice Minister Midori Matsushima -- another female member of the Cabinet -- resigned Monday over a separate scandal. Matsushima allegedly distributed paper fans to supporters, in a possible violation of the election law, which bans politicians from sending gifts of monetary value to constituents.

Sendai restart: Still not so simple

October 21, 2014

Sendai plant unlikely to be restarted by year-end

http://www3.nhk.or.jp/nhkworld/english/news/20141022_01.html

Oct. 21, 2014 - Updated 21:58 UTC+2
Japan's nuclear regulators are calling for more information about the measures for the first plant that has passed revised government requirements to prepare nuclear plants for disasters.

Officials from the Nuclear Regulation Authority on Tuesday met representatives of Kyushu Electric Power Company who want to restart the Sendai plant in Kagoshima Prefecture.

The utility must gain the authority's approval for detailed facility designs and management systems to put the plant back online.

The regulators said the utility has failed to provide sufficient explanations about the plant's quake resistance and other matters.

The operator plans to give additional explanations at a later date. This makes it likely that the authority will grant its approval in November at the earliest.

If the utility decides to revise documents submitted to the authority, the approval will be further delayed.

Even after the authority gives the go-ahead, the new facilities at the plant need to undergo inspections.

Taking these matters into account, it seems unlikely that the plant will be back online by the year-end even if local governments agree to the restart.

Extra briefing about Sendai plant

October 22, 2014

More public briefings on Sendai nuclear plant

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Oct. 22, 2014 - Updated 14:20 UTC+2
The local government hosting the Sendai nuclear power plant in southern Japan will hold an additional briefing for residents. It will **mainly be about evacuation plans in the event of a nuclear accident.**

Kagoshima Prefecture has already held sessions on safety measures by the plant operator, Kyushu Electric Power Company, in 5 municipalities around the nuclear plant, ending Monday.

Last month, Japan's nuclear regulators approved the measures, saying they met revised government requirements for restarting the nuclear plant.

The prefecture will hold an extra session on October 29th in Hioki City near the plant.

Government and prefectural officials will explain evacuation procedures and other emergency measures. Power company staff will describe its safety steps.

OK to restart Sendai

October 29, 2014

Local government gives OK to restart Sendai nuclear plant in Kagoshima Prefecture

http://www.japantimes.co.jp/news/2014/10/29/national/local-government-gives-ok-restart-sendai-nuclear-power-plant-kagoshima-prefecture/

Reuters, Kyodo

The municipal assembly in Satsumasendai, Kagoshima Prefecture, voted Tuesday to approve the restart of the local nuclear power station, another step forward in the fraught process of reviving an industry left idled by the 2011 Fukushima catastrophe.

The city of 100,000 that hosts the two-reactor Sendai plant operated by Kyushu Electric Power Co. has long relied on the facility for government subsidies and jobs.

In September, the plant became the first nuclear facility to meet beefed-up post-Fukushima safetyrequirements.

Nineteen of the 26 assembly members voted in favor of restarting the plant, while four members voted against and three abstained, an assembly member said.

Mayor Hideo Iwakiri also gave the green light, paving the way for the plant to be rebooted as early as the beginning of next year once Kyushu Electric finishes the necessary paperwork and on-site operational checks.

While expressing approval, the mayor said at a news conference that the central government should ultimately be held responsible for any accidents that occur at the plant.

He also stressed that Japan should make more efforts to develop new energy sources and reduce nuclear dependence.

Other municipalities around the complex have said that bringing the plant back online without their consent is unacceptable because many of their residents still have safety concerns.

But Kagoshima Gov. Yuichiro Ito has tamped down these concerns, saying that obtaining approval from the surrounding municipalities is not a legally required process since they do not host the plant.

In Ichikikushikino, a city less than 5 km from the Sendai plant, more than half of its 30,000 residents signed a petition opposing the restart earlier this year.

In the lead-up to the vote in Satsumasendai, officials held town hall meetings in neighboring towns to explain the restart. Some residents complained that the public meetings were restrictive and did not address concerns about evacuation plans.

The vote came as a fire broke out Tuesday at Kyushu Electric's other nuclear plant, the Genkai facility in Saga Prefecture. The blaze started in an auxiliary building of the idled power station and was extinguished by plant workers, local officials said. There were no injuries and no release of radioactive materials, they said.

All 48 of the country's nuclear reactors were gradually taken offline following the Fukushima disaster. Japan has been forced to import expensive fossil fuels to replace atomic power, which previously supplied around 30 percent of the country's electricity.

Prime Minister Shinzo Abe's government is pushing to restart the nation's reactors, but he has said he will defer to local authorities to approve a policy that is still unpopular with large swaths of the public.

October 28, 2014

City assembly set to approve Sendai plant restart

Nuclear & Energy
Oct. 28, 2014 - Updated 23:35 UTC+1
A city assembly in southern Japan is set to approve the restart of a nuclear power plant in its municipality.

Satsuma Sendai city convened an extraordinary session on Tuesday to discuss the resumption of operations at the facility.

Last month, the Sendai plant became the first across Japan to pass new government regulations introduced after the 2011 Fukushima accident.

The assembly members are expected to vote on 10 petitions opposing the move and one in favor of it.

The majority of the assembly supports the restart. It is likely to adopt the petition calling for the plant to go back online.
Mayor Hideo Iwakiri is expected to express his view and also agree to the restart.

Plant operator Kyushu Electric Power Company is also hoping to obtain approval from the Kagoshima prefectural assembly and Governor Yuichiro Ito.

Satsuma Sendai okays nuclear plant restart

http://www3.nhk.or.jp/nhkworld/english/news/20141028_27.html
Oct. 28, 2014 - Updated 07:47 UTC+1
Satsuma Sendai city in southern Japan has approved the restart of a nuclear power plant in its municipality.

The city assembly convened an extraordinary session on Tuesday, to discuss a petition requesting the restart of the facility.

One member said residents will remain opposed unless safety can be guaranteed.

The member said economic activity in the city declined after the plant was shut down, and must be restored.

The petition was adopted with the support of 19 legislators, while 4 voted against.

Following the assembly's decision, Mayor Hideo Iwakiri also expressed his approval to restart the plant. He said he understands the government policy based on its basic energy plan.

Iwakiri said it is a difficult decision when he thinks of the citizens who are cautious about the restart. But said he will do everything he can to ensure public safety.

Last month the Sendai plant became the first in Japan to pass new government regulations introduced following the 2011 Fukushima accident. Since then attention has been focused on the city's attitude toward a possible reactor restart.

Plant operator Kyushu Electric Power Company will next try to obtain approval from the Kagoshima prefectural assembly and Governor Yuichiro Ito.

Local city assembly OKs restart of nuclear plant
http://mainichi.jp/english/english/newsselect/news/20141028p2g00m0dm064000c.html
KAGOSHIMA, Japan (Kyodo) -- A local city assembly on Tuesday approved restarting a nuclear plant located in the southwestern Japan city, a step toward the first resumption of a nuclear facility in the country since new regulations were adopted following the Fukushima meltdowns.
The city assembly of Satsumasendai, Kagoshima Prefecture, adopted a petition in favor of restarting the two-reactor Sendai plant, which became the first nuclear facility in September to meet the stricter post-Fukushima safety requirements.
Satsumasendai Mayor Hideo Iwakiri also gave the green light, paving the way for the plant to go back online as early as the beginning of next year once its operator Kyushu Electric Power Co. finishes the necessary paperwork and on-site operational checks.
However, other municipalities around the Sendai complex have said it is not acceptable to bring the plant back online without their consent, citing safety concerns among locals.
Kagoshima Gov. Yuichiro Ito, however, has said it is not necessary to obtain approval from the municipalities that do not host the plant given it is not a legally required process.
All of Japan's 48 commercial reactors currently remain offline and need to pass the Nuclear Regulation Authority's safety screening to resume operations.

See also :
Local government gives OK to restart Sendai nuclear power plant in Kagoshima Prefecture
http://www.japantimes.co.jp/news/2014/10/28/national/local-government-gives-ok-restart-sendai-nuclear-power-plant-kagoshima-prefecture/#.VE9tFxZ5B1s
Reuters, Kyodo
A town in Kagoshima Prefecture on Tuesday approved the restart of a nuclear power station, another step forward in Japan’s fraught process of reviving an industry left idled by the 2011 Fukushima atomic catastrophe.
(….]

Kagoshima next?

October 28, 2014

Kagoshima nuclear plant 1st to be approved for restart after Fukushima crisis
http://ajw.asahi.com/article/behind_news/social_affairs/AJ201410280087
REUTERS
A town in southwest Japan became the first to approve the restart of a nuclear power station on Oct. 28, a step forward in Japan's fraught process of reviving an industry left idled by the Fukushima nuclear crisis in 2011.
Kagoshima Prefecture's Satsuma-sendai, a town of 100,000 that hosts the two-reactor Kyushu Electric Power Co. plant, is 1,000 km (600 miles) southwest of Tokyo and has long relied on the Sendai nuclear power plant for government subsidies and jobs.

Nineteen of the city's 26 assembly members voted in favor of restarting the plant while four members voted against and three abstained, a city assembly member told Reuters.
The restart of Japan's first reactors to receive clearance to restart under new rules imposed following the Fukushima disaster is unlikely until next year as Kyushu Electric still needs to pass operational safety checks.
All 48 of the country's nuclear reactors were gradually taken offline after the nuclear disaster, the world's worst since Chernobyl in 1986.
An earthquake and tsunami struck the Fukushima No. 1 plant, 220 km (130 miles) northeast of Tokyo, sparking triple nuclear meltdowns, forcing more than 160,000 residents to flee from nearby towns and contaminating water, food and air.
Japan has been forced to import expensive fossil fuels to replace atomic power, which previously supplied around 30 percent of the country's electricity.
Prime Minister Shinzo Abe's government is pushing to restart nuclear reactors, but has said he will defer to local authorities to approve a policy that is still unpopular with large swaths of the public.
The restart divided communities nearest to the plant, pitting the host township that gets direct benefits from siting reactors against other communities that do not reap the benefits but say they will be equally exposed to radioactive releases in the event of a disaster.
In Ichikikushikino, a town less than five km (three miles) from the Sendai plant, more than half the 30,000 residents signed a petition opposing the restart earlier this year.
In the lead-up to the local vote, officials held town halls in neighboring towns to explain the restart, where some residents complained that the public meetings were restrictive and did not address concerns about evacuation plans.
A fire broke out at Kyushu Electric's other nuclear plant on Oct. 28, according to Japanese media. The fire started in an auxiliary building of the idled nuclear station and was extinguished by plant workers, the agency said. There were no injuries and no release of radioactive materials, it said.

NRAP accepts KEPCO's revised assessment

October 29, 2014

Regulator accepts nuclear plant quake projection

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Oct. 29, 2014 - Updated 12:56 UTC+1
The operator of the idled Ohi nuclear power plant in central Japan may be a step closer to its goal of restarting 2 reactors.

Japan's Nuclear Regulation Authority on Wednesday accepted its revised assessment of the strength of the biggest quake that could possibly strike the plant.

Kansai Electric Power Company had initially devised a scenario with a 700-gal maximum for the 2 Ohi reactors it wants to bring back online. The gal is used to measure ground acceleration in earthquakes. But the NRA rejected the figure as too optimistic.

On Wednesday, the NRA agreed to accept in principle the operator's revision to 856 gals. The revised figure assumes simultaneous movement along 3 fault lines near the plant as well as shallower quakes that could shake the ground even more vigorously.

Kansai Electric says the new earthquake projection would require large-scale reinforcement work at the plant that could take about a year to complete. The authority will next examine projections for tsunami and other eventualities at the Ohi power plant.

A district court in May backed area residents and ordered the operator not to restart 2 reactors at the Ohi plant. The utility has appealed the ruling.

The nuclear regulator has already approved under new regulations earthquake projections at 3 other nuclear plants.

Latest revised safety plan

October 31, 2014

KEPCO submits revised Takahama safety plan

http://www3.nhk.or.jp/nhkworld/english/news/20141031_31.html
Oct. 31, 2014 - Updated 11:27 UTC+1
The operator of the Takahama power plant on the Sea of Japan coast has submitted a report on revised safety measures to the country's nuclear regulator to restart 2 reactors.

Officials of Kansai Electric Power Company on Friday submitted to the Nuclear Regulation Authority a 7,700-page report for the plant's Number 3 and 4 reactors.

The utility revised the measures based on advice from the NRA concerning new safety regulations that took effect in July last year.

The revisions include **higher maximum levels of tremors and tsunamis resulting from possible earthquakes.**

Kansai Electric raised its estimate for tremors from 550 gals to 700, and that for tsunami height from 2.6 meters to 6.7.

The utility plans to install a large water pump and equipment for preventing hydrogen explosions.

The regulator is expected to draft a preliminary plan to pave the way for resuming the plant's operations. The plan is to be made public this year.

But before a restart, the utility must obtain approval by local municipalities and complete equipment inspections and other procedures. The process is expected to take at least until next spring.

Takahama would be the second plant to have a preliminary regulation plan drafted by the nuclear authority, following the Sendai plant in Kagoshima Prefecture, southern Japan.

Kagoshima Governor: All's well

November 3, 2014

Kagoshima governor positive after METI briefing on reactor restart

http://www.japantimes.co.jp/news/2014/11/03/national/kagoshima-governor-positive-meti-briefing-reactor-restart/#.VFe6Q8l5B1s

Kyodo

KAGOSHIMA – Kagoshima Gov. Yuichiro Ito has accepted the explanation offered by Minister of Economy, Trade and Industry Yoichi Miyazawa about the government's plan to restart the Sendai nuclear plant.

Miyazawa "clearly explained the need for the restart," Ito told reporters after the pair met Monday in the prefectural government building.

The governor will likely grant his approval for reactivating the plant if the Kagoshima Prefectural Assembly, as expected, votes in favor of the move this Friday.

"We hope for your understanding," Miyazawa told Ito during the meeting. The governor replied, "We will make a decision by comprehensively evaluating factors, after the prefectural assembly holds a vote on it shortly."

The assembly will be voting on whether to support the central government's plan to restart reactors 1 and 2 at the Kyushu Electric Power Co. plant in the city of Satsumasendai.

Earlier in the day, Miyazawa visited the Sendai plant, which is expected to be the first facility to be brought back online under safety regulations adopted after the March 2011 Fukushima No. 1 disaster.

The Nuclear Regulation Authority certified the Sendai nuclear plant as meeting the new safety regulations in September and the municipal assembly and mayor of Satsumasendai approved the restart last month. The restart is expected to take place early next year.

Restart: So many uncertainties and concerns still unadddressede

November 2, 2014

Too soon for a nuclear restart

http://www.japantimes.co.jp/opinion/2014/11/02/editorials/too-soon-for-a-nuclear-restart/#.VFYpdcl5B1s

The city assembly and the mayor of Satsumasendai, Kagoshima Prefecture, have given their nod to the restart of Kyushu Electric Power Co.'s Sendai nuclear power plant, whose Nos. 1 and 2 pressurized light-water reactors, each with a generation capacity of 890,000 kW, cleared the Nuclear Regulation Authority's screening in September under new safety standards that came into force after the March 2011 meltdowns at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant.

The Kagoshima prefectural assembly and Gov. Yuichiro Ito are also expected to approve the plan as early as this week, setting the stage for the first restart of an idled nuclear power plant under the updated standards.

Still, the concerns of many of the local residents have been left unanswered, especially those over the evacuation plans that would come into effect during a major accident at the Sendai plant.

A detailed review of the evacuation plans drawn up by the local governments has not been carried out. It would be irresponsible of the central and the local governments concerned, as well as Kyushu Electric, to go ahead with the restart without addressing the concerns of the very people who could be most affected in case of a nuclear disaster.

The move to restart the Sendai plant has brought to the fore problems in administrative procedures needed to restart a nuclear power plant that had been put offline. There are no specific regulations stipulating whether the consent of local governments near a municipality hosting the plant — besides that of the host municipality itself — is needed for restart.

The Kagoshima governor has declared that the approval of only the prefecture and Satsumasendai would be necessary for the restart. But his decision ignores the concerns of people living in neighboring municipalities who would also be affected by a severe accident at the plant. Most of these municipalities either oppose the restart or are urging the national government to address accountability concerns about the restart. Some of the municipalities have demanded that their consent should be prerequisite for the restart.

Aside from Satsumasendai, the eight municipalities are located within 30 km of the plant. These cities and towns are legally required to work out evacuation plans for their residents in case of a severe accident at the Sendai plant. This requirement is a lesson learned from the 2011 Fukushima disaster — that not only municipalities adjacent to a nuclear power plant but also those located further away from it can be severely affected by radioactive fallout from a serious accident.

The NRA mainly examines whether a nuclear power plant can withstand a major earthquake and tsunami, and whether the plant is sufficiently prepared for an accident, including whether it is equipped with emergency generators and cooling systems to continue cooling reactors when the plant is damaged by a major quake or tsunami. To examine whether evacuation plans devised by local governments will actually work is outside the purview of the NRA.

It does not stand to reason that the central government would not fully involve itself in deciding whether particular evacuation plans are reliable.

The government dispatched several officials to the local municipalities in September to check the evacuation plans, but it is not clear how much they can be involved in making sure that the plans would actually work.

In view of various factors that must be taken into account in making the evacuation plans, local residents' fears are understandable. The two most important questions are whether means of transportation can be secured and which roads will be safe to travel after a quake or tsunami. Not all residents have cars, and it is not certain whether hospitals can secure enough buses to transport inpatients to safety.

The possibility cannot be ruled out that roads used by evacuees will be clogged and people will not be able to escape from danger quickly enough. If designated roads are destroyed by a quake or tsunami, substitute routes will need to be secured. It is not clear whether each municipality concerned and the prefectural government have clear ideas about what to do in such situations.

Whether the public facilities designated as places for accepting evacuees will be well-prepared with the necessary personnel and other resources is also a question.

Iodine pills are supposed to be given in advance to residents living within 5 km of the plant. At present, fewer than 70 percent of them have received the pills. It has not yet been decided what to do with visitors who happen to be in the area when a nuclear accident takes place, as well as new residents. The places and facilities for checking whether people's clothes have been contaminated with radioactive substances, and for decontaminating them, have not been designated yet.
The uncertainties with regard to emergency evacuation underscore all the more the case for the national government establishing a system to check and verify such plans — and stop the planned restart of a plant if necessary — as the U.S. Nuclear Regulatory Commission does.
Even after the NRA's safety screening of the Sendai plant, there is expert criticism that it fails to take into account all types of quakes that could hit the plant. To restart the Sendai plant while all of these concerns are still unaddressed risks ignoring the basic rights of local residents.

Kagoshima Governor says OK

November 4, 2014

Governor accepts minister's explanation about Kagoshima nuclear plant restart

http://mainichi.jp/english/english/newsselect/news/20141104p2g00m0dm035000c.html
KAGOSHIMA, Japan (Kyodo) -- Kagoshima Gov. Yuichiro Ito on Monday accepted the explanation offered by Economy, Trade and Industry Minister Yoichi Miyazawa about the government's plan to restart the Sendai nuclear power plant in the southwestern Japan prefecture.
Miyazawa "clearly explained the need for the restart," Ito told reporters after a meeting at the prefectural hall. It is believed the governor will give the green light for reactivating the plant after the Kagoshima prefectural assembly's anticipated approval Friday.
"We hope for your understanding," Miyazawa told the governor as he requested approval at the meeting.
The governor replied, "We will make a decision by comprehensively evaluating factors, after the prefectural assembly holds a vote on it shortly."
The Kagoshima prefectural assembly plans to hold the vote on Friday and a majority of assembly members are expected to support the central government's plan to restart the Nos. 1 and 2 reactors at the Kyushu Electric Power Co. plant in the city of Satsumasendai
Earlier in the day, Miyazawa visited the Sendai plant, which is expected to be the first facility to be brought back online under new safety regulations adopted after the March 2011 Fukushima Daiichi nuclear plant disaster.
The Nuclear Regulation Authority certified the Sendai nuclear plant as meeting the new safety regulations in September and the municipal assembly and mayor of Satsumasendai approved the restart last month.
The restart is expected to take place early next year.
November 04, 2014(Mainichi Japan)

Restart of Sendai given green light

Trade minister Yoichi Miyazawa, second from left, inspects the Sendai nuclear power plant in Satsuma-Sendai, Kagoshima Prefecture, on Nov. 3. (Ryo Ikeda)

November 4, 2014

Kagoshima assembly to OK restarts of 2 Sendai nuke reactors

http://ajw.asahi.com/article/behind_news/politics/AJ201411040034

THE ASAHI SHIMBUN

KAGOSHIMA--The Kagoshima prefectural assembly is set to give the green light to restarting the reactors at the Sendai nuclear power plant, as a majority of assembly members indicated they will vote in favor of bringing the reactors back online.

The Asahi Shimbun has learned that a majority of the 51-member assembly will approve a petition supporting the resumption of operations of the No. 1 and No. 2 reactors at the Sendai nuclear plant in Satsuma-Sendai.

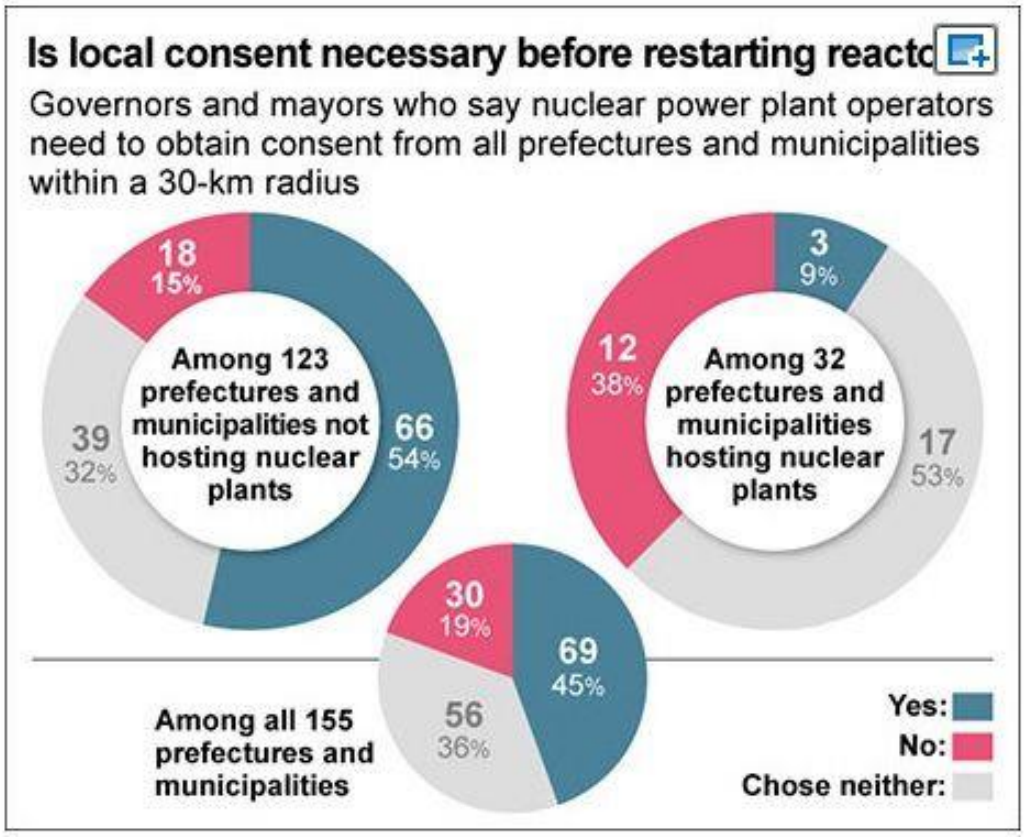
The assembly will deliberate on the petition during an extraordinary meeting of its 15-member special committee on nuclear safety and countermeasures on Nov. 5-7, culminating in a Nov. 7 plenary session.

On Nov. 3, trade minister Yoichi Miyazawa met Kagoshima Governor Yuichiro Ito and prefectural assembly chairman Kenichi Ikehata after visiting the Sendai plant and called for their support for restarting the reactors.

Hiroyuki Hosoda, secretary-general of the ruling Liberal Democratic Party, held a meeting with members of LDP's prefectural assembly caucus on the same day in Kagoshima and explained the party's intention to restart the Sendai plant.

The 35-member LDP caucus is the largest group in the assembly, and some from the three-member Komeito caucus and independents in the assembly are also expected to vote in favor of the petition.
During his meeting with Miyazawa, Ito said deliberations to restart the Sendai plant are in their final stages.
"The Satsuma-Sendai city assembly and mayor have already approved the resumption (of operations), and the prefectural assembly will soon make its decision on the issue," the governor told the trade minister. "Considering those decisions, I will make the final and comprehensive decision."

We want our say before restarting reactors



The Asahi Shimbun

November 4, 2014

Survey: Nearly half of local government leaders want a say in restarting nuclear reactors

http://ajw.asahi.com/article/behind_news/politics/AJ201411040025

THE ASAHI SHIMBUN

Nearly half of all heads of prefectures and municipalities near nuclear power plants say plant operators should be required to obtain their consent before restarting reactors, according to an Asahi Shimbun survey.

The figure reflects growing calls by local governments located within 30 kilometers of nuclear plants to have a greater say in whether such facilities are reactivated.

Among governors and mayors of the 155 prefectures and municipalities surveyed, 69, or 45 percent, said they believe plant operators must obtain consent not only from local governments hosting nuclear plants, but also prefectures and municipalities within a 30-km radius.
Among the 123 prefectures and municipalities that do not host nuclear power plants but are located within the radius, 66 governors and mayors, or 54 percent, said utilities should obtain such consent.
In contrast, among 32 leaders of prefectures and municipalities that host nuclear plants, only three, or 9 percent, said the operators should obtain consent from all municipalities within a 30-km radius. Twelve, or 38 percent, said utilities have to gain consent only from local governments hosting plants.
"Only local governments hosting nuclear power plants have effective rights to give consent to the restart of reactors, which is why they have been given generous financial incentives," said Atsushi Miyawaki, a professor of public administration at Hokkaido University.
"This has created a rift between these municipalities and their neighbors. However, the Fukushima nuclear crisis demonstrated that damage from a nuclear disaster may not be confined to municipalities hosting the plants," he said.
The survey covered governors of 21 prefectures and mayors of 134 municipalities located within the so-called Urgent Protective Action Planning Zone, a 30-km radius around 16 commercial nuclear plants across Japan, with the exception of the crippled Fukushima plant.
The respondents include leaders of 13 prefectures and 19 cities, towns and villages that host nuclear power plants. Leaders of all 155 local governments had answered the survey by the end of October.
On Oct. 28, authorities in Satsuma-Sendai, Kagoshima Prefecture, gave the green light to restarting the Sendai nuclear power plant, making it the first local government to approve the restart of a nuclear power station under new safety standards put in place following the 2011 nuclear disaster.
Kagoshima Governor Yuichiro Ito will now decide whether or not to allow the restart, based on the prefecture's view that the plant's operator, Kyushu Electric Power Co., only needs consent from the host prefecture and city.
Among the leaders of prefectures and municipalities that host nuclear plants, the Shizuoka governor, as well as mayors of Tomioka, Fukushima Prefecture, and Tokai, Ibaraki Prefecture, said utilities should obtain consent from all prefectures and municipalities within a 30-km radius.
In contrast, the governor of Fukui Prefecture, which hosts four nuclear plants, emphasized that “concerned local governments are prefectures, cities and towns that host nuclear plants.”
Meanwhile, the mayor of Niseko, Hokkaido, which is located within 30 km of the Tomari nuclear power plant in Tomari, said utilities should obtain consent from all municipalities that could be affected by a nuclear disaster.
The mayor of Izumo, Shimane Prefecture, agreed, saying the nearby Shimane nuclear plant poses the same risk to the city as it does to Matsue, which hosts the plant.
Among the leaders of all 155 surveyed prefectures and municipalities, 60, or 39 percent, called for the government to create a legally binding procedure that makes it mandatory for nuclear plant operators to gain consent from local governments to restart reactors.
Among the 12 prefectural and municipal leaders who said such a legal procedure is unnecessary, nine were from prefectures and municipalities that host nuclear plants.
The mayor of Takahama, Fukui Prefecture, which hosts the Takahama nuclear plant, said such legislation would add an “excessive political factor” to the country’s energy policy.

More debating about restart

November 5, 2014

Kagoshima Pref. assembly debates reactor restart

http://www3.nhk.or.jp/nhkworld/english/news/20141105_23.html
Nov. 5, 2014 - Updated 06:08 UTC+1
The prefectural assembly of Kagoshima, southwestern Japan, has begun debating whether to approve the restart of a local nuclear power plant.

Sendai Nuclear Power Plant is the first nuclear facility to pass new government regulations drawn up after the 2011 Fukushima Daiichi accident.

The assembly convened an extraordinary session on Wednesday to discuss the resumption of operations at the plant, which is owned by Kyushu Electric Power Company.

Speaking at the session, Kagoshima Governor Yuichiro Ito said he believes the safety of the plant has been guaranteed because it passed a strict review based on the new regulations.

He asked the assembly members to express their views, which he said will be the key factors in his decision about whether to restart the plant.

The assembly will vote on the restart on Friday, the final day of the 3-day session. The governor will make his decision after that.

About 50 protesters gathered in front of the prefectural government headquarters on Wednesday. They called on officials to consider the views of residents who oppose restarting the plant.

In October, the mayor and local assembly of Satsuma Sendai City, which hosts the plant, agreed to the restart after regulators determined that Kyushu Electric's safety measures meet the new requirements.

Safety screening for Oma plant

November 6, 2014

J-Power to apply for govt. screening of Oma plant

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Nov. 6, 2014 - Updated 07:57 UTC+1
A utility in Japan plans to apply to the nation's nuclear regulator for a safety screening of a power plant it is constructing in northern Japan as early as this month. The screening is a prerequisite for opening the plant.

But a nearby city concerned about the plant's safety is challenging its construction in court.

The Oma plant in Aomori Prefecture is being built by Electric Power Development Company, also known

as J-Power.

It is the first commercial plant in the world designed to run exclusively on a mixture of uranium and plutonium recycled from spent nuclear fuel, or MOX.

J-Power stopped construction work at the Oma plant after the 2011 Fukushima Daiichi nuclear disaster. The utility resumed work in late 2012, with an eye to meeting new government regulations.

The company says construction is nearing completion and it is close to satisfying the stricter rules.

The city of Hakodate filed for an injunction with the Tokyo District Court in April to halt the construction, saying it feared damage from a possible accident. The city lies less than 30 kilometers from the Oma plant across the Tsugaru Strait.

Next week J-Power President Masayoshi Kitamura will visit the Aomori prefectural government and the town hall of Oma to outline the utility's application and road map to the plant's completion.

The company also says it intends to brief the city of Hakodate on its plans.

Plant operators have filed applications with the government for screenings of 20 reactors at 13 nuclear power stations. The Oma application is the first for a facility under construction.

Matter of opinion

07.11.2014_No353 / News

'Major Turning Point' For Japan As Governor Approves Sendai Restarts
http://www.nucnet.org/all-the-news/2014/11/07/major-turning-point-for-japan-as-governor-approves-sendai-restarts
Plant Operation
7 Nov (NucNet): The governor of Japan's Kagoshima Prefecture today approved the restart of the Sendai-1 and -2 nuclear reactor units after they became the first in the country to meet new safety standards imposed after the March 2011 Fukushima-Daiichi accident, the Japan Atomic Industrial Forum (Jaif) said. Yuichiro Ito's approval to restart the two pressurised water reactor units, owned and operated by Kyushu Electric Power Company, follows approvals announced last week from the mayor and the local assembly.

Various legal and technical procedures remain, with actual restarts expected at the beginning of 2015 at the earliest, Jaif said. "The decision nevertheless marks a major turning point."

In July 2014 Japan's Nuclear Regulation Authority (NRA) gave Kyushu Electric preliminary approval to restart the two units, pending local consultation and approvals.

The NRA said the station, in southwest Japan, met new safety standards designed to protect against everything from terrorist attacks to tsunamis like the one that led to meltdowns at Fukushima-Daiichi.

The new nuclear safety standards cover three main areas: design basis safety standards, severe accident measures and safety standards for earthquakes and tsunamis.

Operators of nuclear stations in Japan are obligated by law to take concrete steps to mitigate against the possibility of serious accidents. Until now, such action was voluntary.

All of Japan's 48 operational reactors are offline while they undergo inspections to make sure they comply with new safety standards.

Sendai-1 and Sendai-2 are both 846-megawatt PWRs. Sendai-1 began commercial operation in July 1984 and Sendai-2 in November 1985.

Restart given green light, but doubts linger

November 7, 2014

Kagoshima assembly, governor green-light restart of Sendai reactors

Staff Writer

OSAKA – Kyushu Electric Power Co. received approval from the Kagoshima Prefectural Assembly and governor on Friday to restart two nuclear reactors at the Sendai power plant.

Thee move clears the last major political hurdles to bring Japan's first two reactors back online, under new nuclear safety regulations introduced in July 2013.

However, some towns and villages that lie within 30 km of the plant have doubts about the restart and are demanding they, too, be consulted as part of promises by the central government and the utility to seek local consensus prior to restarting the units.

"I decided that the restart of the two reactors could not be avoided," Kagoshima Gov. Yuichiro Ito told a news conference Friday afternoon.

The assembly's vote to proceed with the reactivation had long been expected. It follows a judgment in September by the Nuclear Regulation Authority, the industry watchdog, that the two reactors had met the new safety regulations, and an overwhelming agreement less than two weeks ago by the mayor and city council of Satsumasendai, which hosts the plant, to restart the reactors.

Of the 49 members of the prefectural assembly, 35 are from the Liberal Democratic Party and three are from Komeito. Both parties agreed to the restart.

Satsumasendai Mayor Hideo Iwakiri and Gov. Ito had long made it clear they were in favor of the plan, despite opposition and concern among other municipalities within 30 km of the plant over the possibility of a nearby volcanic eruption, as well as criticism from anti-nuclear activists about the lack of detailed evacuation plans.

Ichikushikino, which has about 30,000 residents, lies within the 30-km radius and parts of the city are only 5.4 km from the plant. City officials were angry at Ito for his stance that as long as Satsumasendai consented to a restart, sufficient local approval had been obtained.

"Our city is a local government that sits right next to (the Sendai) nuclear power plant. As a city whose trust and deep understanding for the restart should be gained in the same way as the city hosting the reactors, and considering how close we are, you should take into account the voices of the people in

surrounding municipalities," Ichikikushikino Mayor Seiichi Tabata wrote in a three-page letter sent to the governor on Thursday.
Tabata called on Ito to consider the safety of the Sendai reactors as well as the inadequacy of current evacuation plans for nearby municipalities, expressing the fears of many area residents that in the event of an accident at the plant, especially one involving a natural disaster that blocked off access roads, escape would be impossible.
At his news conference, however, Ito said he had no problem with local evacuation plans. "The plans drawn up by the central government for evacuation are concrete and logical," he said.
That prompted a reply from the Ichikikushikino mayor Friday evening, who said Ito should try to dispel local concerns and pressure the central government and Kyushu Electric on safety measures.
For Satsumasendai, restarting the two units also means resuming the flow of state funding. Between 1974 and 2013, the city received over ¥27 billion in central government subsidies for hosting the plant.
The plant's No. 1 and 2 reactors, which have been offline since the March 11, 2011, quake and tsunami triggered the Fukushima meltdowns, generate 890 megawatts each. Reactor 1 went into operation in 1984, and reactor 2 the following year.
However, the units are unlikely to resume operation until sometime early next year, as the NRA has not completed its screening process.

Kagoshima Governor agrees to plant restart

http://www3.nhk.or.jp/nhkworld/english/news/20141107_26.html
Nov. 7, 2014 - Updated 07:10 UTC+1
Kagoshima Governor Yuichiro Ito has agreed to the restart of a local nuclear power plant.

The Sendai plant, operated by Kyushu Electric Power Company, is the first facility to obtain the agreement of the host prefecture and municipality for a resumption of operations since new government regulations were drawn up for nuclear plants. These were introduced after the 2011 accident at the Fukushima Daiichi plant.

In September, the Sendai plant became the first nuclear facility in Japan to meet the requirements.

The governor's agreement came after the Kagoshima prefectural assembly approved the restart of the plant earlier on Friday.

Last month, Satsuma Sendai City -- which hosts the plant -- also agreed to accept a resumption of the plant's operations.

Although Kyushu Electric will proceed with the restart, it is likely that the plant will not go back online until early next year because of other administrative procedures.

All of Japan's nuclear reactors are now offline.

Plant restart approved by Kagoshima assembly

http://www3.nhk.or.jp/nhkworld/english/news/20141107_22.html
Nov. 7, 2014 - Updated 05:02 UTC+1
The Kagoshima prefectural assembly in southwestern Japan has approved the restart of a local nuclear power plant. The Kagoshima governor is also likely to give his approval on Friday.

The Sendai plant is operated by Kyushu Electric Power Company. It was the first nuclear facility in the country to meet new government requirements in September. The regulations were drawn up after the 2011 accident at the Fukushima Daiichi plant.

The prefectural assembly voted on Friday on a citizens' petition requesting the restart of the plant. The supporters included members of the Liberal Democratic Party and Komeito.

Kagoshima Governor Yuichiro Ito has repeatedly said he will make up his mind after considering the decisions by Satsuma Sendai City, which hosts the plant, and the prefectural assembly.

Last month, Satsuma Sendai City agreed to restart the plant.

Kyushu Electric is expected to proceed with the restart when the governor gives his agreement. But it is highly likely that the plant will not resume operations until early next year because of other administrative procedures.

All of Japan's nuclear reactors are now offline.

But what is "local approval"?

November 7, 2014

2 reactors to restart in Japan after getting local go-ahead

http://mainichi.jp/english/english/newsselect/news/20141107p2g00m0dm055000c.html

KAGOSHIMA, Japan (Kyodo) -- Two nuclear reactors in southwestern Japan won local consent for their restarts Friday, making it certain that the two will become the first of the country's 48 offline commercial reactors to resume operation despite lingering concerns over evacuation planning and other safety issues.
In giving the green light for the restart of the Nos. 1 and 2 reactors at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture, Kagoshima Gov. Yuichiro Ito said at a press conference the restart "is necessary" and emphasized that safety of the reactors has been ensured by nuclear regulators.
Local approval has been secured for the first time for reactors that have cleared a set of tougher safety requirements introduced in the wake of the 2011 Fukushima nuclear crisis. The actual resumption of the two reactors is expected next year, as regulators need to carry out further checks.
The nod by the governor effectively wraps up the process of winning local approval on the issue, as the prefectural assembly and the mayor of Satsumasendai city that hosts the plant have already expressed their approval.
As the Kagoshima prefectural assembly moved to adopt a petition in favor of restarting the reactors earlier Friday, nuclear opponents who came to listen to the discussions shouted, "You should protect the lives of the residents of the prefecture!" and "You should be ashamed!"

Even before the start of the plenary session, the chair had to call for silence because the protesters were shouting, "We are against nuclear restarts!"
Among residents of Satsumasendai, 64-year-old Masahiro Iwashita said he was disappointed that discussions have proceeded on the assumption the reactors will be restarted.
"There's been no occasion to properly garner opinions of residents of the prefecture...I won't give up efforts to stop the restart," he said.
But a taxi driver in the city expressed hope the reactors will be restarted swiftly and help boost the local economy.
"There aren't many jobs in this area and the number of customers has decreased," 66-year-old Michio Yamada said.
The central and prefectural governments appear to have been eager to finish the process quickly, although residents have voiced concerns about whether the Sendai plant, located in a region with active volcanic sites, will be safe if nearby volcanoes erupt and whether evacuation plans will sufficiently work.
The Nuclear Regulation Authority is mandated to evaluate safety measures for nuclear plants submitted by operators before allowing them to resume operations, but the evacuation plans, devised by local communities, are not subject to state screening.
However, Ito said at the press conference, "The plans have been confirmed by the state's nuclear disaster meeting that they are concrete and rational."
The scope of "local approval" has also been called into question, with no laws to determine the matter.
While Ito has said it means the approval of the prefecture and the host city, assemblies of some municipalities near the city have insisted they also have a say, as their residents could also be seriously affected by a nuclear accident.
Under Japan's new nuclear-disaster mitigation guidelines, revised after the Fukushima crisis, areas that need special preparations, such as evacuation plans, have been expanded to a 30-kilometer radius of a plant from the previous 10 km.
The local assemblies that have called for more say in the matter are located within the 30-km radius.
In the case of the Fukushima crisis, which saw three reactors suffer meltdowns after the plant was hit by a huge earthquake and tsunami, residents living within a 20-km radius of the plant and some areas beyond had to evacuate. More than 120,000 people still live as evacuees.
All of Japan's 48 commercial reactors have been offline since two reactors at Kansai Electric Power Co.'s Oi nuclear complex in Fukui Prefecture shut down for mandatory regular checkups in September last year.
As Japan revamped its nuclear regulations in July last year, reactors are now first required to clear the regulations before resuming operation.
November 07, 2014(Mainichi Japan)

Forget protests

November 7, 2014

Kagoshima governor approves restart of Sendai Nuclear Power Plant despite protests

http://mainichi.jp/english/english/newsselect/news/20141107p2a00m0na021000c.html
KAGOSHIMA -- Kagoshima Gov. Yuichiro Ito gave his consent on Nov. 7 to restarting the Sendai Nuclear Power Plant in the Kagoshima Prefecture city of Satsumasendai despite strong protests from locals and other demonstrators who arrived from areas as far away as Fukushima Prefecture.

Gov. Ito's move came after the Kagoshima Prefectural Assembly adopted a petition calling for reactivation of the plant. Some 400 people had gathered both inside and outside the prefectural assembly chamber, trying to prevent Kagoshima from becoming the first prefecture housing a nuclear plant to approve reactivation under new safety guidelines for nuclear power, but they failed to sway officials.
Police and workers from the prefectural government headquarters closely guarded the assembly building on Nov. 7. At about 9 a.m., a group opposed to restarting the plant's reactors gathered in front of the prefectural government building, protesting that officials were ignoring public opinion.
Among the demonstrators were 12 people from Fukushima Prefecture, which hosts the Fukushima No. 1 Nuclear Power Plant, the scene of the nation's worst-ever nuclear disaster.
"The disaster taught us that there's no such thing as a safe nuclear power plant, and that humans and nuclear power can't coexist," said 58-year-old Yoshiharu Saito, an executive from an organization in the city of Fukushima. "I came here to Kagoshima to convey the feelings of Fukushima Prefecture residents who went through the disaster."
Eiji Yanase, a 60-year-old member of an organization in Saga Prefecture, which is home to the Genkai Nuclear Power Plant, also took part in the protest.
"We are seeing one fait accompli after another. I don't want the children and grandchildren of the future to have to pay the price," he said.
Also protesting was 61-year-old Shigenobu Kawahara, from Isahaya, Nagasaki Prefecture. "To stop moves toward restarting the Sendai Nuclear Power Plant will lead to halting the reactivation of other nuclear power plants," he said.
A plenary session of the Kagoshima Prefectural Assembly commenced at 10 a.m. and the 150 public gallery seats were almost fully occupied. Outside, some reactivation opponents who were unable to enter the prefectural government building shouted that they be let in, resulting in a tussle with prefectural government workers.
Anger against the move to restart the reactors resounded within the chamber, when Makoto Nakamura, chairman of the prefectural assembly's special committee on nuclear power safety measures, reported on the committee's screening results from the previous day. When Nakamura used such expressions as "the world's safest standards," jeers erupted from the public gallery, with one protester yelling out, "Are you still saying things like that?"
November 07, 2014(Mainichi Japan)

"A hasty move without sufficient debate"

November 8, 2014

Editorial: Safety questions remain over Sendai nuclear plant

http://mainichi.jp/english/english/perspectives/news/20141108p2a00m0na014000c.html
A lesson learned from the Fukushima nuclear crisis is that a catastrophic accident endangering residents' health and lives can occur at any nuclear power plant. As such, **serious questions remain over the fact that a move toward restarting the Sendai Nuclear Power Plant in Kagoshima Prefecture is steadily progressing in ignorance of this lesson.**
The Kagoshima Prefectural Assembly has adopted a petition from local businesses calling for a resumption of operations at the atomic power station, and Gov. Yuichiro Ito has also endorsed the restart of the plant. Since the mayor and the municipal assembly of Satsumasendai that is home the power station

earlier approved the reactivation of the plant, its operator Kyushu Electric Power Co. has completed procedures for gaining consent from local communities. Although the latest moves mark a milestone since new regulatory standards for atomic power plants were enforced in July 2013, it can hardly be said that all the challenges to restarting the plant have been resolved.

The government's Nuclear Regulation Authority (NRA) has not completed its procedures for giving the green light to the reactivation of the power plant. Kyushu Electric Power Co. needs to gain approval of its plan on work to improve the plant based on the NRA's assessment and the utility's safety regulations. Such being the case, one cannot help but wonder why the prefectural and municipal governments needed to **hastily** express their consent to the restart of the plant. Critics say some political parties attempted to prevent the issue from being a point of contention during a prefectural assembly election next spring. Serious doubts remain as to whether the local governments thoroughly studied the safety of the nuclear plant and other issues before approving the plant's reactivation.

We have insisted that several conditions need to be met before the restart of idled nuclear plants is approved. The mayors and governors of the municipalities and prefectures have the responsibility to protect the lives and health of local residents should a catastrophic accident occur at atomic power stations they host. The planned response to those who need assistance and preparedness to accommodate evacuees in case of a serious nuclear accident, which are incorporated in local governments' evacuation plans, are not necessarily adequate. Moreover, the effectiveness of local governments' evacuation plans is not guaranteed because there is no system under which national governments screen such plans. As such, **great confusion might be inevitable if a catastrophic accident were to occur at a nuclear plant under the current circumstances.**

Local residents' consent is an important factor in restarting idled nuclear reactors. The Kagoshima Prefectural Government has held briefing sessions in five municipalities around the Sendai plant with the attendance of NRA officials. However, they failed to provide a sufficient explanation in response to questions raised by local residents about the need to restart the power station and the effectiveness of the evacuation plans. Supplementary briefing sessions that the prefectural government held subsequently failed to convince local residents of the plant's safety.

Surveys conducted after these sessions were superficial, merely asking the attendees to make overall comments on the sessions and what they did not understand. **A system should be created to sufficiently listen to local residents' opinions and convince them of the plant's safety**. However, the organizer of the briefing sessions obviously failed to sufficiently do so.

If a catastrophic accident were to occur at the Sendai nuclear plant, not only Satsumasendai but a**lso surrounding municipalities would be affected**. Therefore, many residents of municipalities around the power station are apparently dissatisfied with Kyushu Electric Power's intension to go ahead with the restart of the plant after gaining approval from only the Kagoshima governor and the municipality that hosts the plant.

Needless to say, the responsibility for restarting nuclear plants does not lie solely with local communities that host such facilities. The central government should judge whether to go ahead with the restart of individual nuclear plants after clearly showing a road map toward creating a society that will not rely on atomic power.

Going ahead with the procedure for restarting the Sendai nuclear plant before meeting these conditions should be criticized as a hasty move without sufficient debate.

November 08, 2014(Mainichi Japan)

Minamata group says safety takes back seat again

November 9, 2014

Minamata disease group opposes restart of Sendai nuclear plant

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201411090008

By YASUSHI SAITO/ Staff Writer

MINAMATA, Kumamoto Prefecture--Minamata disease victims and supporters have joined the protest against the restart of nuclear reactors in Kumamoto Prefecture, saying **safety again is taking a back seat in the drive for economic growth.**

"If they miss the danger of nuclear plants because of economic priorities, they have not learned the lessons from Minamata disease," said Koichiro Matsunaga, who heads the group "Stop restarting nuclear plants Minamata."

Formed in September by eight members, including three Minamata disease patients, the group plans to collaborate with local organizations to oppose the resumption of operations at the Sendai nuclear power plant in Satsuma-Sendai, Kagoshima Prefecture.

Kagoshima Governor Yuichiro Ito on Nov. 7 approved the plant's restart, the first such green light under stricter safety standards that were established following the Fukushima nuclear disaster in March 2011. The city of Minamata is about 40 kilometers from the plant at the shortest distance.

Minamata disease, a sometimes fatal neurological disorder that causes numbness and vision problems, was officially recognized as a health hazard 58 years ago. Caused by consumption of marine products contaminated by mercury discharged into the sea by a chemical factory, the disease remains a negative symbol of Japan's period of high economic growth.

Matsunaga said he sees similarities between the Sendai plant's restart and Minamata disease.

"While human lives should take priority, the priority has been placed on corporate profits," Matsunaga said. "(The government) has not learned lessons from Minamata and Fukushima.

Matsunaga, 51, visited Iitate in Fukushima Prefecture in February 2013. Many residents of the mountain village, whose center is about 40 km from the crippled Fukushima No. 1 nuclear power plant, remain in evacuation because of the high levels of radiation around their homes.

Matsunaga said that when he saw the Iitate village office, the vacant houses in the central area and temporary housing, he thought: "Residents cannot return home even if they wanted to.

"The Fukushima nuclear power plant has been tormenting people who were born and brought up in this village. There is no guarantee that Minamata can avoid the same fate."

He cited two problems with restarting the reactors at the Sendai plant: inadequate evacuation plans in the event of a disaster and a lack of trust in the government.

Matsunaga noted that the central government said it would take responsibility for the resumption of operations at the nuclear plant.

"But it did not take responsibility for Minamata disease, either," Matsunaga said.

The mayor of Satsuma-Sendai and the city assembly approved the reactor restarts earlier, on Oct. 28.

Matsunaga's group urged the Minamata assembly to adopt a written statement opposing the reactor restarts, but the assembly rejected it.

"Despite Minamata disease, a public hazard, economic priorities always come first," said Kenji Nagamoto, a 55-year-old Minamata disease patient. "I am disappointed we were not understood."

Minamata city plans to accept 6,645 evacuees from Izumi, Kagoshima Prefecture, if a serious accident occurs at the Sendai nuclear plant.
"With evacuation plans insufficient, to what extent can the central government assure the people's security?" Matsunaga asked.
Minamata Mayor Hiroshi Nishida on Nov. 8 also expressed concerns about the aftermath of a potential nuclear accident.
"We hope the central government will give a sufficient explanation to eliminate the anxieties of Minamata citizens who will accept evacuees, as well as resolve the problem responsibly and with sincerity," Nishida said in a statement.
Another Minamata-based group involved in possible evacuation procedures asked the Kagoshima governor in May to oppose the resumption of the plant. The group's view was not reflected in his decision.
"If a serious accident occurs, Minamata will also be subjected to evacuation," said Takafumi Nagano, head of the group. "I feel angry that Kagoshima Prefecture made the judgment (to resume operations) alone."
Nagano also said the central government's assurances cannot be trusted.
"Industry minister Yoichi Miyazawa said he will stand at the forefront to assume responsibility. But I cannot believe what he said when containment of the Fukushima plant accident is still not evident," Nagano said. "They only seem to be rushing to restart operations of the (Sendai) plant."

Sendai not a good model for restart

November 8, 2014

EDITORIAL: Sendai nuclear plant should not be model for reactor restarts

http://ajw.asahi.com/article/views/editorial/AJ201411080035

Kagoshima Governor Yuichiro Ito agreed on Nov. 7 to allow Kyushu Electric Power Co. to restart operations at its Sendai nuclear power plant. Ito said his decision was based on the opinions of the Kagoshima prefectural assembly, the mayor and the municipal assembly of Satsuma-Sendai, where the plant is located.
The mayors of the eight municipalities located within 30 kilometers of the nuclear plant did not raise objections to the governor's decision.
Local governments of areas hosting nuclear power plants have no legal power to approve or reject decisions on whether to bring reactors back online. However, the consent of the local communities is regarded as an essential procedure for a reactor restart.
The Kagoshima governor's decision has effectively ensured that the Sendai plant will resume operations. It will be the first nuclear power plant to start running again under stricter safety standards set in the aftermath of the disaster that struck the Fukushima No. 1 nuclear power plant in March 2011.
Currently, 18 reactors at 12 nuclear plants across the nation are undergoing safety assessments by the Nuclear Regulation Authority under the new standards.
The administration of Prime Minister Shinzo Abe has pledged to restart all reactors that have passed the nuclear watchdog's safety reviews. The Abe administration intends to use the case of the Sendai plant as the template for the restarts of other plants.

But the process leading to the reactivation of the idled reactors at the Sendai plant has raised serious doubts about the government's approach to the issue. The government is moving toward restarting the Sendai plant's reactors without making sufficient efforts to ensure the local communities are prepared for serious accidents.

SAFETY OF LOCAL RESIDENTS NOT ENSURED

First of all, the plan for emergency evacuations is grossly insufficient.

There is still no reliable plan for securing buses needed to evacuate local residents and dealing with expected traffic jams during emergencies, despite the fact that these issues have a direct bearing on the safety of local residents. The two problems were among the major factors that caused serious confusion in local communities during the Fukushima nuclear crisis, jeopardizing the safety of the residents.

The Fukushima meltdowns brought to the fore the fact that it is impossible to guarantee 100 percent safety of nuclear power generation, which entails risks that cannot be controlled.

If it is still necessary to operate nuclear reactors, authorities must take measures to minimize the risk for residents in host communities that would be affected by accidents and evaluate the sufficiency of those measures in ways that reassure the residents.

Six meetings were held since October to explain the reactor restart plan to local residents. But five of the meetings were focused exclusively on the technical and abstruse content of the safety assessment by the Nuclear Regulation Authority.

These meetings failed to ease the simple anxieties of residents about resuming operations at the Sendai plant. Nor were the meetings used to incorporate residents' proposals into safety measures.

In a survey of participants conducted immediately after the meetings, 47 percent of the respondents said the talks were not helpful. In addition, 60 percent of the respondents said there was at least one issue they did not understand despite the explanations given at the meetings.

In the end, the prefectural governor, the mayors of the municipalities and the local assemblies all said the central government is ultimately responsible for safety measures and evacuation plans.

Local governments, such as prefectures and municipalities, are involved in the process of restarting reactors because the safety of their residents is at stake.

The central government acted in a similarly inadequate way. In response to requests from the prefectural government, the Abe administration dispatched government employees and senior officials to the prefecture.

In local assembly sessions and on other occasions, these officials repeatedly stressed that "the central government takes the responsibility" for ensuring the safety of local communities.

On Nov. 3, Yoichi Miyazawa, the minister of economy, trade and industry, traveled to the prefecture in Kyushu and spoke about the need to restart the plant.

UNCLEAR MEANING OF 'TAKING RESPONSIBILITY'

What exactly does it mean that the government "takes the responsibility?" We know nothing specific about the government's promise.

The Fukushima nuclear disaster has created a raft of daunting challenges: rebuilding the livelihoods of victims; decommissioning the disabled reactors; dealing with a growing amount of radioactive water; decontaminating areas polluted with radiation; and disposing of radioactive waste. The government has not taken responsible actions in any of these formidable challenges.

Tokyo Electric Power Co. is directly responsible for the accident. Electricity consumers and taxpayers eventually have to pay the bills for compensation payments to victims and related government expenditures.

A severe accident at a nuclear power plant causes tremendous damage to the host communities, and the effects of the damage are felt for at least several decades. **The government is incapable of taking the responsibility to deal with all the consequences of a major nuclear accident.**

If the government says it will take the responsibility for the safety of local residents without paying attention to this reality, it is simply making an empty promise.

There is something else the government should do responsibly for the host communities: provide assistance to help end their financial dependence on nuclear power plants. The Abe administration has pledged to reduce the nation's dependence on nuclear energy.

ENDING RELIANCE ON NUCLEAR POWER

Many local governments in areas hosting nuclear plants are willing to approve plans to restart offline reactors. That's because they are generally underpopulated areas that cannot maintain their communities unless they accept nuclear plants to obtain related state subsidies and tax receipts.

To reduce their dependence on nuclear plants, it is vital to change the reality that forces them to accept such plants in the first place.

This is an immense challenge that the local governments cannot deal with on their own. That makes it all the more important to start taking steps to tackle this challenge now.

The government should take measures to promote recycling-oriented industries that make greater use of local resources and develop necessary human resources. It should also reorganize its energy policy budget, which has been focused on promoting nuclear power generation, and work out a new energy policy program featuring measures to reform the power supply system and promote the use of renewable energy sources. It is also the responsibility of the government to initiate debate on these issues involving areas that consume electricity.

In an Asahi Shimbun opinion poll conducted on Oct. 25 and 26, 55 percent of the respondents voiced opposition to the idea of resuming operations at nuclear plants. Similar polls carried out by other newspapers have also found a majority of the respondents cautious about the idea.

If the process of restarting the Sendai plant has become a model, the decision on whether to bring a reactor back online will be effectively left to the host communities. This will cause the will of the entire nation to become increasingly irrelevant. Would such a situation be acceptable?

There is a heap of problems concerning the nuclear power policy that could put the interests of the host communities at odds with those of the nation as a whole. They include, for example, how to store spent nuclear fuel and how to dispose of radioactive waste.

Debate on whether to start running the Sendai plant again has raised the question of how to harmonize the conflicting interests of the communities hosting nuclear plants and the nation as a whole.

--The Asahi Shimbun, Nov. 8

Sendai restart: A "dangerous precedent"

November 12 , 2014

Bad precedent for nuclear restarts

http://www.japantimes.co.jp/opinion/2014/11/12/editorials/bad-precedent-nuclear-restarts/#.VGWoq8l5B1s

Following the recent go-ahead given by Kagoshima Prefecture and the host city of Satsumasendai, Kyushu Electric Power Co.'s Sendai nuclear power plant is likely to be reactivated by early next year — the first under safety guidelines adopted in the wake of the March 2011 meltdowns at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant. But the move contains serious safety and procedural problems, and there is a risk that the Abe administration and power companies will use it as a precedent to rush the restart of more nuclear power plants without fully addressing the legitimate safety concerns of local residents.

the lessons from the Fukushima nuclear disaster, municipalities within 30 km of a nuclear power plant are required to work out evacuation plans for residents in the event of a serious accident. In the case of the Sendai plant, eight municipalities, in addition to Satsumasendai, were required to draw up evacuation plans.

In a September meeting of the national government's nuclear disaster management council, Prime Minister Shinzo Abe described the evacuation plans as "concrete and rational" despite the absence of a formal procedure for the central government to examine such plans. It is unclear how detailed an examination the government gave the plans and whether it checked their operability against worst-case scenarios. Many local residents who took part in a series of explanatory meetings expressed concerns about safety — which are understandable given the procedural setup.

Located in an area with a history of volcanic activity, the Sendai plant is viewed as being vulnerable to future possible eruptions. Kyushu Electric says that if an imminent eruption is predicted, it will take the nuclear fuel out of the plant's two reactors as a safety precaution. But it is difficult to predict volcanic eruptions and the company has yet to decide how to transport the fuel and where it can be safely stored.

The plant itself has problems. Filtered ventilation systems to reduce the amount of radioactive materials released from the reactor core in emergencies will not be installed for another two years. And the plant has not established a permanent off-site facility to serve as a command center in emergencies. A temporary facility will be used for the time being.

In a news conference held after giving his consent to the restart, Kagoshima Gov. Yuichiro Ito declared that there would be "no issue of life or death" for local residents in the event of an evacuation, citing the Nuclear Regulation Authority's assessment of possible radiation fallout from a severe accident at the Sendai plant. This statement ignores key lessons of the Fukushima crisis — that a severe nuclear accident can quickly spin out of control, and that even if radiation exposure does not claim any lives, the stress caused by evacuation and loss of property can cause grave and sometimes fatal health issues.

Because Ito decided that approval by the host city and Kagoshima Prefecture are sufficient to approve the restart, the exclusion of the eight other municipalities in the approval procedure for the Sendai plant may be used as a precedent by the Abe administration and other power firms as there are no legal regulations concerning which municipalities should be involved in such decisions. In short, the will of the people in nearby municipalities who may be directly affected by a severe nuclear accident can be completely ignored.

Trade and industry minister Yoichi Miyazawa said that if a nuclear accident occurs, the national government will be responsible for handling it. But the experience of the Fukushima disaster shows that such a promise means little in reality.

As the seemingly last key hurdle for the restart of the Sendai nuclear power plant is lifted, a dangerous precedent has been set and many fundamental questions remain unanswered.

NRA panel confirms assessment on Tsuruga fault

November 19, 2014

NRA panel: Fault under Tsuruga reactor could move

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Nov. 19, 2014 - Updated 13:04 UTC+1
Experts from Japan's nuclear regulator have determined that a fault running under a reactor at the Tsuruga nuclear plant in Fukui Prefecture, central Japan, could move in the future.

The Nuclear Regulation Authority concluded in May last year that the fault could be active. The plant's operator, Japan Atomic Power Company, then submitted new data disputing that assessment.

But after looking over that data, the NRA's panel of experts on Wednesday reaffirmed last year's conclusion that the fault could shift again.

In its draft assessment report, the panel cited a recently discovered fault north of the reactor that appears to extend from the fault under the reactor.

The panel said it couldn't rule out that the new fault had shifted in the past 120,000 to 130,000 years. Based on new regulations, the authority defines a fault that shifted within that period as potentially active. Reactor buildings and other key nuclear facilities are not allowed to be built atop such faults.

The report pointed out that the new fault could be connected to the fault beneath the reactor.

The panel will submit its assessment to the authority after hearing from other experts who did not participate in the discussions.

If the authority does not overturn the panel's assessment, the reactor cannot be restarted and may have to be decommissioned.

Japan Atomic Power Company Vice President Taiki Ichimura criticized what he described as a unilateral assumption, and expressed confidence it would be proved wrong.

He said the company welcomes the opportunity to challenge the panel's assessment.

Fault under Tsuruga IS active

November 20, 2014

Nuclear watchdog panel: Fault under Tsuruga reactor is active

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201411200043

THE ASAHI SHIMBUN

A fault line beneath the No. 2 reactor of the Tsuruga nuclear power plant is indeed active, an expert panel of the Nuclear Regulation Authority concluded Nov. 19, drawing criticism from the plant's operator.

Japan Atomic Power Co. vowed to challenge the panel's conclusion, which, if it stands, would force the company to decommission the reactor under new safety rules.

"It is a rash, one-sided judgment and just a presumption," Japan Atomic Power Vice President Taiki Ichimura told reporters after the Nov. 19 meeting of the NRA panel. "We are confident that we will be able to rebut and disprove the conclusion."

The NRA in May 2013 pointed out the possibility that the fault line beneath the No. 2 reactor building of the Tsuruga plant in Fukui Prefecture could move in conjunction with the nearby Urasoko active fault.

Japan Atomic Power, citing its own survey results, said the fault under the reactor was not connected to the Urasoko fault's branch and was not active.

After reassessing the conditions at the Tsuruga plant, the expert panel said in its draft report Nov. 19 that the fault under the reactor building "could move in the future," repeating the NRA's stance last year.

The NRA is expected to finalize the draft after it is examined by other experts.

Under stricter safety standards introduced after the Fukushima nuclear crisis triggered by the March 2011 Great East Japan Earthquake and tsunami, reactor buildings cannot be built directly above active faults. Japan Atomic Power will likely be unable to restart the No. 2 reactor unless the panel's draft report is dismissed.

The NRA's assessment of the fault last year came when Kunihiko Shimazaki, a seismologist known for his tough attitude toward power companies, was a deputy chairman of the watchdog. Utilities and ruling coalition officials criticized Shimazaki over his "hurried conclusion" on the Tsuruga plant.

Although Shimazaki's term ended in September and he was replaced, the NRA's position on the fault was not overturned.

The fault line survey at the Tsuruga plant was originally started at the request of the now-dissolved Nuclear and Industrial Safety Agency.

Fault inspections are a separate process from the safety screenings required to restart reactors, so Japan Atomic Power can still submit an application to resume operations at the reactor.

However, NRA Chairman Shunichi Tanaka has said he would respect the expert panel's conclusion when deciding whether to allow reactors to restart.

(This article was written by Chikako Kawahara and Daiki Koga.)

Experts retain Tsuruga reactor fault judgment in draft report

http://mainichi.jp/english/english/newsselect/news/20141120p2g00m0bu027000c.html

TOKYO (Kyodo) -- A panel of experts under Japan's nuclear regulator on Wednesday reaffirmed an earlier judgment that a reactor at the Tsuruga nuclear station is sitting right above an active fault, a move that could force the operator to permanently shut down the unit.

After the Nuclear Regulation Authority acknowledged last year that the fault in question is active, Japan Atomic Power Co. has submitted additional data in trying to have it overturned.

The experts, however, concluded that the new data offered no evidence to sway the judgment as it compiled a new draft report on the fault's assessment.

A zone of rock fragments called D-1, running directly beneath the No. 2 reactor at the plant, is a "fault that could move in the future," the draft report said.

Under the country's nuclear safety requirements, plant operators are not permitted to build reactors and other important safety facilities directly above active faults -- currently defined as those that have moved in the last 120,000 to 130,000 years.
The draft report will likely be finalized by an NRA decision-making panel after making amendments to details -- which will make it difficult for Japan Atomic Power to resume the unit's operation.
All of Japan's nuclear reactors are currently offline. To go back online, they must pass the regulator's safety screening process based on tougher regulations adopted in the wake of the 2011 Fukushima nuclear crisis.
Japan Atomic Power Vice President Taiki Ichimura said he believes the assessment is not based on specific evidence and it is a "one-sided assumption."
"I'm sure we can counter the judgment," he told reporters after the panel meeting, adding he will ask the NRA to create an occasion for more discussion.
If the company has to decommission the unit, its business would be negatively affected by scrapping costs and a loss in asset value.
See also :

Fault beneath Tsuruga nuclear reactor is active, watchdog panel reaffirms
Kyodo
http://www.japantimes.co.jp/news/2014/11/20/national/fault-beneath-tsuruga-nuclear-reactor-is-active-watchdog-panel-reaffirms/#.VG4sc8l5B1s
A reactor at the Tsuruga nuclear station is sitting right above an active fault, a panel of experts under Japan's nuclear regulator has reaffirmed — a move that could force the operator to shut the unit for good. [...]

Restart depends also on Government's stability

November 22, 2014

Poll loss might trigger meltdown in LDP's reactor restart campaign
http://www.japantimes.co.jp/news/2014/11/22/national/politics-diplomacy/poll-loss-might-trigger-meltdown-in-ldps-reactor-restart-campaign/#.VHCliMl5B1s
JIJI
Prime Minister Shinzo Abe may face difficulty restarting the nation's idled nuclear reactors if his Liberal Democratic Party fares poorly in the House of Representatives election on Dec. 14.
The Abe administration said it will reactivate any units confirmed safe by the new testing regime set up by the fledgling Nuclear Regulation Authority in July 2013. The NRA replaced the previous regulator, the Nuclear and Industrial Safety Agency, after the March 2011 triple meltdowns at Tokyo Electric Power Co.'s Fukushima No. 1 plant revealed watchdog was too cozy with the industry.
The government claims that Japan needs to restart the reactors to prevent electricity rates from rising further and hampering the economy. Depending on the election results, it might have a tough time gaining consent for restarts from municipalities that host reactors.
The Ministry of Economy, Trade and Industry estimates that the cost of procuring fuel for thermal power generation will climb ¥12.7 trillion between fiscal 2011 and fiscal 2014, which ends next March.
Although the price of oil has recently been sinking, the jump in fossil fuel costs since the Fukushima crisis, exacerbated by the Bank of Japan's weakening of the yen, have prompted several utilities to raise rates.

New METI chief Yoichi Miyazawa has said that reactors should be reactivated for the sake of the public if confirmed safe.
The No. 1 and No. 2 reactors at Kyushu Electric Power Co.'s Sendai power plant in Kagoshima Prefecture are expected to be the first to go back online because they passed the new safety tests in September. In November, Miyazawa visited municipalities in Kagoshima in a bid to gain public consent for restarting the two units.
The No. 3 and No. 4 reactors as Kansai Electric Power Co.'s Takahama plant in Fukui Prefecture are in the final stage of the NRA's screening process.
But a senior METI official said that political turbulence must be kept to a minimum first. "**Only a stable government can push ahead with the restart policy" because many people are now opposed to nuclear power,** the official said.

The 20-year extension

November 23, 2014

Kepco weights new lease of life for geriatric reactors

http://www.japantimes.co.jp/news/2014/11/23/national/kepco-weights-new-lease-life-geriatric-reactors/#.VHG-V8l5B1s

by Eric Johnston
Staff Writer
In a decision that will set a precedent for Japan's rapidly aging nuclear reactors, Kansai Electric Power Co. must soon choose whether to restart reactors 1 and 2 at its Takahama plant in Fukui Prefecture and operate them beyond the 40-year threshold, the first time a Japanese utility has faced such a dilemma.
The new government guidelines adopted in 2012, 40 years is the maximum limit, in principle, on how long the nation's reactors are allowed to operate.
After that, they are supposed to be decommissioned, a process that can take decades. However, if a utility decides to continue to use them, it can apply for a one-time-only extension of 20 years if it meets a series of additional safety tests the government describes as "stringent."
Currently, all of Japan's 48 commercial reactors are idled. To apply for a two-decade extension on those now at or close age 40, their operators have to apply for special government inspections by no later than next July. These checks will be more expensive than the inspections currently being carried out on younger reactors.
Of Fukui's 13 commercial reactors, 11 of which are operated by Kansai Electric, five are, or soon will be, at the 40-year limit. Another three are over 35 years old, and the utility will have to decide their fate in the next few years.
The two Takahama reactors went into operation in November 1974 and November 1975, with a capacity of 826,000 kilowatts each.

Earlier this month, Kansai Electric President Makoto Yagi said the utility would consider whether to decommission units based on whether they could still turn a profit if granted a 20-year extension. But Fukui politicians have cautioned the company to think about more than just the bottom line.

"What's important is to think about plant operation and decommissioning at the same time. Local governments, as well as utilities, have to check the decommissioning process and this will require funding," Fukui Gov. Issei Nishikawa said last month. "Where will midterm storage facilities be built? Where will a final storage facility for the spent fuel and nuclear waste be located? It's necessary for the central government to be deeply involved."

In September, Fukui Vice Gov. Tatsuji Sugimoto warned Kansai Electric Vice President Shigeki Iwane that "if you're going to discuss decommissioning, you won't get anywhere unless you treat finding a midterm storage facility for the spent fuel, the problem of disposing of nuclear contaminated materials, and how decommissioning will impact the local economy as **one set of issues**."

Decommissioning is of special concern to Fukui because it threatens the state subsidies that have been flowing into the prefecture for four decades. Between the 2007 and 2012 fiscal years, Fukui received at least ¥20 billion annually. From 1974 to 2012, prefectural data show Fukui received about ¥390 billion under three laws designed to reward local governments if they agreed to host nuclear plants.

Much of this has gone into roads, bridges, dams and other projects that keep the coffers of local construction companies full, provide employment for their workers as well as in local service industries, who then return the money via donations for local and national pro-nuclear lawmakers of the Liberal Democratic Party.

But while Kansai Electric, local governments in Fukui, the governor and major corporations in the region support both the restart of the prefecture's newer reactors and, if possible, extending the Takahama units for another 20 years, at least one survey shows the rest of Kansai appears to be generally fine without nuclear power.

The Institute of Nuclear Safety System Inc., established and owned by Kansai Electric in Mihama, Fukui Prefecture, conducted a multiple choice survey last fall on how people in six Kansai prefectures and the southern part of Fukui felt about power generation, especially nuclear energy.

The results showed that, despite pressure from the pro-nuclear lobby for reactor restarts and higher electricity bills, 46 percent of the respondents felt either that atomic power should not be used or that other sources of electricity should be tapped. Although another 45 percent believed the use of nuclear energy was "inevitable," only 8 percent replied it would be a "good" source of power.

In addition, the survey indicated that, despite Kansai Electric jacking up its power rates by 10 percent overall in spring 2013, not many of the respondents were overly concerned.

"The negative effects of the long-term suspension of nuclear power generation have not been recognized," said institute official Atsuko Kitada.

Then there is a question the survey did not address: to what extent should the rest of Kansai be involved in decisions to restart or extend the operational life of the Fukui reactors.

Since the March 2011 Fukushima meltdowns, relations between Fukui and other Kansai prefectures that rely on its nuclear power plants have often been tense. Leaders in neighboring Kyoto and Shiga whose towns lie within a 30-km radius of the Fukui reactors want more of a say in their future. Anti-nuclear groups add that talk of extensions is underway even as the nation has yet to end the crisis at the Fukushima No. 1 plant.

"It is particularly unconscionable for the Abe government to open the way for old reactors to operate when the Fukushima accident is ongoing," said Aileen Mioko Smith of Green Action, a Kyoto-based anti-nuclear lobby.

In October, Maizuru, a port city in Kyoto Prefecture that lies less than 10 km from the Takahama plant in Fukui, called for the **definition of "local government consent"** to be expanded to those municipalities within a 30-km radius of the facility since, by law, they have to draw up evacuation plans in case of a disaster. Around 144,000 people, including Maizuru's 88,600 residents, live within 30 km of Takahama. But Nishikawa rejects such calls.

"I recognize the definition of local consent as meaning Fukui Prefecture and the towns and villages that host the power plants," he told reporters last month. "Since it's been those areas closest to the nuclear plants that have borne the greatest risks over the past 40 or 50 years, there is a natural difference between them and other areas (outside Fukui)."

Kansai Perspective appears on the fourth Monday of each month, focusing on Kansai-area developments and events of national importance with a Kansai connection.

Restart Temperature Engineering Test Reactor (Oarai)?

November 26, 2014

JAEA eyes restart of next-generation nuclear reactor

JIJI

The Japan Atomic Energy Agency on Wednesday applied for a Nuclear Regulation Authority examination in an effort have a next-generation experimental nuclear reactor restarted.

Temperature Engineering Test Reactor in the town of Oarai, Ibaraki Prefecture has an output capacity of 30,000 kilowatts, according to the government-backed agency.

No active fault runs under the ground where the facility is located, the agency said. None of the reactor's important equipment would sustain major damage even if the reactor were hit by a big earthquake that causes ground motion of up to 700 gals, it said.

The facility stands 36.5 meters above sea level, against the maximum assumed tsunami height of 17 meters, the agency said.

In the basic energy policy plan adopted in April, the government stated that Japan will promote research and development of the next-generation reactor. An education and science ministry panel has also sought an early restart of the facility.

The reactor uses helium gas as the coolant. The country's commercial light-water reactors are cooled with water.

The next-generation reactor is said to be safer than light-water reactors. It is still uncertain when the new one will be put into practical use, however.

The test facility was halted for a checkup in February 2011, the month before a huge earthquake and tsunami hit Japan, triggering a nuclear disaster at Tokyo Electric Power Co.'s Fukushima No. 1 power station.

"Inconceivable" or "unlikely"?

November 27, 2014

Court rejects demand to prevent reactors' restart

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Nov. 27, 2014 - Updated 10:14 UTC+1
A court has rejected a petition by residents seeking not to allow the restart of nuclear reactors in Fukui Prefecture, central Japan.

About 180 residents in the nearby prefectures of Shiga and Kyoto and elsewhere had filed the petition about 4 reactors at the Ohi and Takahama nuclear power plants. They are run by Kansai Electric Power Company.

The residents argued that a powerful earthquake and tsunami could lead to a severe accident.

The Otsu District Court dismissed their demand on Thursday.

Presiding Judge Yoshihiko Yamamoto said even though the residents claimed that the restart is imminent, the Nuclear Regulation Authority is conducting screenings based on the premise of resumption.

Yamamoto said the reactors will never be brought back online, unless officials forge a coordinated accident preparedness plan among local municipalities and other parties, as well as evacuation plans for residents.

He said it is inconceivable that the NRA would allow the restart in a hasty manner.

He concluded that there is no need to order the operator not to restart the reactors.

The NRA is expected to make public a draft report by the end of the year that would say the 2 reactors at the Takahama plant have passed its screening.

Kansai Electric calls the court decision appropriate. The utility says it will take every possible measure to ensure safety, and seek the understanding of local residents.

A leader of the residents who petitioned, Yoshinori Tsuji, told reporters that the court said the restart is impossible without a coordination agreement or evacuation plans.

Tsuji said that despite that, the court has left the final judgment to the NRA. He said the court made an unjust decision.

Court nixes demand seeking suspension of Takahama, Oi reactor restart

http://mainichi.jp/english/english/newsselect/news/20141127p2g00m0dm073000c.html
OTSU, Japan (Kyodo) -- A Japanese court on Thursday rejected a demand by some western Japan residents seeking suspension of Kansai Electric Power Co.'s planned restart of nuclear reactors at its Takahama and Oi plants, now offline for a safety screening by the country's nuclear regulator.
The decision by the Otsu District Court in Shiga Prefecture contradicts a ruling by another district court in May not to allow the restart of two reactors at the Oi complex in Fukui Prefecture. Kansai Electric has appealed the May ruling.

In the latest case, residents in Shiga claimed there are many geological faults around the reactors and there is a strong likelihood that they will cause more serious earthquakes and tsunamis than currently anticipated. Shiga neighbors Fukui, which lies to the north.
Both four-unit plants' Nos. 3 and 4 reactors are currently undergoing the Nuclear Regulation Authority's screening based on tougher safety requirements imposed following the 2011 Fukushima meltdowns.
The Takahama site's two units are in the final phase of the assessment process which is necessary for any nuclear reactor in Japan before being allowed to go back online. Their operations could be resumed as early as next spring.
In the decision, however, Presiding Judge Yoshihiko Yamamoto said it is "**unlikely"** that the safety regulator will make a hasty decision to allow the reactors to restart, dismissing the residents' claim that resumption is looming and a severe accident could occur such as in the Fukushima crisis.
Kansai Electric, which had sought to have the residents' request rejected, said the court decision is "reasonable" and it will seek to restart the nuclear plants "as soon as possible" after safety is confirmed by the regulator.
In the wake of the Fukushima disaster that made it difficult for power companies to keep running their nuclear plants, judicial rulings on the plants' operation have been divided.
When the Fukui District Court ordered Kansai Electric Power to suspend the restart of the Oi units in May, the ruling admitted the importance of nuclear power plants for society, but pointed out that they are "merely a tool for generating electricity and thus inferior to people's fundamental rights (to life)."
In a similar case lodged in Osaka to seek suspension of the two Oi units, however, a district court rejected the demand in April 2013. A high court upheld the decision in May this year, saying that it is not appropriate for a court to decide on the matter before the government does.
Before the 2011 nuclear crisis was triggered by a massive earthquake-tsunami disaster, there were a few court judgments that denied the operation of nuclear facilities but all were later overturned by higher courts, including the Kanazawa District Court decision in 2006 to shut down a reactor operated by Hokuriku Electric Power Co.
See also :

Suit against Fukui reactor restarts fails

http://www.japantimes.co.jp/news/2014/11/27/national/suit-against-fukui-reactor-restarts-fails/#.VHdi-Ml5BLM
Kyodo
OTSU, SHIGA PREF. – The Otsu District Court on Thursday rejected a demand by Shiga residents to halt the restart of nuclear reactors at Kansai Electric Power Co.'s Takahama and Oi 's ruling, residents of Shiga argued that the many geological faults in the vicinity could cause stronger earthquakes and tsunami than currently anticipated.
Both nuclear plants have four reactors each. Two at each plant are being screened by the Nuclear Regulation Authority based on tougher safety requirements imposed following the triple core meltdown in Fukushima in March 2011.
The Takahama site's two units are in the final phase of the assessment process. They could be back in operation as early as next spring.
In Thursday's decision, presiding Judge Yoshihiko Yamamoto said it is unlikely the NRA will be overly hasty in allowing the reactors to resume operation, dismissing the residents' claim that resumption is looming and a severe accident could occur.

Kansai Electric said that the ruling was “reasonable” and that it will seek to restart the reactors “as soon as possible” after they are confirmed safe by the NRA.
Since the Fukushima disaster, judicial rulings on nuclear power plants have been divided. When the Fukui District Court ordered Kansai Electric to suspend the restart of the Oi reactors in May, the ruling affirmed their importance to society but pointed out they are “merely a tool for generating electricity and thus inferior to people’s fundamental rights.”
A similar case lodged in Osaka to halt the two Oi units was rejected by the district court in April 2013. A high court upheld the decision in May this year, saying it is not appropriate for a court to decide on the matter before the government does.
Before the Fukushima disaster, a few court judgments had sided against nuclear power plants, but all were later overturned by higher courts, including a Kanazawa District Court decision in 2006 that ordered the closure of a reactor run by Hokuriku Electric Power Co.

Sendai: Not before February

November 27, 2014

Restart of Sendai plant in February at earliest

http://www3.nhk.or.jp/nhkworld/english/news/20141127_27.html
Nov. 27, 2014 - Updated 09:26 UTC+1
Restarting of a nuclear power plant in Kagoshima Prefecture, southwestern Japan, will not take place before February, due to a document revision.

In September, the Sendai plant became the first in Japan to pass new government regulations introduced after the 2011 accident at the Fukushima Daiichi plant. The prefecture's governor and assembly have consented to a restart.

The plant's operator, Kyushu Electric Power, must now gain approval for a construction plan by explaining facility designs in detail and a set of maintenance rules on emergency responses.

The company on Thursday said at a regulators' meeting that it will present a revised construction plan for the plant's No.1 reactor in early December after improving its explanations about anti-earthquake measures.

The utility says it will also present revised versions of a construction plan for the No.2 reactor, and a set of emergency rules for both reactors this year.

Kyushu Electric wants to restart the No.1 reactor first.

But that would take at least until February, pending the regulatory agency's approval for the construction plan and inspections of new safety measures.

Kepco hoping to operate Takahama beyond the 40-year limit

December 1, 2014

Kepco inspects aging Takahama reactors for chance at 20-year extension

http://www.japantimes.co.jp/news/2014/12/01/national/kepco-inspects-aging-takahama-reactors-for-chance-at-20-year-extension/#.VHyv2Ml5Cos

Kyodo

The reactors are the No. 1 and No. 2 units at the Takahama nuclear plant.

Safety requirements adopted after the 2011 Fukushima nuclear crisis include a provision requiring operators to shut and dismantle reactors when they are 40 years old. But the nuclear regulator may grant a one-time extension of up to 20 years if utilities carry out thorough checks on their safety systems and the integrity of the containment vessel.

Seven of Japan's 48 nuclear reactors are either 40 years old or close to it. Kepco was the first utility to declare it would try to keep old reactors in action after the Fukushima meltdowns, while the government has sought to have old units shut.

Kepco has judged that keeping the two reactors going would help to repair a balance sheet saddled with costly fossil fuel imports, despite the hefty price tag for equipment upgrades and new investment in safety.

All of the nation's reactors remain offline pending safety checks.

Kepco, which serves Osaka and surrounding areas, will examine a range of factors such as the state of the welding of the reactor pressure vessels — which contain the nuclear fuel.

But the company will then need to apply for Nuclear Regulation Authority safety screening based on the new regulations and obtain approval before the units can come back online.

Kepco aims to have its checks complete and to ask for NRA screening as early as next spring.

Takahama's No. 1 unit turned 40 last month and the younger No. 2 unit is due to hit the barrier in November next year.

The pro-nuclear government of Prime Minister Shinzo Abe has urged utilities to decide quickly on whether to scrap their aging reactors, apparently in an attempt to ease concerns over the safety of nuclear power by promoting the shutdown of old facilities and bringing newer reactors back online.

KEPCO begins special checks seeking to keep old nuclear units

http://mainichi.jp/english/english/newsselect/news/20141201p2g00m0dm048000c.html

OSAKA (Kyodo) -- Kansai Electric Power Co. on Monday launched special checks on its two aging nuclear reactors at the Takahama plant, seeking to operate them beyond the limit of 40 years despite public concerns over the safety of old nuclear facilities in Japan.

Under tighter safety requirements adopted after the 2011 Fukushima nuclear crisis, reactors are not allowed to operate more than 40 years in principle to ensure safety. The nuclear regulator may grant a one-time extension of up to 20 years, but utilities seeking to extend the operational periods must conduct special checks that set a high hurdle to clear and require hefty costs.

Seven of Japan's 48 nuclear reactors, including the Takahama Nos. 1 and 2 units on the Sea of Japan coast in Fukui Prefecture, are around 40 years old. Kansai Electric was the first power company that announced its intention to keep old reactors in operation after the Fukushima meltdowns, while the government has sought to promote shutdowns of old facilities.

Kansai Electric has judged that keeping the two reactors would contribute to improving its earnings that have deteriorated due to a surge in fossil fuel costs in the absence of nuclear power, despite massive costs for upgrading equipment and enhancing the safety of the plant. Currently, all the reactors in Japan remain offline.

Under the special checks, which are expected to take up to four months, the utility serving Osaka and surrounding areas will scrutinize the state of reactor pressure vessels -- which contain the nuclear fuel -- and other key equipment.
But the company will then need to apply for the Nuclear Regulation Authority safety screening based on the new regulations and obtain approval to continue the units' operations, a process necessary for any reactor before being allowed to go back online.
Kansai Electric plans to finish the special checks and apply for the NRA screening as early as next spring.
The Takahama No. 1 unit became 40 years old in November, and the No. 2 unit will be 40 years old November next year.
The pro-nuclear government of Prime Minister Shinzo Abe has urged utilities to quickly decide on whether to scrap their aging reactors, apparently in an attempt to ease concerns over the safety of nuclear power by promoting the shutdown of old facilities and bring relatively new reactors back online.

After Sendai, Takahama

December 13, 2014

Takahama nuclear plant restart could come next spring

http://mainichi.jp/english/english/newsselect/news/20141213p2a00m0na012000c.html

The Nuclear Regulation Authority (NRA) secretariat will submit documents by year's end effectively approving reactor safety measures -- opening the way for the restart of those reactors -- at the Takahama Nuclear Power Plant in Fukui Prefecture, it was announced Dec. 12.
It will become the second time that nuclear reactors will have passed new, stricter safety regulations put in place after the Fukushima No. 1 nuclear plant meltdowns. The first approval was for the No. 1 and 2 reactors at the Sendai Nuclear Power Plant in Kagoshima Prefecture. Approval paves the way for reactivation of the reactors.
The draft report is expected to be presented at an NRA regular meeting on Dec. 17 or Dec. 24. If the authority grants its approval, the document will be subjected to public comment for a month, after which an official decision on whether to ratify it will be made.
Other remaining procedures include obtaining a construction permit and getting the agreement of locals to restart the reactors. The actual reactivation would not occur until spring 2015 at the earliest.
Based on its previous experience with the Sendai plant, the government believes that it can proceed with reactivation if it gets the agreement of the Fukui Prefectural Government and the government of the town of Takahama, where the plant is located. In the case of the Sendai reactors, however, the 30-kilometer emergency evacuation planning area around the plant was entirely within Kagoshima Prefecture. The 30-kilometer area around the Takahama plant stretches across three prefectures: Fukui, Kyoto and Shiga, raising the possibility of local opposition.
Takahama plant operator Kansai Electric Power Co. has boosted safety measures at the station to withstand a quake of 700 Gals (a unit of acceleration) from 550 Gals. It has improved tsunami countermeasures to withstand a wave 6.2 meters high, up from 5.7 meters. New protection measures, such as raising seawalls by two meters to make them eight meters tall, have cost 103 billion yen.

At the end of October, Kansai Electric reported these new measures in an addendum to a request for permission to alter its nuclear reactors. The NRA has been examining this addendum as it prepares the document giving a passing grade to the plant's safety measures.
December 13, 2014(Mainichi Japan)

Takahama next

December 15, 2014

Takahama plant set to pass new rules for restart

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Dec. 15, 2014 - Updated 11:32 UTC+1
Japan's nuclear regulator appears set to present a draft assessment that will effectively approve a restart of the Takahama nuclear power plant in Fukui Prefecture.

The Nuclear Regulation Authority will disclose the assessment at its meeting on Wednesday.

Authority experts have been evaluating whether the No.3 and No.4 reactors at the plant meet new government regulations introduced after the Fukushima Daiichi plant accident in March 2011.

If no problems are found in the draft at the meeting, the authority will then gather public opinion on it for 30 days before officially adopting the document.

Regulators have so far screened restart applications from power companies for a total of 20 reactors at 13 plants across the country.

Takahama will be the second plant to pass the new regulations, following the Sendai plant in Kagoshima Prefecture in September.

But it will take time until the plant can be restarted as operator Kansai Electric Power Company still needs permission for and inspections of its design, as well as local consent. The facility is unlikely to go online before spring at the earliest.

Abe keen to boost nuclear energy

December 15, 2014

With election over, Abe ready to boost reactor restarts

http://www.japantimes.co.jp/news/2014/12/15/national/abe-set-boost-efforts-revive-nuclear-power-election/#.VJBeWnt1Cic
Kyodo
With the Liberal Democratic Party's sweeping election victory Sunday, Prime Minister Shinzo Abe is expected to increase his efforts to revive nuclear power despite persistent public opposition.

Although polls show that most people are against restarting reactors idled following the 2011 Fukushima crisis, Abe has continued to promote nuclear as a key source of energy, arguing its use is necessary to maintain stable and cheap electricity in resource-poor Japan.
Abe hopes early next year to restart two reactors at Kyushu Electric Power Co.'s nuclear plant in Satsumasendai, Kagoshima Prefecture, which in September became the first to meet tighter, post-Fukushima safety regulations.
Another two reactors at Kansai Electric Power Co.'s Takahama power station in Fukui Prefecture, currently in the final phase of the Nuclear Regulation Authority's screening process, could also go back online within 2015.
However, as restarting nuclear plants did not take center stage in the election, partly because Abe avoided focusing on the contentious issue, critics say the LDP's victory cannot be taken as a vote of confidence regarding this issue.
In a rare mention during the campaign, Abe delivered a speech in Kagoshima Prefecture last Thursday arguing that nuclear power is necessary to protect jobs.
Local leaders in Kagoshima have already given the green light to restarting the power plant, but residents doubt that sufficient discussions have been held.
"I feel frustrated that there was no debate on the nuclear issue" during the election, a 44-year-old company employee who did not want to give his name said after voting.
With the election already in its rear view mirror, the LDP faces the task of deciding the nation's long-term energy policy, another issue Abe was reluctant to discuss during the campaign.
The process of deciding the country's energy mix, including the percentages of electricity to be generated by nuclear power and renewable sources, could be further delayed amid uncertainty over how many reactors will resume operations down the road, while Komeito, the coalition's junior member, has pledged to completely phase out nuclear power in the future.

Takahama open to media

December 16, 2014

Reactor special inspection shown to media

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Dec. 16, 2014 - Updated 11:32 UTC+1
Kansai Electric Power Company has shown to media special inspection procedures aimed at restarting 2 aging nuclear reactors at its plant in central Japan.

Last year, Japan's government limited the operational lifespan of nuclear reactors to 40 years in principle.

Operators must decide whether to decommission their aging reactors or apply for permission to extend their lifespans. Such permission requires special inspections to assess in detail the extent of reactor deterioration.

Kansai Electric has been conducting special inspections since December 1st on the No.1 and 2 reactors at the Takahama nuclear plant in Fukui Prefecture.

On Tuesday, journalists were allowed to watch workers remotely control an ultrasonic device in a reactor to examine the interior.

Workers are also checking the inner coating of the reactor containment vessel.

Kansai Electric plans to report the results of the inspection to the Nuclear Regulation Authority by July next year, the deadline for extension application.

In Japan, 7 nuclear reactors, including the 2 at the Takahama plant, have been in operation for about 40 years.

Virtual go-ahead for Takahama plant

December 17, 2014

Fukui nuclear reactors move big step toward restarts

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201412170075
By TOSHIO KAWADA/ Staff Writer
TAKAHAMA, Fukui Prefecture--Kansai Electric Power Co.'s Takahama plant here became the second nuclear power facility to receive the virtual go-ahead to resume operations under tougher safety requirements introduced after the Fukushima nuclear disaster.
The Nuclear Regulation Authority on Dec. 17 said it concluded that the No. 3 and No. 4 reactors at the Takahama nuclear plant have met the safety standards required to prepare for natural disasters and severe accidents.
The NRA's decision will be finalized after it receives public opinions on the issue for 30 days starting Dec. 18.
However, Kansai Electric must first gain the consent of local officials and residents to restart the reactors.
In addition, the NRA still needs to check the detailed construction plans and blueprints for the Takahama plant, as well as safety guidelines on how Kansai Electric will operate the reactors and respond to an accident.
An additional one to two months will also be necessary for the NRA to conduct on-site inspections.
If no problems arise, Kansai Electric will likely be able to resume operations at the plant next spring at the earliest.
"There still remains screenings of the construction plans and safety rules to restart the reactors, so we will continue to sincerely respond to the NRA's examination," Kansai Electric President Makoto Yagi said at a news conference on Dec. 17.
Kansai Electric is also proceeding with a special safety inspection to extend the operating lives of the aging No. 1 and No. 2 reactors of the Takahama plant for two decades beyond the normal expiry date of 40 years.
Under the stricter safety standards, utilities must have quake-resistant buildings for emergency operations in the event of damage caused by a natural disaster.
Kansai Electric listed the buildings for the two aging reactors as emergency operation centers, but it is currently constructing separate buildings for emergency purposes at the Takahama plant site.

The NRA is requiring the company to keep those two reactors shut down for the time being. The nuclear watchdog could rescreen the No. 3 and No. 4 reactors if Kansai Electric hopes to restart the aging reactors at an early date.
The administration of Prime Minister Shinzo Abe is moving toward restarting now-idled reactors that are deemed safe by the NRA. Currently, no reactors are operating in Japan.
The first nuclear plant expected to resume operations is Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture. The No. 1 and No. 2 reactors there passed the NRA's safety screenings in line with the stricter regulations.
The results of the NRA's examination of the Sendai plant reactors were released in July.
The nuclear watchdog referred to its examination of the Sendai plant to work out its 433-page draft report that virtually allows Kansai Electric to resume operations at the Takahama plant.
Kansai Electric submitted its application to restart the Takahama No. 3 and No. 4 reactors when the new safety regulations took effect in July 2013.
It plans to use the reactors for plutonium-thermal power generation, in which mixed-oxide fuel consisting of plutonium and uranium is used.
The Takahama plant is located just 3.5 meters above sea level, much lower compared with the Sendai plant. Kansai Electric was required to raise the height of surrounding levees to block tsunami.
Kansai Electric initially projected a maximum tsunami height at the Takahama plant of 2.6 meters. It revised the estimate to 6.2 meters after the NRA ordered the company to recheck its calculations.
The utility was also advised to increase its projected earthquake scale from 550 gals to 700 gals and enhance the quake-resistance of plant equipment. A gal is a unit of acceleration that measures the extent of an earthquake's seismic waves.
The next step for Kansai Electric is to win the approval of Fukui Prefecture and Takahama town to restart the reactors.
"We will work to restart operations as early as possible by making efforts to obtain an agreement from people living in the surrounding areas," Yagi said.
Areas of Kyoto and Shiga prefectures located within a 30-kilometer radius of the Takahama plant have maintained a cautious stance toward resuming reactor operations there.
Areas within 30 km of the plant are designated as the Urgent Protective Action Planning Zone. Local administrations in the zone could demand that Kansai Electric keep the reactors offline until it also gains their approval, pointing to the possible dangers to their residents.

2 KEPCO reactors clear major safety hurdle toward resumption

http://mainichi.jp/english/english/newsselect/news/20141217p2g00m0dm041000c.html
TOKYO (Kyodo) -- Two idled nuclear reactors owned by Kansai Electric Power Co. on Wednesday cleared the initial safety hurdle to being brought back online, possibly next year, bolstering the government's plan to revive atomic power following the 2011 Fukushima crisis.
The Nos. 3 and 4 units at the Takahama nuclear plant, located on the Sea of Japan coast in Fukui Prefecture, western Japan, follow two reactors operated by Kyushu Electric Power Co. in passing the nuclear regulator's tighter safety requirements, introduced after the Fukushima accident.
Prime Minister Shinzo Abe's Liberal Democratic Party, which won a major victory in Sunday's lower house election, is set to speed up efforts to reactivate nuclear plants that have remained idled amid safety

concerns raised by the Fukushima meltdowns, even though the majority of people surveyed in Japan oppose resumption.
The Nuclear Regulation Authority decision-making panel approved Kansai Electric's enhanced safety measures against possible earthquake and tsunami hazards as well as other severe accidents that could affect the plant. The regulator will give a formal safety clearance to the utility after a monthlong public consultation period through Jan. 16.
NRA Chairman Shunichi Tanaka said the regulator has confirmed the plant's compatibility with the new regulatory standards, however, he urged Kansai Electric to make continued efforts to enhance safety.
Among Japan's 48 commercial reactors -- all of which currently remain offline -- only four, including the Takahama units, have met the more rigorous safety requirements. Passing the NRA's safety screening based on the regulations is the initial requirement for resumption, with no specific date set for the restart.
The Takahama units will not go back online before spring, as Kansai Electric still needs to obtain local approval and undergo more procedures including on-site operational checks.
Power companies are desperate to bring their idled nuclear reactors back online amid an increase in fossil-fuel costs for thermal power generation, which has covered the shortfall in the absence of atomic power.
On Wednesday, Kansai Electric said it will raise electricity bills from April, citing its deteriorating earnings. The utility last raised electricity rates in May last year.
"We face a severe financial condition and if this goes on it will endanger the company's existence," President Makoto Yagi said at a press conference in Osaka.
The utility, serving an area centering on Osaka, will likely post its fourth straight group net loss in the business year through next March. In addition to the Takahama units, it also hopes to restart two more reactors at its Oi complex in Fukui.
But the process of resumption may not go as smoothly as the utility hopes, partly because neighboring municipalities such as Shiga Prefecture demand more say in deciding whether to allow the resumption, saying they could also be severely affected in the event of a nuclear accident.
A pair of reactors at Kyushu Electric's Sendai complex, located in southwestern Japan, became the first units in September to meet the new regulations. Local municipalities have already given the green light to their resumption and they could go back online early next year.
December 17, 2014(Mainichi Japan)
See also :

Two Kepco reactors clear major safety hurdle toward restart

http://www.japantimes.co.jp/news/2014/12/17/national/two-kepco-reactors-clear-major-safety-hurdle-toward-restart/#.VJGfwP-cJA
Kyodo
Two idled nuclear reactors owned by Kansai Electric Power Co. on Wednesday cleared an initial safety hurdle necessary for them to be restarted, possibly next year, bolstering the Abe government’s plan to revive atomic power following the 2011 Fukushima crisis.[...]

Takahama nuclear plant's draft assessment approved

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Dec. 17, 2014 - Updated 04:15 UTC+1
Japan's nuclear regulator has compiled its draft assessment on safety measures for 2 of the 4 reactors at Takahama nuclear plant in Fukui Prefecture, central Japan.

The draft effectively approves the safety measures and clears the way for the restart of the plant located on the Japan Sea coast. A draft assessment of another plant in southern Japan has already been approved.

The Nuclear Regulation Authority unanimously approved the draft on Wednesday.

The draft assessment says the No. 3 and 4 reactors now meet government regulations introduced after the Fukushima Daiichi nuclear disaster in March 2011.

Kansai Electric Power Company's measures include raising the reactors' ability to withstand maximum projected jolts and tsunami heights from earthquakes. The operator also installed a higher embankment and cooling pumps to prepare for the possibility of a severe nuclear accident.

Authority commissioner Toyoshi Fuketa said the body confirmed the reactors are equipped with minimum measures to ensure safety, but the operator should continue efforts and investment for greater safety.

The authority will gather public opinion on the draft for 30 days before officially adopting the document.

The plant's operator still needs approval on details of equipment design as well as inspections. It also needs to gain local consent. The facility is unlikely to go online before spring.

Takahama will be the 2nd plant to pass the new regulations, following the Sendai plant in Kagoshima Prefecture, southern Japan, in September.

All of Japan's nuclear reactors are currently offline.

"Return to nuclear power"

December 18, 2014

Takahama reactors meet new safety standards, paving way to 'return to nuclear power'
http://mainichi.jp/english/english/perspectives/news/20141218p2a00m0na012000c.html
The Nuclear Regulation Authority (NRA) concluded on Dec. 17 that the No. 3 and 4 reactors at Kansai Electric Power Co.'s Takahama Nuclear Power Plant have met its new safety requirements, clearing one of the hurdles to restarting the idled facilities.
The government, meanwhile, is poised to start discussing the reconstruction of aging nuclear power stations. Although the ruling parties won a solid majority in the Dec. 14 House of Representatives election, it cannot be said that they have secured a free hand over the country's nuclear energy policy, which was not fully debated during the election. The government of Prime Minister Shinzo Abe has made clear its stance toward "returning to nuclear power," but it remains to be seen whether the government will be able to secure public understanding for continued reliance on nuclear power by restarting idled reactors and rebuilding aging nuclear power plants.

Following the NRA's decision on the Takahama plant in Fukui Prefecture, a senior Kansai Electric official said, "If the Takahama reactors are reactivated, we'll be able to focus on measures to restart the No. 3 and 4 reactors at our Oi Nuclear Power Plant."

Safety requirements for nuclear reactors were tightened after the Fukushima disaster. Earlier, two reactors operated by Kyushu Electric Power Co. also passed the requirements. These developments are favorable for other major utilities because idled nuclear reactors in the country appear to be on track to being restarted.

Some Kansai region manufacturers have shifted their manufacturing bases elsewhere because of higher electricity prices and an unstable power supply during the summer, caused by the shutdown of nuclear power plants. The business community is now hopeful that those companies will bring their factories back to the Kansai region, because their power supply will become stable if nuclear reactors go back online

Fuel costs shouldered by power companies across Japan to operate their thermal power plants have increased about 3.6 trillion yen from pre-disaster levels. Financially strained, these companies have introduced full-scale price hikes. At the same time, increasing crude oil prices have pushed up electricity prices further, forcing businesses and households to shoulder the extra burden.

Those factors have played a part in the Abe government's move to promote nuclear power. If electricity prices remain high, they will get in the way of economic recovery, though the Abe administration has set forth corporate tax cuts as a key policy measure for economic growth in his economic policy mix, dubbed "Abenomics." The government is set to accelerate efforts to reactivate 21 reactors at 14 nuclear power stations across the country, but it will not stop there. It is also trying to shift its policy focus to the idea of continuing to rely on nuclear power by rebuilding aging nuclear power stations.

Under the Basic Energy Plan adopted by the Cabinet in April, the government set forth a plan to promote reactivation of idled nuclear reactors. At the same time, it said that it would "reduce (its reliance on nuclear power) as much as possible." The government, therefore, postponed its decision on the best possible composition of different energy sources, including nuclear, thermal and renewable energy.

If the government were to prohibit construction of additional nuclear plants and the rebuilding of existing nuclear facilities, and if it did not extend reactors' designated 40-year lifespan, Japan's nuclear generating capacity would be halved by 2030 and there would be no nuclear plants in the country by 2049. The government's discussions on the best possible composition of various energy sources will focus either on the "natural death" of nuclear plants, or continued reliance on nuclear power.

Nuclear power plants play a certain role in combating global warning. Considering the fact that it will take a long time to decommission nuclear power plants and process radioactive waste, it is necessary to nurture nuclear engineers. Local governments that host nuclear power plants are seeking new financial resources because they will not receive government subsidies and fixed property tax revenues if nuclear power plants are decommissioned. Based on these ideas, the government has opted for a policy of retaining nuclear power generation by rebuilding aging nuclear power stations.

Nonetheless, the costs of rebuilding and running nuclear power plants are expected to swell as a result of anti-disaster measures and extra expenses to improve safety. It costs several hundred billion yen to build a single nuclear power plant, and it takes time to recover the costs for such an investment. While deregulation of the electric power industry moves forward, a representative of one utility commented, "If we were to continue to run nuclear power plants, we would want a guarantee for stable electricity charges." However, it is difficult for utilities to secure public understanding for receiving special treatment for building and running nuclear power stations.

There was no in-depth debate on nuclear power during the Dec. 14 general election. If the government were to press forward and promote nuclear power with no debate, it would likely provoke a fierce public backlash. (By Masahiro Nakai and Shinya Hamanaka, Economic News Department)
December 18, 2014(Mainichi Japan)

Restart at Sendai delayed

December 24, 2014

Restart of nuclear plant in March at earliest

http://www3.nhk.or.jp/nhkworld/english/news/20141225_06.html

Dec. 24, 2014 - Updated 22:02 UTC+1
The restart of a nuclear power plant in Kagoshima Prefecture, southwestern Japan, is not likely before March, due to a document revision.

In September, the Sendai plant became the first in Japan to meet new government regulations introduced after the Fukushima accident in 2011.
The host city's mayor, the prefecture's governor, and local assemblies have all approved the restart plan.

The plant's operator, Kyushu Electric Power, must now obtain approval for 2 types of documents from the Nuclear Regulation Authority.

One is a construction plan that describes the facility's design in detail. The other is a set of rules for operation and emergency responses.

The company had planned to submit a revised construction plan for the plant's No.1 reactor in early December after improving its explanations of earthquake-resistance measures.

But the utility says it is taking more time than expected and it now plans to submit the document next year.

The delay pushes back the restart of the reactor at least until March, pending the regulatory agency's approval of the construction plan and inspections of new safety measures.

Local governments want their say

January 5, 2015
Almost the same article in the Japan Times on two runnning days:

Local governments want bigger say in restarting reactors

Kyodo

Only about 20 percent of 160 prefectural and municipal governments that host or are located near nuclear plants support how Kyushu Electric Power Co. went about getting the go-ahead for restarting its reactors in Kagoshima Prefecture.

Kyushu Electric won consent in November from the Kagoshima Prefectural Government and the city of Satsumasendai for the restart of two reactors at its Sendai plant. As a result, they will likely become the first of the country's 48 offline commercial reactors to resume operations.

In a survey by Kyodo News on 21 prefectures and 139 municipalities that are located within 30 km of a reactor, only 35 said the procedure adopted by Kyushu Electric — seeking the consent of just the host prefecture and host municipality — was appropriate.

While 55 municipalities, or about 30 percent, said the utility's methods were inappropriate, 70 avoided giving a clear-cut answer. None of these 55 municipalities directly host reactors.

Although the central government appears to back the way Kyushu Electric sought approval only from the host prefecture and municipality, the survey suggests that many municipalities near offline nuclear plants do not favor such a narrow approach.

Amid lingering safety concerns over nuclear power following the Fukushima No. 1 disaster in 2011, the number of cities calling for nearby municipalities to have a say in the decision-making process outnumbered those stating that only those directly hosting reactors should be involved.

The two reactors at the Sendai plant in Kagoshima Prefecture could be brought back online as early as this spring.

January 4, 2014

Poll shows local governments split on how to restart nuclear reactors

http://www.japantimes.co.jp/news/2015/01/04/national/poll-shows-local-governments-split-on-how-to-restart-nuclear-reactors/#.VKmxr3t1Cic

Kyodo

Only about 20 percent of 160 prefectural and municipal governments that host or are located near nuclear plants support how a utility company in Kagoshima Prefecture went about getting the go-ahead for restarting its nuclear reactors, a Kyodo News poll showed Sunday.

In November, Kyushu Electric Power Co. won consent from the Kagoshima Prefectural Government and the city of Satsumasendai for the restart of two nuclear reactors at its Sendai plant in the prefecture, which means the two reactors will become the first of the country's 48 offline commercial reactors to resume operation.

In a survey conducted on 21 prefectures and 139 municipalities that are located within a 30-km radius of nuclear reactors, only 35 said the procedure adopted by Kyushu Electric — seeking the consent only of the host prefecture and host municipality — was appropriate.

While 55 municipalities or about 30 percent said the method taken by Kyushu Electric at the Sendai plant was not appropriate, 70 avoided clear-cut answers, including those that said they do not know.

None of the 55 municipalities host nuclear reactors.
Although the central government appears to back the way Kyushu Electric limited seeking approval to only the host prefecture and municipality concerned, the survey suggests that many municipalities near offline nuclear plants do not necessarily favor such a narrow approach.
Amid lingering safety concerns over the restart of nuclear reactors following the Fukushima No. 1 disaster in 2011, the number of municipalities calling for those within a 30-km radius of nuclear reactors to participate in the decision-making process outnumbered those stating that only those hosting reactors should be entitled to give the green light to the resumption of operations.
The two nuclear reactors at the Sendai plant in Kagoshima Prefecture are expected to go back online this spring or later

NRA: Please focus on the job

January 5, 2015

NRA bracing itself for possible reactor restarts

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Jan. 5, 2015 - Updated 05:14 UTC+1
The head of Japan's nuclear watchdog has asked its employees to work with greater responsibility this year. He said the task of regulatory authorities will take on greater importance if and when the country's reactors start going back online.

Nuclear Regulation Authority Chairman Shunichi Tanaka gave a New Year's address on Monday before 460 employees of the NRA's secretariat.

Tanaka said **if reactors are restarted, regulatory authorities will be required to carry out new kinds of work, such as inspections on the nuclear facilities.**
He said NRA officials must carry out their work with a greater focus than last year.

All of Japan's reactors are currently offline.

Utilities must pass new government regulations introduced after the 2011 Fukushima accident. They were set up as a precondition to restart their nuclear reactors.

The NRA is currently screening applications filed by utilities for 21 reactors at 14 plants.

In September, reactors at the Sendai nuclear plant in Kagoshima, southern Japan, became the first ones to clear the new regulations.

The Takahama nuclear plant in Fukui, on the Sea of Japan coast, is expected to have its safety measures approved by the end of this month at the earliest.

This year a number of pressurized water reactors may pass inspections and go back online.

Screenings of boiling water reactors, the same type as the reactors that suffered meltdowns at the Fukushima Daiichi plant, will also get underway.

The nuclear watchdog will be responsible for carrying out an appropriate assessment of the country's reactors as well as for explaining their decisions to the public.

Gov. Izumida remains adamant about restart

January 7, 2015

Niigata governor still at odds with Tepco chief over reactor restarts

http://www.japantimes.co.jp/news/2015/01/07/national/niigata-governor-still-odds-tepco-chief-reactor-restarts/

Kyodo
NIIGATA – Niigata Gov. Hirohiko Izumida remained at odds Tuesday with Tokyo Electric Power Co. President Naomi Hirose over the restart of reactors at Tepco's Kashiwazaki-Kariwa nuclear power plant in the prefecture, saying the utility has not done enough to probe the reasons behind the March 2011 meltdowns at the Fukushima No. 1 plant.
Izumida, who has said he will not approve the restart of the Niigata reactors unless all of the facts are discovered and made public on the Fukushima triple-core meltdowns, met Hirose for the first time in a year on Tuesday.
But the two remained far apart over the restart plan, as Tepco seeks to get the plant back online and has already scheduled meetings with local residents later this month.
The utility filed for the restart of reactors 6 and 7 at Kashiwazaki-Kariwa with the Nuclear Regulation Authority in September 2013.
"The (restart application) screening by the NRA is in full swing. We will start explaining to residents what safety measures we have put in place," Hirose told Izumida at the prefectural government office.
"The first thing we need is the full discovery of reasons behind the Fukushima accident," Izumida responded.
Izumida added that many Tepco officials have not agreed to the disclosure of documents that contain their interviews with the government investigation panel on Fukushima, calling this "backward-looking."
Hirose, however, said it is up to each Tepco official to decide whether to agree to disclose their interview transcripts.
Tepco said it will go ahead with plans to hold meetings with residents to explain its position in the city of Kashiwa on Jan. 22 and in the village of Kariwa on Jan. 23.

Niigata governor scolds TEPCO president, rejects reactor restarts

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201501070051

THE ASAHI SHIMBUN

NIIGATA--Niigata Governor Hirohiko Izumida on Jan. 6 remained adamantly opposed to restarting the Kashiwazaki-Kariwa nuclear plant and chided the president of the plant operator over the company's response to the Fukushima nuclear disaster.

Naomi Hirose, president of Tokyo Electric Power Co., was seeking Izumida's approval to bring two idle reactors at the plant back online, but he instead received criticism from the governor.

"(TEPCO) is taking a passive stance toward investigating the causes of the accident at its Fukushima No. 1 nuclear power plant," Izumida told Hirose.

TEPCO in autumn 2013 applied to the Nuclear Regulation Authority for safety screenings of the No. 6 and No. 7 reactors at the plant in Niigata Prefecture. The company not only has to win approval from the NRA, but it also needs the green light from host communities--and the prefectural governor--to resume operations.

During their talks, Hirose asked Izumida to inspect the Kashiwazaki-Kariwa nuclear power plant.

Izumida has repeatedly said he will not approve the reactor restarts unless TEPCO thoroughly examines the Fukushima nuclear accident, which unfolded after the Great East Japan Earthquake and tsunami in March 2011, and presents the results of its investigation.

He rejected Hirose's request for an inspection.

"There has not been a sufficient investigation into the causes of the (Fukushima) accident nor in-house disciplinary actions, so we cannot stand at the starting line of discussions on safety," the governor said.

TEPCO plans to upgrade its office in Niigata Prefecture to a local headquarters by July and increase the number of employees there from the current 20 or so.

The plan is designed to allow TEPCO to more effectively consult with local governments and residents in obtaining their consent for the reactor restarts.

TEPCO has forecast a net profit for the business year ending in March 2015, following widespread cost-cutting measures and reduced fuel costs.

TEPCO Chairman Fumio Sudo said in a news conference late last year that the company will forgo an additional electricity rate hike in 2015.

Sudo, however, also said the company could slip back into the red for the fiscal year ending in March 2016 if it cannot resume operations at the Kashiwazaki-Kariwa nuclear plant.

New subsidies to accelerate restarts

January 15, 2015

New subsidy system designed to expedite restarts of nuclear reactors

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201501150078

The Sendai nuclear power plant in Satsuma-Sendai, Kagoshima Prefecture, is expected to resume operations this spring at the earliest. (Asahi Shimbun file photo)

THE ASAHI SHIMBUN

The Abe administration has earmarked 1.5 billion yen ($12.75 million) for a **new subsidy system designed to accelerate restarts of idled nuclear reactors and to convince residents that nuclear plants are safe.**

The figure was included in the draft budget for fiscal 2015, which was finalized on Jan. 14.

The fiscal 2015 draft budget also includes 91.2 billion yen for an existing annual grant system that targets regions hosting nuclear power facilities. These subsidies are provided to local governments based on power production at each nuclear plant they host.

Under the new system, prefectural governments that host nuclear reactors will receive grant money when the reactors resume operations or are later stopped so that the negative impact on local economies can be alleviated.

Although the local governments will be able to decide how to spend the funds, **the subsidies are expected to be used, for example, to conduct monitoring surveys to prevent the spread of groundless rumors about nuclear power. The central government also wants prefectural authorities to use the funds to hold explanatory sessions to convince residents of the safety of nuclear plants.**

All of the nation's reactors are currently offline in light of stricter safety standards introduced after the Great East Japan Earthquake and tsunami triggered the Fukushima nuclear crisis in March 2011. The administration decided on the figure for the existing subsidy system based on the assumption that all reactors are operating at 81 percent of capacity.

The Abe administration will revise the estimate for fiscal 2016 so that local governments that host restarted reactors will be able to receive larger amounts than other regions.

One way of discouraging plaintiffs

January 17, 2015

Some residents drop petition to halt restart of Sendai reactors in Kagoshima

http://www.japantimes.co.jp/news/2015/01/17/national/some-residents-drop-petition-to-halt-restart-of-sendai-reactors-in-kagoshima/#.VLqiGy51Cos

Kyodo

KAGOSHIMA – Some of the local residents seeking a court injunction to halt the restart of Kyushu Electric Power Co.'s Sendai nuclear plant in Kagoshima Prefecture have dropped their petitions, their lawyers said Saturday

Around 10 of the 23 residents who had sought the injunction last May have decided not to push ahead with their petition after learning that Kyushu Electric could seek massive damages from them, the lawyers said.

In addition to the residents' petition with the Kagoshima District Court, a larger group of plaintiffs filed in 2012 a lawsuit with the same court against Kyushu Electric and the state to prevent the restart of two reactors at the Sendai plant due to safety reasons.

The 23 residents are part of this larger group and reside in Kagoshima, Kumamoto and Miyazaki prefectures.

If the plaintiffs win the case, it would delay the utility's efforts to restart the reactors. But in the event they lose, Kyushu Electric could demand compensation from those who petitioned for the injunction because of the damages incurred due to the stoppage, according to the lawyers.

In one of the hearings, Kyushu Electric informed the court in writing that if the restart is delayed, it would mean losses worth ¥550 million per day.

The utility has also urged the court to order the plaintiffs to prepare cash collateral for possible compensation they might have to pay. The court has not yet issued such an order but some of the locals have decided to back out, the lawyers said, adding a ruling on the injunction is expected to be handed out in February at the earliest.

Last November, Kyushu Electric won consent from the Kagoshima Prefectural Government and the plant's host city of Satsumasendai for the restart of the two reactors at the Sendai plant, putting them in line to become the first of the country's 48 offline commercial atomic units to resume operation.

They are the first units to have cleared a set of tougher safety requirements introduced following the 2011 Fukushima nuclear crisis.

Sendai: Delayed till April

January 23, 2015

Sendai nuclear plant's restart delayed to April

http://www3.nhk.or.jp/nhkworld/english/news/20150123_27.html

Jan. 23, 2015 - Updated 08:19 UTC+1

The restart of the Sendai nuclear power plant in Kagoshima Prefecture, southwestern Japan, has been put off again due to a document revision.

The plant operator, Kyushu Electric Power Company, has been revising a construction plan for one of its two reactors. The document describes the facility's design in detail.

This is one of the documents needed to obtain approval from the Nuclear Regulation Authority for the restart. The other is a set of rules for operation and emergency responses.

Kyushu Electric says the plan could be submitted after the middle of next month. This is the second delay in the planned restart of the facility.

In September last year, the plant became the first in the country to meet the new government regulations introduced after the Fukushima accident in 2011.
The host city's mayor, the prefecture's governor and local assemblies have all approved the restart plan.

The latest delay pushes back the restart until April or later, pending the regulatory agency's approval of the plan and inspections.

All the commercial nuclear reactors in Japan are now offline.

Application for 3 more restarts

February 3, 2015

Kansai Electric to apply shortly to restart three more reactors

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201502030042
By KOJI NISHIMURA/ Staff Writer
OSAKA--Kansai Electric Power Co. will seek approval from the Nuclear Regulation Authority before the end of March to restart three reactors at its Mihama and Takahama power plants in Fukui Prefecture.
It also plans to ask the NRA to conduct safety assessments of the No. 1 and No. 2 reactors of the Oi nuclear power plant in Oi, Fukui Prefecture, as soon as the company deems they are ready to go back online.
With the utility having already requested NRA screening of the No. 3 and No. 4 reactors of both the Takahama and Oi nuclear power plants, the latest decision brings to nine the number of reactors Kansai Electric is preparing to restart.
The utility said Feb. 2 it intends to reactivate the No. 3 reactor in the Mihama facility in the town of Mihama and the No. 1 and No. 2 reactors at the Takahama plant in Takahama.

Kansai Electric will submit requests to the nuclear watchdog body for safety screening to ensure it is in compliance with tightened regulation standards.
The utility operates 11 nuclear reactors in total.
The remaining two are the No. 1 and No. 2 reactors at the Mihama nuclear power plant, which are due to be scrapped because of their age.
A final decision on decommissioning will be made by the end of March.
Kansai Electric decided to commission five more reactors based on its judgment that the restarts will bring profits despite the costs of revamping safety measures.
Reactors that are more than 40 years old are required to undergo a special inspection before the NRA will agree to extend their service.
To comply with these regulations, the No. 1 and No. 2 reactors at the Takahama nuclear power plant, which are 40 and 39 years old, respectively, are currently undergoing special inspections by Kansai Electric.
The No. 3 reactor at the Mihama nuclear power plant, which has been operating for 38 years, is next to follow.

NRA will approve safety measures for Takahama 3 and 4

February 3, 2015

NRA to approve Takahama safety measures

http://www3.nhk.or.jp/nhkworld/english/news/20150203_36.html

Feb. 3, 2015 - Updated 13:29 UTC+1

Japan's nuclear regulator is set to compile next week its final assessment on 2 reactors at the Takahama power plant in Fukui Prefecture, central Japan.

The final document will certify that the reactors have passed the regulator's scrutiny, which is a prerequisite for their restarts.

The final assessment follows the Nuclear Regulation Authority's approval of its draft in December. The draft said the safety measures at the numbers 3 and 4 reactors by the plant's operator have met new government requirements set after the Fukushima Daiichi disaster.

The regulator is examining about 3,600 opinions on the draft it received from the public in the 30 days after mid-December.

The NRA says the final document will come as early as Thursday of next week, after the public comments are gone through.

Kansai Electric Power Company will still need approval for equipment design details as well as the

consent of local governments. The reactors are unlikely to be brought online before summer. In a document submitted to the NRA, the utility reportedly plans to restart the reactors in November.

The Takahama plant has 4 reactors. The NRA says that if the utility files restart applications for the remaining numbers 1 and 2 reactors, it will reassess the measures for numbers 3 and 4.

The NRA says this is because the severe accident command center for the numbers 3 and 4 reactors in the current plan is too close to the other 2 reactor buildings.

Onagawa's faulty inspection reports

February 4, 2015

4000 errors in inspection records at Onagawa plant

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Feb. 4, 2015 - Updated 13:27 UTC+1

Tohoku Electric Power Company says it has found more than 4,000 improper entries in its inspection records about one of the reactors at its Onagawa nuclear power plant.

The initial inspection was held to check a wide range of facilities at the plant's No. 2 reactor after the great earthquake that hit northeastern Japan. The operator is hoping to restart the reactor about 100 kilometers north of the crippled Fukushima Daiichi plant.

But Japan's Nuclear Regulation Authority pointed out last year that Tohoku Electric's inspection was lax and the firm was re-examining the inspection records on the No. 2 reactor.

Company officials said at a news conference on Wednesday that the utility has scrutinized all the inspection records for the reactor since August 2011.

They said in some cases workers entered "no problem" for parts that didn't exist, citing the example of monitoring equipment for a valve which was not there.

In other cases, incorrect product types and serial numbers were left untouched. They say there were 4,188 errors in total.

Managing Director Takao Watanabe apologized to people in the region for causing concern, although he asserted the improper entries will not lead to any safety problems.

The company says it will also check the inspection records for the No.1 and No. 3 reactors.

Takahama restart

February 4, 2015

Two idled Kepco reactors to get safety OK next week

http://www.japantimes.co.jp/news/2015/02/04/national/two-idled-kepco-reactors-set-get-safety-ok-next-week/#.VNHONC51Cos

Kyodo
Two more idled nuclear reactors, in Fukui Prefecture, are set to obtain safety clearance from regulators, sources said Tuesday, giving another boost to Prime Minister Shinzo Abe's plan to revive atomic power following the 2011 triple meltdown at Tepco's Fukushima No. 1 plant.
Reactors 3 and 4 at Kansai Electric Power Co.'s Takahama nuclear plant will follow two reactors operated by Kyushu Electric Power Co. in meeting with the country's tighter safety requirements, which were imposed after the Fukushima meltdowns, moving a step closer to resuming operation.
According to the sources, the Nuclear Regulation Authority is set to approve on Feb. 12 a final report concluding that the two Takahama units comply with the new safety requirements, after Kansai Electric boosted safety measures against possible hazards at the plant.
But it will likely take at least a few more months before the reactors can go back online, given the operator still needs to obtain local approvals and undergo more procedures, including on-site operational checks.
All of Japan's 48 commercial reactors were gradually taken offline after the start of the Fukushima nuclear crisis, the worst such disaster since the 1986 Chernobyl disaster. Passing the NRA's safety screening is the initial requirement for resumption.
A pair of reactors at Kyushu Electric's Sendai plant in Kagoshima Prefecture became the first to meet the new regulations in September. Local municipalities have already given the green light to their resumption, but the units still remain offline as Kyushu Electric is behind schedule for finishing all necessary procedures.
In the case of the Takahama reactors, the process of resumption may not go as smoothly as the utility hopes, partly because some municipalities within the 30-km radius of the plant are demanding more say in deciding whether to allow the restart amid concerns they could also be severely affected in the event of a nuclear crisis.

Sendai restart delayed again

February 5, 2015

Nuclear plant restart delayed again

http://www3.nhk.or.jp/nhkworld/english/news/20150205_29.html

Feb. 5, 2015 - Updated 09:17 UTC+1

The restart of a nuclear power plant in southwestern Japan may not come until May at the earliest, due to a procedural reason.

In September, 2 reactors at the plant in Satsuma Sendai City in Kagoshima Prefecture became the first in Japan to meet new, tougher government regulations introduced after the 2011 nuclear disaster in Fukushima. Later, the governor of Kagoshima gave consent to Kyushu Electric Power Company to restart them.

The utility still needs approval from the Nuclear Regulation Authority for technical documents. It told the authority on Thursday that preparing them will take 2 or 3 months longer than expected because the authority says many revisions are needed.

One of the documents explains in detail facility designs for the plant's Number 1 reactor. The company originally planned to submit it in December. It now says it will take until the end of February, due to the need to provide more detailed data and explanations on earthquake resistance.

The utility says it will submit by the end of March a separate document describing designs for facilities that are shared with the Number 2 reactor.

The restart may not come until May or later, possibly the summer, pending the regulator's approval of the documents and onsite inspections.

All of Japan's commercial nuclear reactors remain offline.

Possible restart in June for Sendai

February 6, 2015

Sendai reactor faces June restart if inspection, election hurdles cleared

Reuters
http://www.japantimes.co.jp/news/2015/02/06/national/sendai-reactor-faces-june-restart-if-inspection-election-hurdles-cleared/#.VNXo3i51Cov
The Abe government is aiming to restart a nuclear reactor by around June, following a lengthy and politically sensitive approval process made difficult by the Fukushima disaster, sources familiar with the plans said.
The administration of Prime Minister Shinzo Abe has been pushing to bring some of the country's reactors back online after all 48 closed following the triple meltdown at Tepco's Fukushima No. 1 plant in March 2011, arguing they are key to economic growth.
A reboot would boost the nation's utilities, which have been hit by huge losses as they switch back to fossil fuels and race to upgrade nuclear plants, with two turning to the government for bailouts.
But the move would be controversial given that most citizens oppose nuclear power, with memories still fresh of the worst atomic crisis since Chernobyl in 1986.

"We urge the government to take into full consideration the tremendous suffering from the nuclear power plant accident and make sure that future policy ensures the safety and peace of mind of all citizens," Fukushima Gov. Masao Uchibori said, when asked about restarts.
Kyushu Electric Power Co. will be given the green light to restart two nuclear units in southwestern Japan, with June pencilled in for the first unit, according to three sources familiar with the government's thinking. They declined to be identified as they were not authorized to speak with media.
By June, the Nuclear Regulatory Authority is expected to have completed the final checks and appraisal of the reactors at Kyushu Electric's Sendai station, letting Abe give the final go-ahead after local authority approval late last year.
A June restart would also mean local elections scheduled for April would be out of the way, giving the government some leeway to take such a potentially unpopular step.
An industry ministry spokesman said no announcement had been made on Sendai's restart date.
A gradual return to nuclear power would not immediately end Japan's heavy reliance on fossil fuel imports, which has stoked a record trade deficit.
The use of fuel oil is likely the first to be curbed as it is the most expensive substitute and is being burned in older units that had been mothballed until being brought back online after Fukushima.
Demand for coal and liquefied natural gas, which has hit successive records as nuclear plants were shut down, will likely remain high, utilities and analysts have said.
Kyushu Electric's Sendai reactors, commissioned around 30 years ago, received initial safety clearance in September.
Two more rounds of checks are ongoing and, while there have been hitches, the June start date looks feasible for inspectors to finish their job, said another source.
However, **there is a chance restarts could be delayed as the units have been shut for more than three years and may need further maintenance.**

Takahama reactors clear safety checks

February 12, 2015

Takahama reactors clear NRA safety checks

http://www.japantimes.co.jp/news/2015/02/12/national/kepco-reactors-at-takahama-clear-key-safety-hurdle-toward-resumption/#.VNzcQC51Cos

by Eric Johnston
Staff Writer

Two nuclear reactors in Fukui Prefecture received a safety clearance from the Nuclear Regulation Authority on Thursday, marking a major step in efforts by Kansai Electric Power Co. to commence restarts this year.
It is the second time the NRA has granted a green light to potential restarts under tough, new safety standards. It earlier cleared two reactors at the Sendai plant in Kagoshima.

Although the new regulator said the Takahama No. 3 and 4 reactors meet operational safety requirements, two prefectures nearby fear how they would be affected by an accident and are demanding a say in whether to bring the plant back to life.
Furthermore, anti-nuclear activists warn that neither Fukui nor the Kansai region have developed detailed evacuation plans in the case of an accident.
The Takahama reactors, which turn 30 years old this year, still need approval from the NRA for design upgrades. They must also complete pre-start operational checks and win approval from residents. Kepco has said it hopes to restart them later this year, possibly in November.
The NRA said its decision had been uninfluenced by public concerns, including allegations that Kepco may have underplayed the likelihood of a major earthquake in the vicinity and concerns about the reactors' vulnerability to terrorism.
At a news conference Thursday, NRA Chairman Shunichi Tanaka said the reactors meet the new safety standards but cautioned **the checks are only one element in assessing risk.**
"This doesn't mean there's zero risk of an accident. What I'm saying is that under the new regulations and standards, the safety level sought for operation of the reactors has been satisfied," Tanaka said.
Kepco now needs to not only address the remaining technical and engineering issues, but also placate neighboring Kyoto and Shiga prefectures with assurances about safety and evacuation steps.The Takahama plant is only a few kilometers from the Fukui-Kyoto border.
About 397,000 people live within 30 km of the plant, including almost 90,000 in Maizuru, Kyoto Prefecture, a port city with a Maritime Self-Defense Force base that would likely play a major role in any evacuation.
In addition, 52,000 people in Shiga Prefecture, home to Lake Biwa, a major source of drinking water in the region, live within 30 km of the reactors.
Kepco is in talks with Kyoto and Shiga prefectures about various forms of cooperation for a restart. But residents in both prefectures are demanding the practice of formally obtaining local cooperation on restarts should include not only the governments that host a nuclear power plant but all administrations within 30 km — the approximate exclusion zone surrounding the Fukushima No. 1 plant.
Fukui opposes expanding the definition of "local consent," and Kepco has said only that it will formally seek permission from the Fukui governor and the town of Takahama.
Prior to the 2011 Fukushima meltdowns, the Kansai region relied on nuclear power for approximately half of its electricity needs.

Kansai Electric gets NRA go-ahead to restart 2 reactors in Fukui

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201502120057

By CHIKAKO KAWAHARA/ Staff Writer
Japan's nuclear watchdog gave the green light Feb. 12 to restart two idled reactors at a plant in Fukui Prefecture, adding impetus to government efforts to bring nuclear facilities back online.
The Nuclear Regulation Authority approved enhanced safety measures submitted by Kansai Electric Power Co. for the No. 3 and No. 4 reactors at its Takahama plant, a key hurdle for their restart.
Of the 48 commercial reactors that went offline after the Fukushima nuclear crisis unfolded in March 2011, only two other reactors--at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture--have received safety clearance.

Kansai Electric will now work toward completing other procedures, such as obtaining final NRA go-ahead and the backing of local governments to restart the reactors.
The reactors at both the Takahama and Sendai plants are not expected to go back online before summer, as their operators still need to obtain approval of detailed construction plans, as well as operational and accident-response manuals.
Also, on-site operational checks that follow the final NRA approval take one to two months to complete.
Kansai Electric submitted its application to restart the No. 3 and No. 4 reactors at the Takahama facility after new safety regulations took effect in July 2013.
The NRA approved the draft permission for the plant's safety measures last December and solicited opinions from the public over 30 days. It examined 3,615 opinions and made some corrections to the draft before adopting a final version.
The nuclear watchdog also took into consideration Kansai Electric's plan to use the reactors for plutonium-thermal power generation, which uses mixed-oxide fuel comprising plutonium and uranium.
It also gave the approval on condition that the utility enhances the plant's tsunami resistance and designates part of the No. 1 and No. 2 reactor buildings as emergency headquarters in the event of a serious incident.
In satisfying the latter condition, Kansai Electric will need to resubmit safety measures for the No. 3 and No. 4 reactors if it seeks to restart the No. 1 and No. 2 reactors.
With the Abe administration pushing to bring reactors that pass the NRA's safety standards back online, Kansai Electric believes it will be able to restart the No. 3 and No. 4 reactors after obtaining consent from Fukui Prefecture and the city of Takahama, which host the plant.
Prefectural authorities will make their decision after the utility has satisfied other requirements.
However, the restart remains uncertain, as some neighboring prefectures within 30 kilometers of the plant--which are required to map out disaster-evacuation plans--have demanded a greater say in the move.
Kyoto and Shiga prefectures, parts of which are included in the zone, have negotiated with Kansai Electric to give them the right to be more involved in the decision-making process.
The NRA said it will provide explanatory briefings on its decision to approve the safety measures at the Takahama plant for local governments that ask.

2 more idled nuclear reactors in Japan get safety OKs

http://mainichi.jp/english/english/newsselect/news/20150212p2g00m0dm034000c.html

TOKYO (Kyodo) -- Two more of Japan's idled nuclear reactors obtained safety clearance from the regulator on Thursday, giving another boost to the government's planned resumption of atomic power generation following the 2011 Fukushima Daiichi meltdowns.
With the Nuclear Regulation Authority's approval of enhanced safety measures against possible earthquake and tsunami hazards as well as other severe accidents, the Nos. 3 and 4 reactors at Kansai Electric Power Co.'s Takahama complex, located on the Sea of Japan coast in Fukui Prefecture, cleared a key hurdle toward resumption.

Although the majority of the public in Japan remains opposed to the restart, Prime Minister Shinzo Abe is looking to resume operation of reactors that clear the regulator's screening based on the country's new, tighter regulations, saying it is necessary for economic growth.
Among a total of 48 commercial reactors that were gradually taken offline after the Fukushima nuclear crisis, only two other reactors, owned by Kyushu Electric Power Co., have obtained safety clearance under the new regulations so far.
"The level of safety that we require for resumption has been secured (regarding the two Takahama reactors)," Shunichi Tanaka, chairman of the regulatory body, said at a press conference.
"But this does not mean that accidents will never occur or there are no risks," Tanaka said, calling for Kansai Electric's continued efforts to enhance safety of the plant.
The units, however, are not expected to go back online before summer, as the operator still needs to complete other procedures, such as submitting a construction plan, undergoing on-site operational checks and obtaining local approval.
The restart also remains uncertain because some neighboring municipalities within a 30-kilometer radius of the plant have demanded a greater say in deciding whether to allow it, claiming they could also be greatly affected in the event of a severe accident.
A Kansai Electric spokesman said the company hopes to restart the two Takahama units by November.
The company seeks to resume operations at nine of the 11 reactors it owns, the exceptions being two aging reactors.
In September, a pair of reactors at Kyushu Electric's Sendai plant in southwestern Japan became the first to meet the stricter safety requirements introduced following the Fukushima nuclear crisis, the worst since the 1986 Chernobyl disaster.
But the Sendai plant, seen as the closest to resumption, still remains offline as the operator is behind schedule in completing necessary procedures.
Power companies are desperate to bring their idled nuclear reactors back online amid an increase in fossil-fuel costs for thermal power generation, which has covered the output shortfall in the absence of atomic power.
Kansai Electric, which was one of the most nuclear-reliant utilities in Japan before the Fukushima accident, is expected to post a fourth straight year of losses in the current business year through March.
The utility sought government permission last year for raising its electricity bills from April, after it last raised household bills in May 2013.
February 12, 2015(Mainichi Japan)

NRA: Takahama reactors clear screening

http://www3.nhk.or.jp/nhkworld/english/news/20150212_19.html

Feb. 12, 2015 - Updated 03:55 UTC+1
Japan's nuclear regulator says 2 reactors at Takahama nuclear plant in Fukui Prefecture have cleared screening for restart.

The Nuclear Regulation Authority unanimously decided on Thursday that safety measures on the No.3 and No.4 reactors meet new government requirements set after the Fukushima Daiichi disaster.

About 3,600 ordinary people gave their views on the NRA assessment via a public comment system.

Some comments said the authority underestimated the size of tremors from an earthquake. Others criticized the inadequacy of measures to deal with a severe accident or terrorist attack.

The Takahama plant in central Japan is the second to be cleared for restart, following the green light for the Sendai plant in Kagoshima Prefecture, in the southwest.

Operator Kansai Electric Power Company aims to bring the reactors back online in November, after its equipment designs are authorized and it wins the approval of local governments.

The company plans to seek the consent of Fukui Prefecture and Takahama town, which host the plant.

But some local governments demand approval from all municipalities within the plant's 30-kilometer zone. The municipalities are obliged to draw up disaster preparedness plans.

Municipalities in Fukui's neighboring prefectures of Kyoto and Shiga, which fall in that zone, are seeking a new accord with Kansai Electric.

Screening process: No major development

February 12, 2015

Screenings of nuclear fuel facilities in Japan not moving forward

http://mainichi.jp/english/english/newsselect/news/20150212p2a00m0na019000c.html

December last year marked one year since the implementation of new safety standards applying to nuclear fuel facilities, which play a significant role in the nation's nuclear fuel cycle. The Nuclear Regulation Authority (NRA) is performing safety checks of such facilities alongside inspections of nuclear power plants, but so far there have been no major developments.
NRA member Akira Ishiwatari visited a reprocessing facility for spent nuclear fuel in Aomori Prefecture in December last year. It was the first full-scale, on-site inspection to be conducted since the facility's operator, Japan Nuclear Fuel Ltd., applied for a safety check in January 2014 with an eye to start operations. The focus of the inspection was whether an active fault lay beneath the plant. If a fault existed, the main structures would need further reinforcement against earthquakes.
After examining 10 spots including geological formations in trenches that were dug, Ishiwatari told reporters that he wanted the data for drilling that was underway, indicating that it would take quite some time to reach a decision on the facility.

Applications for safety screening of 15 nuclear fuel facilities have been submitted to the NRA. Among them are four major Japan Nuclear Fuel facilities, including a reprocessing facility and a MOX fuel facility, together with a reactor for university research. The reprocessing and MOX fuel facilities form the core of Japan's nuclear fuel cycle.

The MOX fuel that is processed at the reprocessing facility in Aomori Prefecture is used at nuclear power plants in so-called "pluthermal" systems. The reactor at the Oma Nuclear Power Plant in the prefecture, to be operated by J-Power (Electric Power Development Co.), would be the first commercial reactor in the world to use 100 percent MOX fuel. A safety screening application for this plant has already been filed.

The Monju fast-breeder reactor in Fukui Prefecture, which was designed to generate more nuclear fuel than it consumes, also plays a pivotal role in the nuclear fuel cycle. A total of 99.3 percent of the uranium used as fuel at nuclear power plants consists of Uranium-238, which is not fissile. Monju has been touted as a "dream reactor" as it can break this down into fissile plutonium, increasing the amount of nuclear fuel.

However, the outlook for each of these facilities is unknown. NRA Chairman Shunichi Tanaka has said the Oma reactor will be evaluated carefully, as there are no other cases of 100 percent MOX fuel operation.

As for the Monju reactor, it was learned in November 2012 that a massive number of checks had not been performed properly, which effectively resulted in it being ordered to a halt. The operator, Japan Atomic Energy Agency, has sought to revise its administration system, but there are no immediate prospects of the order being lifted.

Similarly, in the screening of the reprocessing facility, the NRA and Japan Nuclear Fuel have not seen eye to eye. Five screening meetings were held in January, but one NRA official said all that happened was that people gathered for the meetings. Kazuhiro Matsumura, senior executive vice president of Japan Nuclear Fuel, stressed, "We are putting full effort into explaining the issues" However, a critical NRA official commented, "The grounds for their explanations in the screening process are lacking. They're just trying to get it over and done with simply and take the easiest route."

In screenings for nuclear power plants, the No. 1 and 2 reactors at the Sendai Nuclear Power Plant operated by Kyushu Electric Power Co. have been granted safety clearance. Permission was similarly granted to the idled No. 3 and 4 reactors at Kansai Electric Power Co.'s Takahama Nuclear Power Plant on Feb. 12. To date, when power companies have failed to respond clearly to NRA requests during nuclear power plant screening, the screening process has tended to remain at a standstill. As such, the stance of Japan Nuclear Fuel is likely to be tested.

More eyes needed

February 14, 2015

EDITORIAL: Bring more parties aboard in reactor restart process

http://ajw.asahi.com/article/views/editorial/AJ201502140047

Citizens protest restarting of reactors at the Takahama nuclear power plant at a rally in Kyoto on Feb. 12. (The Asahi Shimbun)

The Nuclear Regulation Authority has formally approved an application by Kansai Electric Power Co. to restart the No. 3 and No. 4 reactors at its Takahama nuclear power plant in Fukui Prefecture.

The decision means that the two offline reactors meet its safety standards.

This is the second time the NRA has endorsed the safety of reactors under tighter standards introduced after the outbreak of the Fukushima nuclear crisis in March 2011. Two reactors at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture have also been granted the safety clearance.

The focus will now be on whether local governments in the vicinity give their consent. However, there is no law stating which prefectures and municipalities should be involved in the process.

With regard to the Sendai plant, Kagoshima Governor Yuichiro Ito decreed that only Kagoshima prefectural authorities and the facility's host city of Satsuma-Sendai should have any say.

The Abe administration decided to use the Sendai plant as a template for its push to bring idled reactors back online. In line with this policy, Kansai Electric and Fukui Governor Issei Nishikawa intend to seek the consent of only the prefecture and the town of Takahama for the restart.

The Fukushima nuclear disaster brutally underscored the reality that a severe accident can affect vast areas.

Allowing reactors to be restarted under the regulatory framework in place before the outbreak of the crisis is simply unacceptable.

The current approach for local government consent covers only the prefecture and the host municipality. Instead of treating this as an established system, the government should redefine the scope of local governments concerned before reactors are brought back online.

For instance, the city of Maizuru, Kyoto Prefecture, is within five kilometers of the Takahama plant. This means residents of the city would have to be evacuated immediately if there was a major accident at the plant.

Eight municipalities in Kyoto and Shiga prefectures lie within 30 km of the facility. These local governments are required by the state to compile evacuation plans for nuclear emergencies. The total population of the eight municipalities exceeds 120,000. This compares with 50,000 or so people living in the Fukui Prefecture area of the 30-km zone.

The NRA is also assessing the safety of the Oi plant in Fukui Prefecture, the Genkai plant in Saga Prefecture, the Ikata plant in Ehime Prefecture, the Shimane plant in Shimane Prefecture and the Shika plant in Ishikawa Prefecture. All of these facilities lie close to neighboring prefectures.

A key indicator of the government's stance toward this issue will be the scope of the local governments involved in the process of restarting the two reactors at the Takahama plant.

MORE 'EYES' NEEDED

The requisite consent from local governments hosting nuclear plants for operating reactors is based on safety agreements between these governments and the plant operators.

As many nuclear power plants were constructed in the 1970s onward, the number of problems with the facilities has increased. Yet, crucial information about these problems was tightly controlled by the plant operators and the central government, with local governments concerned often left out of the loop.

This prompted host governments to strike deals with the operators of nuclear plants to demand relevant information so that they can closely monitor safety aspects from the standpoint of local residents.

For instance, agreements between Fukui Prefecture and operators of nuclear plants in the prefecture include a provision that allows local governments to demand the suspension of a reactor under certain circumstances, as well as a clause requiring advance discussions before restarting reactors after a serious incident.

The prefectures acquired these rights through persistent negotiations with the operators following every incident and glitch along the way.

Since the Fukushima disaster, which has made residents of municipalities around nuclear plants uneasy about the safety of the facilities, many local governments across the nation have started calling for similar agreements with plant operators.

Kansai Electric, however, has been reluctant to respond to these calls.

The utility is currently in talks with Kyoto Prefecture for a new agreement, but refuses to accede to the prefecture's call for the right to consent.

Fukui Governor Nishikawa supports this stance, stressing that host governments have been assuming related “responsibilities and risks.”

Host governments are probably wary about giving a say to local governments that are not as deeply involved in nuclear plant-related matters.

However, the participation of surrounding governments in the process of deciding whether to restart reactors would lead to a broader scope of safety monitoring through a greater number of eyes.

Host governments have acquired the right to look into the safety of the nuclear plants on their own and, should they decide, refuse to approve plans to restart reactors if there are safety concerns. They should share this privilege with surrounding local governments to widen the scope of local communities that have a say in the matter.

CONSENT OF 30-KM ZONE

The three prefectures of Fukui, Kyoto and Shiga, as well as municipalities concerned, have worked out evacuation plans for broad areas in accordance with the central government's nuclear disaster-response guidelines. However, work has barely started on coordinating details to ensure the evacuations will be carried out properly.

If a serious nuclear incident occurs in Fukui Prefecture, more than 100,000 people in the three prefectures may have to be evacuated, mainly to the Kansai region.

Such a scenario conjures up images of major traffic snarls and serious confusion. Many issues need to be sorted out, including how to secure buses for evacuations.

In January, the Union of Kansai Governments, which groups seven prefectures and four designated cities, called on the central government to get actively involved in efforts to ensure the effectiveness of wide-area evacuation plans.

Until the central government commits itself to this task, the union warned, there is little likelihood that calls to restart the Takahama reactors will be accepted.

Operators of nuclear plants planning to restart reactors should be required to gain prior consent from all local governments responsible for the safety of residents during nuclear emergencies.

For the time being, the local government consent program should cover all areas within 30 km of nuclear plants, in line with the emergency evacuation zones defined by the government’s nuclear disaster-response guidelines.

It may also be advisable to consider providing a legal basis in the future for the requirement of local consent, which is currently based only on agreements between plant operators and local governments. This step would help remind nuclear plant operators that this is a process of great gravity.

REUNITING LOCAL TIES

When two reactors at the Oi plant were restarted in 2012, local government heads in the Kansai region, which uses electricity produced at the plant, temporarily expressed their opposition to the move. As a result, Fukui Prefecture became isolated.

The one-sided push against the restart of the reactors caused Fukui Prefecture to develop deep-rooted distrust of local governments in areas that consume electricity generated by the facility.

It is essential to make fresh efforts to overcome the conflict of interests and reunite the relationships among the broader range of local communities concerned.

We suggest the central government take the lead by coordinating talks among the governors of Fukui and Kansai prefectures, along with the mayors of municipalities within 30 km of the plant, to build consensus on the scope and rights of local governments involved.

There is a raft of problems that need to be resolved through cooperation between areas where nuclear plants are located and those that consume the electricity the sites produce. These include, for instance, where to store spent nuclear fuel rods piled up in storage pools at nuclear plants and how to support local communities that would lose their main revenue source when aged nuclear plants are decommissioned.

This process will undoubtedly require a great deal of time and effort. But sufficient time should be spent on tackling the challenges presented by the harrowing incident at the Fukushima plant.

The future of nuclear power generation is a question that should be answered through national debate.

We are eager to see Fukui and Kansai take a first step in this direction together.

--The Asahi Shimbun, Feb. 14

Takahama reactors

February 16, 2015
http://www3.nhk.or.jp/nhkworld/english/news/nuclearwatch/20150216.html

Nuclear Watch : Takahama Reactors Clear Screening

Kurando Tago, NHK WORLD
The operator of a nuclear power plant in central Japan is a step closer to restarting two reactors after government regulators approved the plan. The facility is the second to meet the new regulations introduced after the 2011 Fukushima accident, but not everyone agrees with the decision.
Officials with the Nuclear Regulation Authority were unanimous in giving approval for the restart. They say the No. 3 and No. 4 reactors of the Takahama nuclear plant meet the new requirements for withstanding potential earthquakes and tsunami. "We've confirmed the plant's operator will guarantee the level of safety that the authority is demanding," says Shunichi Tanaka, the authority's chairman.
The operator, Kansai Electric Power Company, is hoping to bring the reactors back online in November. But it still needs to win the approval of local governments, while some people are raising concerns about safety.
Dozens of people rallied in front of the NRA's office to protest the authority's decision. Operators are looking for consent from Fukui Prefecture as well as Takahama town, which host the plant.
But authorities with other local governments want their voices heard as well. They want Kansai Electric to get approval from all municipalities within the plant's 30-kilometer zone. Officials in those areas are obliged to draw up disaster-readiness plans, and some residents are voicing anxiety. "The plant's existence is desirable in terms of employment as many people work there," says one resident. "But when it comes to the plant's safety risks, it's a different story."
"Our community is in close proximity to the nuclear plant. We want a framework that makes sure our voices will be heard," says Kyoto Prefecture Governor Keiji Yamada, adding he has notified Kansai Electric of the concerns.
People around the world saw how the Fukushima disaster affected the lives of nearby residents. Now residents near the Takahama plant say Kansai Electric must come face-to-face with their concerns.

(Public) approval not guaranteed

February 17, 2015

Local approval is no given for Takahama nuclear restarts

http://www.japantimes.co.jp/news/2015/02/17/national/local-approval-given-takahama-nuclear-restarts/#.VOMDyy51Cot

JIJI
FUKUI – Kansai Electric Power Co. wants to fire up its Takahama nuclear plant as soon as possible, but it has cleared only one hurdle in securing a green light from regulators. The next could be difficult: obtaining the consent of local officials.

The plant must have evacuation plans for all residents. Although the plant is located in Fukui Prefecture, the evacuation zone sweeps into Kyoto and Shiga prefectures, and they fear for a repeat of a crisis like the Fukushima meltdowns.
The Nuclear Regulation Authority declared last week that the No. 3 and No. 4 reactors of the Takahama plant meet safety standards.
But Yutaka Nose, mayor of Takahama, called on the NRA to explain what that green light means. He suggested that it record a video for town residents to watch via a local cable television network.
Nose said he himself will only decide whether to approve the restarts after consulting residents.
Fukui Gov. Issei Nishikawa plans to decide in line with the recommendations of a panel of experts conducting an independent assessment at the prefectural government's behest. He will also, he said, consider sentiment in the town and the prefectural assembly.
Along with the NRA's safety certificate, **Kansai Electric needs to win approval for the systems and facilities it would deploy in the event of an accident**.
Nishikawa said he will take everything into account in deciding what to do.
It is unlikely that there will be much progress before **April's gubernatorial election**.
If the Sendai nuclear plant in Kagoshima Prefecture is anything to go by, approval could be months away at least. Approval is still pending for a resumption of life at that plant's No. 1 and No. 2 reactors, even though the NRA gave a thumbs-up in September.
The safety standards the NRA now holds reactors to were introduced after the crisis at the Fukushima No. 1 plant in March 2011.
A total of 21 reactors at 14 power plants are currently slated to get NRA screening, and some of them are already undergoing inspections. For now, all reactors remain offline.
In the event of a serious accident, residents within 5 km would be evacuated immediately. For those further away in the 30-km zone there need only be evacuation plans in place.
About 70 residents of Maizuru, Kyoto Prefecture, live within 5 km of the Takahama plant. The 30-km area includes 128,000 people in seven cities and towns in Kyoto, and 55,000 in four municipalities in Fukui.
Kyoto Gov. Keiji Yamada has not been drawn on whether he favors restarts. He has demanded "clear-cut accounts" from the central government, the NRA and Kansai Electric.
However, he seems satisfied with a draft safety agreement between his prefecture and the utility.
Taizo Mikazuki, governor of Shiga Prefecture, part of which also falls within the 30-km radius, maintains that he will not endorse the restart of the reactors unless the Takahama plant introduces an "effective" safety system.
Mikazuki was elected last July on a pledge of seeking to phase out nuclear power.
He has warned that in the event of an accident, the fallout won't respect prefectural boundaries. He believes reactivating nuclear plants should be a matter for other prefectures, not just the one that hosts the plant.
But Nishikawa said the decision should be for Fukui Prefecture and the town of Takahama alone because they host the plant and will assume the risk.
Nishikawa recognizes that there is concern in the Kyoto and Shiga prefectural governments, and therefore he has called on the central government to explain why the reactors need to be restarted.

Documents submitted to NRA for restart of Kagoshima plant

February 27, 2015

Utility submits papers to restart nuclear plant

Feb. 27, 2015 - Updated 11:18 UTC+1

http://www3.nhk.or.jp/nhkworld/english/news/20150227_45.html

The operator of a nuclear power plant in southwestern Japan has submitted revised technical documents to regulators. They hope to gain approval to restart the plant.

In September last year, 2 reactors at the Sendai facility in Satsuma Sendai City in Kagoshima Prefecture became the first in Japan to meet new, tougher, government regulations. The new rules were introduced after the 2011 nuclear disaster in Fukushima.

Later, Kyushu Electric Power Company, which operates the plant, obtained the governor of Kagoshima's consent to restart the reactors.

But the company still needs 2 approvals from the Nuclear Regulation Authority before it can put the reactors back online.

On Friday, the utility submitted a revised construction plan that includes detailed designs of the facilities as well as some other information about the Number One reactor.

Company's officials say that it has taken 2 months longer than expected. They needed to conduct experiments to verify earthquake resistance. They also say they were required to give more detailed explanations.

The utility plans to submit by the end of March documents describing the central control room and other facilities. They will also provide technical data about the Number Two reactor.

If a restart happens it may not come until May or later, possibly the summer. It depends on the regulator's approval of the documents and onsite inspections.
An executive from the utility, Akira Nakamura, said the company was required to thoroughly verify the facilities' quake resistance and it took longer than expected.

All of Japan's commercial nuclear reactors are currently offline.

Takahama assembly to vote on restart

February 27, 2015

Takahama assembly to vote on restarting nuclear reactors

http://www.japantimes.co.jp/news/2015/02/27/national/takahama-assembly-to-vote-on-restarting-nuclear-reactors/#.VPF7Ni51Cos

by Eric Johnston
Staff Writer

The town assembly of Takahama, Fukui Prefecture, which hosts Kansai Electric Power Co.'s Takahama nuclear power plant, will decide by March 20 whether to approve the restart of the plant's No. 3 and 4 reactors, which recently cleared central government inspections.

The decision by the assembly, which is generally seen as pro-nuclear, will be based on whether five basic conditions the prefecture requested of the central government in mid-February are met to their satisfaction. These include central government explanations to local residents on the importance of the reactors, the safety measures being taken, and a plan for dealing with midterm storage of the spent nuclear fuel they produce.

The prefectural government also wants to know how big nuclear's role in the overall energy mix will be, how the lessons of the Fukushima meltdowns will be applied to Takahama, and what kind of assistance other local governments hosting nuclear power plants will receive for employment and economic issues when plants are decommissioned.

In addition to the above, the Takahama assembly will canvass residents on whether they want the plant to be restarted. While not legally required, obtaining local permission for restarts is a long-established practice. Fukui Gov. Issei Nishikawa, who is also generally seen to be pro-nuclear, will have the final say, which is expected to come after the nationwide round of local elections in April.

One condition that neither the municipal nor the prefectural government sought was specific language demanding that neighboring cities and towns in Kyoto and Shiga prefectures that are within 30 km of Takahama also give formal permission for the restart. Under new guidelines adopted after 3/11, all local governments lying fully or partially within a 30-km radius of a nuclear power plant have to draft evacuation plans.

On Friday, a general safety agreement including Kepco, the Kyoto Prefectural Government, and the heads of seven towns and villages within 30 km of Takahama, was signed at prefectural headquarters following weeks of discussions.

Under the agreement, which is the first of its kind, the Kyoto localities will establish a joint committee to work together with Kepco, which will provide them with information about the reactors. As parts of Maizuru, a city in Kyoto with a population of nearly 89,000, lie within five km of the Takahama plant, Kepco has agreed to consult its officials about safety measures and respond to their opinions.

Kepco has also promised to provide Kyoto officials with an explanation of why it needs to build more reactors, should the utility decide to do so, and to provide prior notice if either spent nuclear fuel or radioactive waste is transported through the prefecture.

A survey by anti-nuclear citizens in Kyoto and Shiga conducted between Jan. 16 and Feb. 25 on 97 local assembly members in the seven Kyoto and two Shiga localities within 30 km of Takahama showed that 77 percent said they thought it was necessary to obtain their permission for a restart.

About 127,500 people in seven Kyoto prefectural cities, towns, and villages with a total population of 277,500 live within 30 km of the Takahama plant. Part of Takashima, Shiga Prefecture, which has a population of about 52,500, also lies within that zone.

Municipalities want right to express themselves on restart

March 2, 2015

Municipalities near nuclear plants want more say on reactivation: survey

http://mainichi.jp/english/english/newsselect/news/20150302p2a00m0na014000c.html

The mayors of over half of the municipalities near those hosting nuclear power plants have told the Mainichi Shimbun in a survey that they oppose reactivation of nuclear power plants based on agreements with the host city and prefecture alone.

The governments of municipalities surrounding those hosting nuclear power plants aren't given the right to express their opinions on reactivation, and there is no means to have their residents' opinions heard in the procedures leading up to reactivation.

In the case of the Sendai Nuclear Power Plant in Kagoshima Prefecture, procedures to obtain local consent only involved the prefecture and the city of Satsumasendai, hosts of the plant. With regards to this method, 11 of the 22 mayors of municipalities hosting nuclear power plants said that they thought it was correct to seek only the host prefecture and municipality's agreement. Only one village mayor said this was wrong. By contrast, the mayors of 60 of the 117 surrounding municipalities within 30 kilometers of the plants said the scope of consent sought was inappropriate. Just 14 said it was right to leave the decision up to the host prefecture and municipality alone.

"The residents of surrounding municipalities have a deep interest in the matter of plant reactivation, and reactivation can no longer be decided based on the opinions of the host municipalities alone," responded the mayor of Fujieda, Shizuoka Prefecture.

The survey also asked the 22 hosting municipalities' mayors whether it was acceptable to restart power plants that meet new safety regulations adopted after the Fukushima No. 1 Nuclear Power Plant disaster. Nine agreed with this stance while five opposed it. Meanwhile, 39 of the mayors of the 117 surrounding municipalities said it was not acceptable to restart the plants, while 23 said it was acceptable, showing a difference in attitude between the mayors of municipalities hosting nuclear power plants and those of the surrounding municipalities.

Fifty-two of the mayors of the surrounding municipalities said that municipalities' opinions were not being reflected in the national government's nuclear power policy, while 34 said they were. Twenty-nine of the 52 mayors who said the municipalities' opinions were not being reflected were also mayors who opposed reactivation.

"There is no opportunity to directly deal with the government," answered the mayor of Kucchan, Hokkaido.

"The understanding of residents is of the utmost importance in nuclear power policy, but the opinions of municipalities are not being represented," wrote the mayor of Fukuroi, Shizuoka Prefecture.

The mayor of Mito wrote, "There is no chance or method to express the voices of municipalities to the national government."
The survey was conducted from late January on the mayors of 135 municipalities specified by the government as "Urgent Protective Action Planning Zones" (UPZs), plus the mayors of four municipalities within 30 kilometers of Electric Power Development Co. (J-Power)'s Oma Nuclear Power Plant, currently undergoing safety inspections ahead of possible activation.
A similar survey was conducted on the mayors of 21 governors of prefectures within UPZs. Two of them, the governors of Fukui and Kagoshima prefectures, both nuclear power plant hosts, said that they thought it was correct to seek only the agreement of hosting municipalities for plant reactivation. The governors of two other nuclear power plant hosts, Ibaraki and Shizuoka prefectures, said they thought it was incorrect, as did the governors of Shiga, Kyoto, Tottori and Nagasaki prefectures, which are located around nuclear power plant hosts.
There is no clear legal basis for the scope of municipalities included when seeking agreement for reactivation of nuclear plants. For the Sendai Nuclear Power Plant, a safety agreement between Kagoshima Prefecture, the city of Satsumasendai and Kyushu Electric Power Co. was used as the basis for defining the municipalities whose agreement was necessary. Agreement on the plant's reactivation was expressed first by the Satsumasendai Municipal Assembly, then the mayor, followed by the prefectural assembly, then the governor.
The dissatisfaction of municipalities near nuclear plants with their inability to be a part of the process for deciding on plant reactivation is likely to affect the upcoming spring unified local elections.
March 02, 2015(Mainichi Japan)

Judges can stop nukes

March 5, 2015
Court battles are sole remaining obstacle to nuclear restarts

http://www.japantimes.co.jp/news/2015/03/05/national/court-battles-are-sole-remaining-obstacle-to-nuclear-restarts/#.VPgauS51Cos

by Mari Saito and Kentaro Hamada
Reuters
The fight over restarting the nuclear industry is moving to the courts, where power companies face the risk of further delays in firing up idled reactors if judges side with local residents worried about nuclear safety.
Four reactors owned by two utilities cleared regulatory safety checks in recent months, opening up the possibility of ending more than a year without atomic power in Japan, the first such spell in the four decades it has been using nuclear energy.
And while ruling politicians and Japan’s bureaucracy are pushing for restarts, the judiciary — which typically sided with power companies before the 2011 Fukushima nuclear disaster — may be shifting its attitude.

Judges are now considering injunctions that could halt the restarts and indefinitely extend the countrywide shutdown of Japan's 48 reactors that followed Fukushima, posing a threat to power companies already surviving on government support.

"Japan's courts have always been hesitant to properly check the state and its legislative process," but the shift in public opinion against nuclear power may have turned some judges in favor of residents, said Hiroshi Segi, a former judge turned critic of Japan's judicial system.

The court decisions, which might come this month — four years after the earthquake and tsunami that knocked out the Fukushima reactors — could mean months, even years of delays and hundreds of millions of dollars in losses for Kansai Electric Power Co. and Kyushu Electric Power Co.

Many citizens were shocked when Tokyo Electric Power Co. repeatedly mishandled and misreported on the Fukushima meltdowns and explosions, which led to a decontamination and decommissioning process that will take up to 30 years and cost billions of dollars. National opposition to restarts remains about two-to-one over support, polls have consistently shown.

"Now that we are drawing closer to restarts, there is no other entity but the judiciary to realistically stop it," said Yuichi Kaido, a lawyer involved in cases to stop restarts at the Sendai and Takahama nuclear plants and who has been battling utilities in court for three decades.

The plaintiffs contend the utilities are underestimating the earthquake risks at Sendai, in Kagoshima Prefecture, and Takahama, in Fukui, and are not meeting tougher post-Fukushima standards. Residents also say the government has not drafted credible evacuation plans for use in case of another nuclear event.

Kaido's team of anti-nuclear lawyers is planning to seek injunctions on every plant that wins regulatory approval.

"Judges must know that their decision could stop the next nuclear accident," Kaido said.

Ten utilities have so far submitted reactors at 13 nuclear facilities nationwide for restart. Electric Power Development Co., or J-Power, is also seeking approval for its Ohma plant, which is still under construction.

The costs of halting the restarts are high. Every day the Sendai reactors sit idle costs Kyushu Electric more than $4.6 million, the operator estimates.

Kansai and Kyushu Electric, the utilities most reliant on nuclear power before Fukushima, have amassed more than $10 billion in combined losses over the past four years.

Both are also on track for their fourth straight year of losses, Kyushu Electric after receiving a government bailout in 2014. Kansai Electric said last year that its corporate survival was at risk.

Halting restarts would also further complicate Prime Minister Shinzo Abe's plan to reduce imports of more expensive thermal fuels by reinstating nuclear power, which previously supplied nearly a third of Japan's energy.

Abe's government wants the first restarts, of Kyushu Electric's Sendai reactors in Kyushu, by around June, people familiar with the matter said last month. The industry had initially hoped the first reactors would be back online by last summer.

With judges appearing more sympathetic to anti-nuclear activists, though, the utilities face tougher prospects before the judiciary.

The lead judge in the Takahama case, Hideaki Higuchi, ruled against restarting Kansai Electric's Ohi plant in May last year, a rare victory for activists.

"I think residents could win the (Takahama) shutdown in Fukui District Court," said Akihiro Sawa, a former official with the Ministry of Economy Trade and Industry, which oversees electric power companies.

Sawa, now a research director at the 21st Century Public Policy Institute, affiliated with the nation's biggest business lobby, said he has been warning utility executives to take the lawsuits seriously.
A Kansai Electric representative said the company will continue telling the court its plant is safe. Still, "Kansai Electric believes there is a significant possibility that they will lose," said a person familiar with the utility's thinking.
Kyushu Electric has asked the court to dismiss the injunction request against its restart at Sendai, saying it has taken additional safety precautions after Fukushima and that there is no danger of an accident that would release large amounts of radiation.
In the Ohi decision last May, the Fukui court judge said protecting residents' health from a potential nuclear accident was more important than any financial gains the country may get from restarting stalled plants.
"I am hopeful that the Sendai judge will feel the same," Kaido said.

21 applications for restart

March 11 , 2015

Utilities apply to restart 21 reactors

Mar. 11, 2015 - Updated 11:02 UTC+1

http://www3.nhk.or.jp/nhkworld/english/news/20150311_22.html

Japanese utilities have applied to restart more than 40 percent of the country's reactors, which remain offline 4 years after the Fukushima Daiichi disaster.

Regulators had received applications to screen 21 reactors at 14 plants as of Wednesday. All 48 of Japan's commercial reactors are offline.

Regulators must determine whether operators' safety measures are meeting new, stricter government requirements for earthquakes, tsunami and severe accidents. The measures against severe accidents were put in place after the 2011 nuclear crisis.

The Nuclear Regulation Authority has so far given the green light to 4 reactors at 2 plants.

2 of the reactors are at the Sendai plant in Kagoshima Prefecture, southern Japan, while the others are at the Takahama plant in Fukui Prefecture, central Japan.

No restart dates have been set yet. The city hosting the Sendai reactors has given its approval, but equipment at the plant must still be given a thorough inspection. The reactors might be restarted as early as May, but summer or later are also possibilities.

The Takahama reactors have yet to gain local approval. They must also still pass inspection by the

regulator and others.

Regulators are screening 5 other reactors that appear to have met requirements for withstanding earthquakes and tsunamis.

Utilities may scrap some old reactors rather than apply for restarts. Seven reactors will be at least 40 years old by July 2016. Utilities could decide to decommission 5 of them.

The government allows reactors to run for 40 years in principle, with a one-time extension of up to 20 years.
The operator of 2 reactors is inspecting them with an eye to applying for extensions.

Sendai: Not before June

March 13, 2015

Earliest Sendai plant restart would be June

http://www3.nhk.or.jp/nhkworld/english/news/20150313_29.html

Mar. 13, 2015 - Updated 11:38 UTC+1
Japanese nuclear regulators next week plan to certify the equipment design paperwork for a nuclear reactor in southwestern Japan. Operators aim to restart the Sendai nuclear plant in June, at the earliest.

Officials at the Nuclear Regulation Authority, or NRA, are set to approve next Wednesday the equipment design documents for the No.1 reactor at the plant. They've decided that the Kyushu Electric Power Company has appropriately assessed the quake resistance of the facilities and equipment.

Last September, the plant's No.1 and No.2 reactors became the first in Japan to clear new, tougher regulations introduced after the 2011 Fukushima nuclear accident. Satsuma Sendai City and Kagoshima Prefecture, where the plant is located, also approved the restart.

Kyushu Electric's next step is to apply for NRA inspections for the No.1 reactor's facilities and equipment.

It also needs to submit the designs of an emergency power generator and other equipment shared with the No.2 reactor. The operator will likely present the documents in April.

Since the NRA's inspections are expected to last more than 2 months, it is unlikely the restart could happen before June.

All of Japan's nuclear reactors are currently offline.

Satsumai Sendai applies for inspection

March 18, 2015

A reactor to be inspected under new regulations

Mar. 18, 2015 - Updated 05:11 UTC+1

http://www3.nhk.or.jp/nhkworld/english/news/20150318_19.html

The operator of a nuclear power plant in Satsuma Sendai, southwestern Japan, may be able to restart one of its reactors as early as June.

On Wednesday, Kyushu Electric Power Company obtained approval from the Nuclear Regulation Authority of its equipment design documents for the Number 1 reactor. The documents involve an assessment of the earthquake resistance of the facilities and equipment.

As a result, the utility is expected to apply for an onsite NRA inspection as soon as Thursday.

Referring to the inspection, NRA Chairman Shunichi Tanaka said there is still important work to be done before the reactor can resume operation.
He suggested that both the regulators and the utility be well prepared, as the inspection will cover many new facilities and require detailed checks.

The inspection is expected to take around 2 months, including preparation. It may take longer, since the reactor has been idle for a long time.

Last September, the plant's Number 1 and 2 reactors became the first in Japan to clear the new, tougher regulations introduced after the 2011 Fukushima nuclear accident.

Kyushu Electric has yet to submit documents on the designs of an emergency power generator and equipment shared with the Number 2 reactor. The operator will likely present the documents in April.

All of Japan's nuclear reactors are currently offline.

Sendai to restart in June

March 20, 2015

Kyushu Electric plans to restart Sendai plant reactor in June

http://mainichi.jp/english/english/newsselect/news/20150320p2g00m0dm026000c.html

TOKYO (Kyodo) -- Kyushu Electric Power Co. has submitted a plan to the Nuclear Regulation Authority to restart the No. 1 reactor at its Sendai power plant in Kagoshima Prefecture in June, sources close to the matter said Thursday.
A schedule for restarting a rector was disclosed for the first time after a set of tougher nuclear safety requirements were introduced in the wake of the 2011 Fukushima nuclear disaster.
As the utility will have to arrange a schedule with the authority for a pre-operation test of instruments and equipment at the plant, the schedule for restarting the reactor may change.
According to the report submitted to the regulatory authority, the utility plans to begin the pre-operation test in late March, restart the reactor in June and complete the test in August to begin commercial operations.
Japan's 48 commercial reactors were all gradually taken offline after the Fukushima nuclear crisis.

March 19, 2015

Utility applies for reactor check for July restart

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Mar. 19, 2015 - Updated 13:30 UTC+1
A utility has applied for onsite inspection of a reactor at a power plant in southwestern Japan for a possible restart in July.

Kyushu Electric Power Company filed the application with the Nuclear Regulation Authority on Thursday.

The step came one day after the regulator approved the utility's equipment design documents for the No.1 reactor at the Sendai plant in Satsuma-Sendai city.

Last September, the reactor, along with another at the same plant, became the first to clear new, tougher regulations introduced after the 2011 Fukushima nuclear crisis.

The inspection involves performance checks of new equipment installed under the regulations.

Inspectors are to check whether coolant pumps and other new facilities are built as designed and whether they function as planned.

Kyushu Electric's plan calls for the inspection to start on March 30th. Officials hope to start loading nuclear fuel into the reactor in early June.

More checks are expected to follow, including ones to see if newly equipped water-level gauges in the reactor are functioning properly.

The officials say they hope to pull out control rods to put the reactor back online in early July.

They plan to start generating electricity about one week later after the reactor reaches criticality, or a

self-sustaining nuclear chain reaction.

The utility hopes to start commercial operation in late August after final, comprehensive examinations.

But experts say the inspection may take longer because the reactor has remained off-line for a long time and it will be the first to undergo on-site inspection under the new rules.

The utility says restart of the No.2 reactor is not expected until August at the earliest because of a delay in presenting equipment design documents.

Kyushu Electric aims to restart Sendai plant reactor in June

http://www.japantimes.co.jp/news/2015/03/19/national/kyushu-electric-aims-to-restart-sendai-plant-reactor-in-june/#.VQwWhOF1Cos

Kyodo
Kyushu Electric Power Co. has submitted a plan to the Nuclear Regulation Authority to restart the No. 1 reactor at its Sendai power plant in Kagoshima Prefecture in June, sources close to the matter said Thursday.
It's the first time a schedule for restarting a reactor has been disclosed since a set of tougher nuclear safety requirements were introduced in the wake of the 2011 nuclear disaster at Tepco's wrecked Fukushima No. 1 plant.
As the utility will have to arrange a schedule with the authority for a pre-operation test of instruments and equipment at the plant, the schedule for restarting the reactor may change.
According to the report submitted to the regulatory authority, the utility plans to begin the pre-operation test in late March, restart the reactor in June and complete the test in August to begin commercial operations.
Japan's 48 commercial reactors were all gradually taken offline following the triple meltdown at Tepco's Fukushima No. 1 power plant, which was crippled by the March 2011 earthquake and tsunami.

Takahama restart approved by Assembly

March 20, 2015

Takahama Municipal Assembly approves restart of local nuclear plant

http://mainichi.jp/english/english/newsselect/news/20150320p2a00m0na014000c.html

TAKAHAMA, Fukui -- The municipal assembly here agreed on March 20 to approve the restart of two idled reactors at the Takahama Nuclear Power Plant.
The Takahama Municipal Assembly reported its decision to Mayor Yutaka Nose later in the day. "We'd like to keep in mind the assembly's move as an important factor in deciding on the issue," Mayor Nose said.
The mayor will notify the Fukui Prefectural Government of the town's position on the issue after the April 12 Fukui gubernatorial and prefectural assembly elections.
After deliberations on the issue at the prefectural assembly, Gov. Issei Nishikawa will make a final decision on whether to endorse resumption of operations at the No. 3 and 4 units at the Takahama plant.
Kansai Electric Power Co. (KEPCO), operator of the atomic power station, expects that it will reactivate the plant in November this year.
Assembly Speaker Teruo Matoba proposed in a meeting held behind closed doors on March 20 that the 14-seat assembly approve KEPCO's plan to restart the plant. A majority of its members were in favor of the speaker's proposal.
On March 4, the assembly adopted two petitions calling for restarting the nuclear plant while rejecting three others against reactivation. The assembly has also voted to urge the central government to approve early resumption of operations at the plant's two reactors.
The national government's Nuclear Regulation Authority is still screening KEPCO's plan to modify the plant based on its safety measures and changes to safety regulations on the operation and management of the plant.

Preventive measures still not implemented at Monju reactor

March 23, 2015

JAEA declares prototype fast-breeder reactor safety measures sufficiently improved

http://mainichi.jp/english/english/newsselect/news/20150323p2a00m0na003000c.html

The Japan Atomic Energy Agency (JAEA) reported to the government on March 23 that it has sufficiently improved safety measures on its troubled Monju fast-breeder nuclear reactor, which remains shut down on Nuclear Regulation Authority (NRA) orders.
"All countermeasures have been implemented and positive results have been produced," says the report on the maintenance and management of the prototype reactor in Fukui Prefecture, submitted by JAEA President Shojiro Matsuura to Education, Culture, Sports, Science and Technology Minister Hakubun Shimomura.
However, the report failed to convince Shimomura.
"It's necessary for the JAEA to make further efforts to raise employee awareness of maintenance and management and to improve their skills," the science minister said. "The agency's efforts are still not enough to win public understanding."
Matsuura, whose current term as JAEA president ends on March 31, acknowledged that its efforts remained insufficient.

"I think the maintenance and management system has been established, but more efforts are needed to make sure that the system takes root at the plant."
The NRA effectively banned the JAEA from operating the Monju reactor in May 2013 after it came to light that maintenance workers failed to check numerous inspection items at the plant.
The JAEA had aimed to have the ban lifted by the end of March. However, the NRA pointed out earlier this month that the agency had still failed to fully implement preventive measures, and the lifting of the ban will likely be delayed.

NRA to inspect Sendai plant

March 29, 2015

Nuclear regulators to inspect reactor for restart

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Mar. 29, 2015 - Updated 19:16 UTC+2
Nuclear regulators will begin examining a reactor at a power plant in southwestern Japan on Monday to determine whether its operations can be restarted.

Officials with the Secretariat of the Nuclear Regulation Authority will oversee inspections of facilities at the No.1 reactor at the Sendai plant in Satsuma-Sendai city.

All commercial reactors in the country are currently offline. Last September, two reactors at the plant became the first to clear new, tougher regulations introduced after the 2011 Fukushima nuclear accident.

The NRA will determine whether the new facilities and equipment have been installed as planned and can function properly.

The new regulations require about 500 items to withstand severe nuclear accidents.

Inspectors will also check for any deterioration of conventional equipment as the No.1 reactor has been offline for nearly 4 years.

Kyushu Electric Power Company is the plant's operator. It wants to start loading nuclear fuel into the reactor in early June for a restart in early July.

But the schedule depends on the pre-start inspections.

Screening Takahama and Mihama reactors

April 2, 2015

Screening starts for 3 aging reactors

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Apr. 2, 2015 - Updated 10:52 UTC+2

Japan's nuclear regulators have begun screening for restarts of 3 aging reactors on the Sea of Japan coast in Fukui Prefecture, central Japan.

The reactors at the Takahama and Mihama plants are the first to undergo the screening as they approach a new 40-year age limit for operation.

Members of the Nuclear Regulation Authority and other officials met on Thursday to start screening the No.1 and 2 reactors at Takahama and No.3 reactor at Mihama.

Both plants are operated by Kansai Electric Power Company.

To bring reactors back online, their operators must meet government requirements introduced after the 2011 Fukushima nuclear crisis to prepare them for disasters.

Under the regulations, reactors can operate for 40 years in principle. Extensions of up to 20 years are allowed only when they clear both the screening for restarts and special inspections for possible deterioration.

Kansai Electric officials explained at the meeting what safety steps they take.

One major challenge with old reactors is preventing electric cable fires. The officials say they plan to replace hundreds of kilometers of cables per reactor with those made of flame-retardant materials or apply to them fire-resistant coatings.

The officials also say they will build a new emergency operation facility for the Takahama plant.

The firm originally planned to use the No.1 and 2 reactor buildings in case of emergencies at the No.3 and 4 reactors, which have already cleared screening.

The regulators asked the utility for further details on ways to confirm that the cables are fireproof and responses to simultaneous accidents at Takahama's 4 reactors.

The plant has until July next year and the Mihama plant until November next year to clear the screening.

If the 3 reactors fail to meet the many requirements by then, the utility is to be required to decommission them.

Life-span extension reviews begins for three aging Kepco reactors

http://www.japantimes.co.jp/news/2015/04/02/national/three-aging-nuclear-reactors-begin-getting-lifespan-extension-reviews/#.VR1qkuHwmos

Kyodo

The nuclear regulator on Thursday began screening three Kansai Electric Power Co. reactors which the utility wants to bring back online and keep in service beyond their mandated 40-year life span. All three are now nearing that limit.

A regulation brought in after the March 2011 nuclear disaster forbids the operation of nuclear reactors for more than 40 years, although operators can secure a 20-year extension if the reactors are refitted and obtain safety clearance from the Nuclear Regulation Authority.

Before the nuclear crisis, Kansai Electric was heavily reliant on atomic power. It hopes to restart the No. 3 unit at its Mihama plant and Nos. 1 and 2 units at the Takahama plant, all located on the Sea of Japan coast in Fukui Prefecture.

But Kansai Electric faces the daunting task of upgrading old equipment and clearing regulator screening within certain time limits.

For example, the new regulations require utilities to install power cables made from fire-retardant materials. Kepco hopes to clear the NRA checks by coating existing cables with non-flammable paint.

The company has decided to scrap its Nos. 1 and 2 reactors at the Mihama plant, which are both over 40 years old, believing that it was not economical to invest in costly refits, given the reactors' comparatively small output.

Ikata restart

April 14, 2015

Restart plan for Ikata nuclear plant

http://www3.nhk.or.jp/nhkworld/english/news/20150414_15.html

Apr. 14, 2015 - Updated 05:37 UTC+2

Japan's nuclear regulator is set to draft an approval paper for the restart of a plant in western Japan.

The move comes as the operators of the Ikata nuclear power facility in Ehime Prefecture submit a revised safety plan.

Commissioners at the Nuclear Regulation Authority have been discussing safety measures for the Ikata reactor for more than 20 months.

They have been examining the magnitudes of possible earthquakes and tsunamis that could hit - as well as the operator's severe accident plan.

The regulator asked operator Shikoku Electric Power Company to raise its maximum magnitude of a possible earthquake, and to install a command center in the event of a severe accident.

The operator is expected to submit its revised safety plan on Tuesday.

If it is satisfied with the plan, the NRA will begin an assessment in one of several steps needed to restart the reactor.

Ikata could be the third plant in the country on course for restart following the Sendai plant in Kagoshima, southwestern Japan, and the Takahama plant in Fukui on the Japan Sea coast.

But it is widely believed that the Ikata reactor will not be online until winter at the earliest as more time is needed for the regulator to finish its assessment.

The operator must also go through the NRA's detailed on-site checks of equipment and machines, and the utility needs to gain local consent.

Screening

April 14, 2015

Reactors being screened for restart

http://www3.nhk.or.jp/nhkworld/english/news/20150414_32.html

Apr. 14, 2015 - Updated 12:11 UTC+2
All 48 reactors at 16 nuclear plants in Japan have been put offline since the accident at the Fukushima Daiichi power station in March 2011.

Plant operators had applied for screening by the Nuclear Regulation Authority for 24 of the reactors at 15 plants as of Tuesday, to see whether they comply with new requirements introduced after the accident.

2 reactors at the Sendai plant in Kagoshima Prefecture, southwestern Japan, and 2 more at the Takahama plant in Fukui Prefecture have passed the screening.

Kyushu Electric Power Company aims to restart the Sendai reactors in July, as it has already obtained approval from the prefecture and the host city.

Kansai Electric plans to put the Takahama reactors back online in November, but must undergo an equipment inspection and persuade local governments to agree to a restart.

Detailed discussion of the screening is almost complete for one reactor at the Ikata plant in Ehime Prefecture, Shikoku. 2 at the Genkai plant in Saga Prefecture, Kyushu; and 2 at the Ohi plant in Fukui Prefecture are in the final stages of the screening. Most others are still in the early stages.

Fukui Court rejects restart

April 14, 2015

Court rejects restart of Takahama nuclear reactors

http://mainichi.jp/english/english/newsselect/news/20150414p2g00m0dm057000c.html

FUKUI, Japan (Kyodo) -- A court issued an injunction on Tuesday ordering Kansai Electric Power Co. not to restart two reactors at its Takahama nuclear power plant on the Sea of Japan coast that have cleared safety screening by the nation's nuclear safety regulator.
The Fukui District Court's decision -- the first such injunction in Japan forbidding nuclear reactors from resuming operations -- concerns the Nos. 3 and 4 reactors at the four-unit complex in Fukui Prefecture, located in an area along Wakasa Bay dotted with several nuclear power plants.
The court said it cannot see credible evidence in the utility's assumptions regarding earthquake risk.
The injunction is effective immediately. The utility serving Osaka and its surrounding region is expected to appeal the decision, but will not be able to restart the reactors unless its arguments are accepted.
The court decision is likely to affect not only the utility's resumption plans but also the government's energy policy, which places nuclear power as a key electricity source despite the crisis at the Fukushima Daiichi nuclear plant.
Kansai Electric hoped to restart the two reactors in November after they cleared a Nuclear Regulation Authority screening in February based on what the Japanese government calls "the world's toughest safety standards" introduced after the 2011 Fukushima meltdowns.
Presiding Judge Hideaki Higuchi at the district court also presided over a May 2014 ruling by the same court that ordered the regional utility not to restart two reactors at another nuclear power plant in the same prefecture.
In the latest case filed by residents in Fukui and elsewhere in December, they claimed that an unexpected earthquake could cause a severe nuclear accident and spread radioactive materials. Kansai Electric argued that the company has taken sufficient safety measures.
All of Japan's 48 commercial reactors had gone offline by the end of September 2013 and remain inactive as none has yet completed all procedures required for a restart. Amid persistent safety concerns, the majority of Japanese remain opposed to restarting nuclear reactors.
Power companies are desperate to restart their nuclear plants amid an increase in imported fuel costs for thermal power generation in the absence of nuclear power. Kansai Electric relied heavily on nuclear power for its power generation before the Fukushima crisis triggered by a huge earthquake and tsunami.
Only two other nuclear reactors, owned by Kyushu Electric Power Co., have obtained the regulator's safety clearance so far.

Fukui court forbids Takahama nuclear plant restart

http://www.japantimes.co.jp/news/2015/04/14/national/crime-legal/critical-case-fukui-court-rule-takahama-nuclear-plant-restart/#.VS187ZPwlLM
by Eric Johnston
Staff Writer

Plans to bring Kansai Electric Power Co.'s Takahama No. 3 and 4 nuclear reactors back online were dealt a severe setback Tuesday when the Fukui District Court approved an injunction against restarting them, citing safety concerns.

It marks the first time in Japan's nearly half-century of commercial atomic power operations that a court has ordered an injunction against firing up reactors.

The decision comes despite the Nuclear Regulation Authority appraising the reactors against technical and safety criteria and clearing them for restart last November.

The injunction, which took effect immediately, is expected to push back Kepco's schedule — it originally envisaged restarting the reactors this November — but the longer term impact is unclear.

For Prime Minister Shinzo Abe, resuming nuclear power is key to domestic revitalization, particularly the success of his "Abenomics" policy mix.

In its ruling, the court challenged Kepco's assertion that the reactors were safe. Presiding Judge Hideaki Higuchi, who in a regular lawsuit last year ruled that the Oi No. 3 and 4 units not be restarted, said Kepco had not shown evidence its earthquake simulation data, which were used to conduct the safety evaluation, could be relied upon.

"This ruling is a giant step for efforts to abolish nuclear power, and, in practice, stops the restart of the reactors," said lawyers representing nine people seeking the injunction.

"I was not that surprised, as we had indications that the court would rule in our favor," said Atsuko Nishimura, one of the nine.

Part of the reason for the lack of complete surprise was that Nishimura and those seeking the injunctions felt that Higuchi, at least, might be on their side. So did Kepco, which undertook legal efforts to remove him. Those attempts failed last week when a high court rejected an appeal to overturn a lower court's dismissal of a move to unseat them.

In a statement, Kepco expressed regret over the decision but said it remained determined to restart the Takahama reactors.

"We're preparing to file the necessary papers to get the injunction lifted at the earliest possible date and will make efforts to stress the safety of the reactors," the utility said.

Pro-nuclear Fukui Gov. Issei Nishikawa, who was elected to a fourth term on Sunday, had no comment on the ruling and only addressed the safety issue in a written statement.

"The government is pursuing the restart of those reactors whose safety has been confirmed by the NRA. Fukui will respond to the ruling by sufficiently confirming the central government's and Kepco's response, and by making safety the top priority," Nishikawa said.

Kyoto-based anti-nuclear activist Aileen Mioko Smith said the ruling would likely have a huge political impact on restart plans elsewhere. But she added that she hoped the injunction will also influence nuclear safety policy at the NRA.

"The (injunction) ruling is a preventative measure. Seismologists have warned this area could see another big earthquake. To have an injunction will, hopefully, prevent another nuclear disaster like Fukushima, or worse," she said.

Fukui court blocks reactor restart

http://www3.nhk.or.jp/nhkworld/english/news/20150414_37.html

Apr. 14, 2015 - Updated 09:13 UTC+2

A court in Fukui Prefecture, central Japan, has issued a provisional injunction blocking the restart of 2 reactors at the Takahama nuclear plant.

A group of 9 citizens had filed for the injunction to keep the plant's No.3 and 4 reactors offline, citing safety problems.

Officials of the plant's operator, Kansai Electric Power Company, said they had taken thorough anti-quake measures based on lessons learned from the accident at the Fukushima Daiichi nuclear plant in 2011.

At the Fukui District Court on Tuesday, presiding judge Hideaki Higuchi said Kansai Electric is too optimistic in assuming that no major earthquake would hit Takahama, as 5 unexpectedly large quakes have hit nuclear plants across Japan in less than a decade.

The judge also said the Nuclear Regulation Authority's new requirements should be as tough as possible to eliminate any risk of disaster, but are too lax to ensure the safety of nuclear reactors.

Tuesday's injunction takes effect immediately, so Kansai Electric will not be able to restart the reactors unless the court decision is overturned.

Lawyers for the utility said they will consider lodging an objection.

Ruling on Takahama reactors' restart

http://www3.nhk.or.jp/nhkworld/english/news/20150414_12.html

Apr. 14, 2015 - Updated 03:17 UTC+2

People in Fukui Prefecture in central Japan are awaiting a court decision on whether a local nuclear plant should be allowed to go back online.

The Fukui District Court is set to deliver its decision on Tuesday on the Takahama nuclear power plant. A group of 9 citizens has filed for a provisional injunction to block the restart of the plant's No.3 and No.4 reactors.

The citizens say plant operator Kansai Electric is underestimating the maximum strength of an earthquake that could hit Takahama. They also claim there are safety problems with equipment, and warn

of the risk of a serious accident.

Kansai Electric officials say they have taken thorough anti-quake measures based on the lessons learned from the accident at the Fukushima Daiichi nuclear plant in 2011. They deny that the plant's equipment is unsafe.

In February, the Nuclear Regulation Authority found the 2 Takahama reactors in compliance with new requirements introduced after the Fukushima accident.

With procedures for a restart already underway, the Fukui District Court has judged that it needs to promptly deliver its decision. If it issues an injunction, the measure could take effect immediately.

Govt. still wants restart

April 14, 2015

Govt. to continue seeking restart

Apr. 14, 2015 - Updated 11:06 UTC+2

http://www3.nhk.or.jp/nhkworld/english/news/20150414_40.html

Japan's government has vowed to continue seeking to restart the country's nuclear reactors, despite a provisional injunction issued by the Fukui District Court.

Chief Cabinet Secretary Yoshihide Suga told reporters on Tuesday that the government respects the independent Nuclear Regulation Authority's decision that the reactors comply with what are called the toughest requirements in the world. He said the decision came after a lengthy review.

Suga stressed that the government is not a party to the lawsuit, and that the injunction is provisional. He said the government will closely watch what the plant's operator does.

Suga added that he does not think the court decision will affect the government's energy policy or plans to restart other reactors.

The secretary general of the main opposition Democratic Party, Yukio Edano, said the decision by the judiciary must be taken seriously.

Edano described the decision as clear proof that the public does not believe nuclear plants are as safe as the government claims.

He said the Democrats will urge the government and nuclear regulators to keep this in mind and act cautiously.

Meaning of Fukui Court's injunction

April 14, 2015

Effects of injunction on restarting reactors

Apr. 14, 2015 - Updated 12:11 UTC+2

The Takahama nuclear power plant cannot restart operations unless the injunction is overturned. Kansai Electric Power Company says it intends to lodge an objection with the court as soon as possible.

The utility says it will in the meantime continue with screenings and inspections by Japan's nuclear regulator. It will also seek the consent of Fukui Prefecture.

The Nuclear Regulation Authority says the injunction will not affect administrative procedures such as screenings and inspections.

Work toward restarting operations will continue as planned, and attention will be on whether the court's decision can be overturned by the time the reactors are ready.

Observers say the court's decision could affect future debate on nuclear safety in Japan.

Earlier, the Nuclear Regulation Authority announced that it had found the 2 reactors at the Takahama plant in compliance with new government requirements introduced after the 2011 Fukushima accident.

The observers say the court's decision is likely to cast doubt on not only restarting the reactors but on the regulator's current requirements as well.

NRA not pleased with Fukui injunction

Dossier 8

April 15, 2015

Nuclear watchdog hits out at injunction against restart of Takahama reactors

http://www.japantimes.co.jp/news/2015/04/15/national/nuclear-watchdog-hits-out-at-injunction-against-restart-of-takahama-reactors/#.VS6AG5PwlLM

AFP-JIJI

The head of the nation's nuclear watchdog said Wednesday a landmark court provisional injunction banning the restart of two atomic reactors was based on a judicial "misunderstanding" of basic facts.

Although I haven't studied it in detail, many things that are based on misunderstandings are written in the verdict," Shunichi Tanaka told reporters, when asked about the court injunction that was issued on Tuesday.

"It is internationally recognized that our new regulatory regime is one of the strictest . . . but that was apparently not understood (by the judge)," the Chairman of the Nuclear RegulationAuthority (NRA) told reporters.

Tanaka's damning comments came a day after a district court in Fukui Prefecture granted a temporary stop order in response to a bid by local residents to halt the restart of the No. 3 and No. 4 reactors at the Takahama nuclear power plant.

That came after the NRA said last December that Takahama's reactors met tougher safety standards introduced after a powerful earthquake and tsunami triggered a triple meltdown at Tepco's Fukushima No. 1 plant in 2011.

Pro-nuclear Prime Minister Shinzo Abe has backed an industry push to return to get the country's reactors back online — which once supplied more than a quarter of Japan's electricity — as companies squeal over the high cost of electricity produced from dollar-denominated fossil fuels.

But there has been a groundswell of public opposition to nuclear power since the Fukushima crisis — the worst atomic disaster since Chernobyl in 1986 — began.

Japn's entire stable of reactors was gradually switched off following the disaster, and tens of thousands of people remain displaced from areas around Fukushima because of elevated levels of radioactivity.

The NRA was sold to the public as a watchdog with teeth after criticism that the last nuclear regulator was spineless and had facilitated a cozy relationship between power companies and the government.

But criticism of the body has grown in recent months, with claims that outspoken critics have been removed from its ranks.

Anti-nuclear campaigners saw the legal challenge as something of a Hail Mary that was unlikely to succeed in Japan's usually meek courts.

But Tuesday's verdict was a shot across the NRA's bows, saying the body's safety guidelines are "too loose" and "lacking in rationality".

Presiding judge Hideaki Higuchi said the method of predicting the maximum size of future earthquakes that could hit the nuclear reactors "has lost credibility," pointing out there have been five quakes in Japan that exceeded such predictions since 2005.

Tanaka said in greenlighting Takahama's reactors, the NRA had taken into consideration past experience, including that at Fukushima.

"We have demanded utilities meet very strict guidelines . . . and take measures to prevent severe accidents even if an earthquake bigger than expected hits," he said.

But he added that it was unreasonable to expect guarantees.

"There is no absolute safety in the world . . . a plane can fall and a train can overturn," he said.

KEPCO appeals court decision

April 18, 2015

Kansai Electric appeals reactor restart injunction, cites economic impact

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201504180031

Kansai Electric Power Co. filed an objection on April 17 seeking revocation of a court ruling that banned the restart of two reactors at its Takahama nuclear power plant in Fukui Prefecture.
The utility also requested that the Fukui District Court suspend the temporary injunction it issued on April 14, saying the order could cause “major economic loss” to the company.
The injunction, which residents in the prefecture and elsewhere had sought over safety concerns, legally bans Kansai Electric from bringing the No. 3 and 4 reactors at the plant back online.
Even if the two reactors pass the remaining safety screenings by the Nuclear Regulation Authority and the utility obtains permission from local governments to restart, it cannot do so unless the injunction is suspended or reversed.
If the district court upholds the decision, the utility plans to appeal it to the Kanazawa branch of Nagoya High Court.
Kansai Electric President Makoto Yagi said at a news conference in Tokyo on April 17 that the company will seek revocation of the injunction as early as possible while making every effort to prove the plant is safe.
Given the stoppage in nuclear power generation across the nation and the increase in imported fuel costs for thermal power plants, Kansai Electric has applied for a second time to the industry ministry for approval to raise household electricity rates.
The price increase was calculated on the premise that the two reactors at the Takahama plant will be brought back online in November.
(This article was written by Hideki Muroya and Koji Nishimura.)

Kansai Electric appeals court decision to ban nuclear restart

http://mainichi.jp/english/english/newsselect/news/20150418p2g00m0dm011000c.html

FUKUI, Japan (Kyodo) -- Kansai Electric Power Co. filed an objection Friday seeking revocation of a recent court decision that banned the utility from restarting two nuclear reactors at its Takahama nuclear plant in western Japan.
The utility serving Osaka and neighboring areas is not allowed to switch the reactors back online unless the Fukui District Court undoes the temporary injunction it issued Tuesday as sought by a group of residents in Fukui Prefecture and elsewhere.
The court decision dealt a blow to the government's plan to revive nuclear power generation, suspended following the 2011 Fukushima meltdowns. Kansai Electric hoped to restart the two units in November after it obtained safety clearance from the regulator in February based on post-Fukushima regulations.

The court said the safety of the Takahama plant is not secured despite the Nuclear Regulation Authority safety approval, saying the new regulations -- which the government has touted as "the world's toughest" -- are "too loose" and "lacking rationality."
Kansai Electric President Makoto Yagi said at a press conference Friday he believes there are "factual errors" in the content of the court decision.
Aiming to restart its reactors as soon as possible, the utility has spent a massive amount of money to boost their safety as required by the regulations.
Amid an increase in imported fuel costs for thermal power generation in the absence of atomic power, Kansai Electric expects a fourth straight yearly loss in the business year that ended in March.

Kepco appeals injunction blocking restart of Takahama reactors

AFP-JIJI, JIJI
FUKUI – The operator of a Japanese nuclear plant whose restart was blocked this week by a court injunction said Friday it would appeal the ruling.

Kansai Electric Power has submitted “a motion of complaint to Fukui district court” over Tuesday’s injunction banning the refiring of the Takahama nuclear plant’s No. 3 and 4 reactors, a company spokesman said.
In its ruling, the court said the safety of the reactors at Takahama had not been proved, despite a green light from the Nuclear Regulation Authority, whose guidelines, the court said, were “too loose” and “lacking in rationality.”
“We genuinely regret that the court did not understand our argument,” the spokesman said, adding that the temporary court order “includes significant factual errors.”
Kepco also warned of huge economic damage if the reactors are not restarted.
The utility had been aiming to begin operating the facilities as early as November, but it cannot restart them unless the ban is removed or suspended.
The nuclear issue is a highly sensitive one in Japan, which remains deeply scarred by the triple meltdown disaster at the Fukushima No. 1 atomic plant in 2011.
The worst atomic accident in a generation forced tens of thousands of people from their homes, with some still displaced and scientists warning that tracts of land might be uninhabitable for decades.
The nation’s entire stable of reactors — which once provided more than a quarter of the country’s electricity — was gradually switched off following the disaster.
Activists are also seeking an injunction to prevent the restart of reactors at the Sendai plant in Satsumasendai, Kagoshima Prefecture, with a court expected to rule that issue April 22.
But pro-nuclear power Prime Minister Shinzo Abe has backed an industry push to return to fire up the stalled reactors, with the country’s manufacturers complaining over the high cost of electricity produced from dollar-denominated fossil fuels.

Court refuses to block restart

April 22, 2015

Court refuses injunction seeking to stop restart of Kagoshima reactors

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201504220075

THE ASAHI SHIMBUN

KAGOSHIMA--A court here on April 22 rejected a request by local residents to halt the restarts of two reactors at the Sendai nuclear power plant, saying new, stricter safety standards are "not unreasonable."

Twelve plaintiffs plan to immediately appeal the Kagoshima District Court's ruling to the Fukuoka High Court. Kyushu Electric Power Co. is seeking to resume operation of its No. 1 and No. 2 reactors at the facility in Satsuma-Sendai, Kagoshima Prefecture.

Twenty-three residents from Kagoshima, Kumamoto and Miyazaki prefectures originally filed the suit, 11 of whom later left the group.

The rejection follows an injunction issued April 14 by the Fukui District Court in a separate case that put on hold Kansai Electric Power Co.'s plans to restart reactors at its Takahama nuclear plant in Fukui Prefecture. The court there called the new safety requirements inadequate.

The updated safety measures were introduced after the March 2011 Great East Japan Earthquake and tsunami triggered a triple meltdown at the Fukushima No. 1 nuclear power plant.

The key issue argued by the plaintiffs was whether the largest possible seismic movement generated by an earthquake planned for the Sendai plant in a worst-case scenario is sufficient.

The suit noted that five earthquakes have exceeded the maximum expected levels at four nuclear power plants since 2005. It claimed that Kyushu Electric, which set the maximum quake level at 620 gals, has underestimated the size of tremors that could strike the Sendai plant, endangering the lives of people living near the facility.

A gal is a unit of acceleration used to measure the extent of seismic waves produced by earthquakes.

However, Presiding Judge Ikumasa Maeda said the new restrictions were created after taking into account "regional differences," and rejected the request for an injunction.

The plaintiffs argued there is also a danger that a pyroclastic flow of ejecta and gas generated by a catastrophic volcanic eruption in Kyushu could reach the Sendai plant. They said there is no way to rule out the possibility because there is no technology in place to predict such an event.

Maeda dismissed the idea, noting that most volcanologists have not said risks have increased for such large-scale eruptions.

Last September, the Nuclear Regulation Authority ruled that the Sendai facility complied with its updated requirements, the first such decision in the country since the March 2011 disaster.

Kyushu Electric, which has since won consent from local governments and assemblies for the restart, plans to resume operations at the plant's No. 1 reactor in early July.

Kagoshima court rejects injunction against Sendai reactor restarts

http://www.japantimes.co.jp/news/2015/04/22/national/crime-legal/looming-ruling-sendai-reactor-restart-injunction-embolden-nuclear-foes/#.VTeCiZPwmot

Kyodo, Reuters

KAGOSHIMA – The Kagoshima District Court on Wednesday dismissed an injunction to block the restart of two more nuclear reactors in the prefecture, brushing aside the concerns of local residents worried about the safety of the plant.
The decision clears another hurdle for reactors at the Sendai Nuclear Power Plant to begin starting up as early as June, as the government pushes to revive Japan's idled nuclear industry four years after the disaster in Fukushima began.

The ruling stands in sharp contrast to last week's decision by the Fukui District Court to block the restart of reactors at the Takahama plant in Fukui Prefecture over safety concerns.
The Kagoshima District Court found no "irrationalities" in new safety standards adopted after the 2011 Fukushima meltdowns, ruling in favor of the plant operator.
The Kyushu Electric Power Co. plans to fire up one of the reactors in July, a watershed moment for the nation as it would be the first reactor restart under the revised rules.
The court's decision could inject momentum into the government's policy to restart nuclear power plants that have passed the safety standards, although the public remains divided on the matter.
Plaintiffs, including residents near the Sendai plant, are expected to appeal the ruling, their lawyers said.
Chief Cabinet Secretary Yoshihide Suga, the top government spokesman, said there will be no change in the government's policy of bringing the Sendai nuclear power plant back online. All 48 of Japan's commercial reactors remain offline amid heightened public concerns about safety following the triple meltdown at Tokyo Electric Power Co.'s Fukushima No.1 plant.
Four years after a quake and tsunami wrecked that facility, prompting mass evacuations, the Sendai reactors operated by Kyushu Electric have cleared most of the regulatory hurdles and could begin starting up as early as June.
The focus of the court case was on whether the operator of the Sendai plant has adequate measures in place to guard against earthquakes and whether it had weighed the chance of a volcano erupting nearby. The effectiveness of existing evacuation plans for local residents was also called into question.
Presiding Judge Ikumasa Maeda ruled that the new safety standards were crafted based on consultations among experts.
"There are no irrationalities," he said.
The judge also said the operator calculated the biggest possible earthquake motion after taking into account "uncertainties" over natural phenomena, and thus the decision to restart the power plant was legitimate.
Prime Minister Shinzo Abe wants to reboot reactors to help reduce high energy costs, but opponents are using the courts to block the revival of nuclear power, which is widely unpopular, especially in areas where they can't get local governors or mayors to prevent a restart.
Kansai Electric has four of its 11 reactors under injunction and recently announced plans to decommission two units.
Tepco, which is dealing with the Fukushima No. 1 debacle, is tussling with local authorities to get another power station up and running — Kashiwazaki Kariwa, the world's biggest. It sits on the Sea of Japan coast in Niigata Prefecture.
Chubu Electric Power Co.was forced to shut its Hamaoka plant in Shizuoka Prefecture because of its proximity to offshore tectonic plates and is facing legal action.

Court refuses to block restart of Sendai reactors

http://www3.nhk.or.jp/nhkworld/english/news/20150422_19.html

Apr. 22, 2015 - Updated 05:55 UTC+2
A Japanese court has dismissed a request to block the restart of 2 nuclear reactors in southwestern Japan.

A group of citizens had sought an injunction to keep the Number 1 and 2 reactors at a nuclear plant in Satsuma-Sendai City in Kagoshima Prefecture offline.

The 12 citizens from Kagoshima and 2 neighboring prefectures argued that earthquakes and large volcano eruptions could cause serious damage to the reactors.

The plant's operator, Kyushu Electric Power Company, argued that the 2 reactors are strong enough to withstand earthquakes. The utility also said chances of a huge volcano eruption are slim.

The utility is aiming to restart the 2 reactors in July as it has already obtained approval from the governments of Kagoshima and Satsuma-Sendai City. They would be the first to restart among the 48 reactors that are offline in Japan. The reactors cleared screenings by the Nuclear Regulation Authority in September, becoming the first under the country's new, strict requirements.

In a ruling on Wednesday, presiding judge Ikumasa Maeda at the Kagoshima District Court said that in light of up-to-date scientific knowledge, there is nothing irrational found in the new requirements that should keep the reactors offline. He said the same about the regulators' judgment to restart the reactors.

Last week, the Fukui District Court issued an injunction blocking the restart of 2 reactors at the nuclear plant in Takahama, calling the regulator's new requirements “too lax to ensure safety".
After Wednesday's ruling, a lawyer for the citizens accused the court of accepting Kyushu Electric's argument and called the ruling unfair. He said they will continue efforts to stop the restart of the reactors.

Mid-July start for Sendai plant, says Kepco

April 23, 2015

Utility plans mid-July restart of Sendai reactor

http://www3.nhk.or.jp/nhkworld/english/news/20150423_20.html

Apr. 23, 2015 - Updated 06:50 UTC+2
Kyushu Electric Power Company says it will push back the planned restart of a reactor at its Sendai nuclear plant due to a delay in onsite inspections.

This move follows the dismissal by a district court on Wednesday of a request by local residents to block

the restart of 2 reactors at the plant.

At a meeting with the Nuclear Regulation Authority on Thursday, the utility submitted a plan to restart the No.1 reactor at the plant in Kagoshima Prefecture in mid-July. It had been aiming for early July.

Nuclear regulators are currently conducting inspections at the plant in southwestern Japan.

Kyushu Electric officials told the regulators that they do not have all the necessary documentation ready and that has delayed the inspections.

Under the revised plan, the utility will start loading nuclear fuel into the reactor by mid-June. It plans to pull out control rods in mid-July to put the reactor back online.

But nuclear regulators said Kyushu electric's schedule seems unrealistic. The utility said it will reconsider the plan, which may result in a further delay of the restart.

Reactors 1 and 2 at the plant became the first in Japan to clear new regulations introduced after the 2011 Fukushima accident.

NRA will proceed with screenings

April 23, 2015

NRA meeting on Takahama after injunction

http://www3.nhk.or.jp/nhkworld/english/news/20150423_25.html

Apr. 23, 2015 - Updated 09:43 UTC+2
Japan's nuclear regulators continue to take steps to restart reactors at a plant in central Japan. They say their work is not affected by a recent court decision blocking such a restart.

Nuclear Regulation Agency officials met on Thursday to review progress at the No. 3 and 4 reactors at Kansai Electric's Takahama plant in Fukui Prefecture.

The meeting is the first on the reactors since the Fukui District Court issued a provisional injunction on April 14th. The operator cannot restart the reactors unless the court decision is overturned.

In February, inspectors confirmed that the reactors met new regulations introduced after the 2011 Fukushima accident.
Nuclear regulators say the injunction will not affect administrative procedures regarding the reactors.

Kansai Electric officials told the regulators at the meeting that the firm will later explain details of new facilities. They include a quake-resistant seawall and a facility to serve as a base for recovery efforts in the

event of an accident. They are necessary for restarting the reactors.

The regulators accepted the utility's explanation.

NRA officials said they will proceed with what screenings and inspections they can while the injunction is in effect.

Mid-July restart just "wishful thinking"

April 23, 2015

Sendai reactor restart 'unrealistic,' regulator says

http://www.japantimes.co.jp/news/2015/04/23/national/sendai-reactor-restart-unrealistic-regulator-says/#.VTkTU5Pwmos

JIJI, Staff Report
Kyushu Electric Power Co. has been forced to review restart plans for the No. 1 reactor at its Sendai Nuclear Power Plant a day after a court ruling paved the way for the move.
The plant, in Kagoshima Prefecture, was set to be restarted in mid-July, but on Thursday the Nuclear Regulation Authority criticized the company's planning.
The NRA found the plan, which was presented at a meeting between Kyushu Electric and the NRA, to be too optimistic following some work delays in ongoing final checks on the No. 1 reactor.
"We don't think the plan is realistic," Toyoshi Fuketa, commissioner of the NRA, said at the meeting. "It just looks like wishful thinking."
He added that: "As the checks are important, we want to spend time where we need to."
Under its existing timetable Kyushu Electric planned to insert nuclear fuel into the reactor in June, reactivate it mid-July and begin commercial operations mid-August.
Japan's commercial reactors remain offline amid heightened public safety concerns following the triple meltdown at Tokyo Electric Power Co.'s Fukushima No. 1 plant in 2011.
The Sendai No. 1 reactor was on track to be the first to be restarted.
"We will reconsider the timetable," Kyushu Electric Managing Executive Officer Akira Nakamura told reporters after the NRA meeting.
On Wednesday, Kagoshima District Court dismissed a provisional injunction to block the restart of two reactors at the Sendai plant.
It stood in sharp contrast to a decision by the Fukui District Court last week to block the restart of reactors at the Takahama plant in Fukui Prefecture over safety concerns.
Prime Minister Shinzo Abe wants to reboot reactors to help reduce high energy costs, but opponents are using the courts to block the revival of nuclear power, which is widely unpopular, especially in areas where residents cannot get local governors or mayors to prevent a restart.

Needed: Clear roadmap to phasing out nukes

April 23, 2015

Editorial: Thorough debate on restarting nuclear reactors needed

http://mainichi.jp/english/english/perspectives/news/20150423p2a00m0na007000c.html

Courts were split over whether the green light should be given to restarting nuclear reactors at two power stations that are deemed to meet new regulatory standards set by the government's Nuclear Regulation Authority (NRA).

On April 22, the Kagoshima District Court dismissed a petition filed by residents around the Sendai Nuclear Power Plant in Kagoshima Prefecture for a provisional injunction to ban resumption of operations at the power station's No. 1 and 2 reactors.

Less than 10 days earlier -- on April 14 -- the Fukui District Court had issued a provisional injunction banning reactivation of the No. 3 and 4 reactors at the Takahama Nuclear Power Plant in Fukui Prefecture.

Behind the split in the courts' decisions are differences in basic ideas on how to evaluate the risks of serious accidents like the one at the tsunami-ravaged Fukushima No. 1 Nuclear Power Plant in 2011 and the possible impact of such disasters. The two court decisions also highlight difficulties evaluating the country's nuclear power policy. As such, the government should help deepen discussions on its nuclear energy policy to win the understanding of the general public.

The main point of contention in the two court cases was whether the biggest possible earthquake motion that the two plant operators calculated based on the new safety standards is appropriate. The quake resistance of each nuclear plant is determined based on the biggest possible quake motion estimated to hit such plants.

In their petition, residents around the Sendai plant contended that the biggest possible earthquake motion that could hit the power station is well underestimated because the figure was calculated based on the average scale of limited earthquakes that occurred in the area hosting the plant. In response, the Kagoshima District Court deemed that there are "no irrationalities" in the NRA's new regulatory standards even in light of scientific knowledge that reflects the experiences of the Fukushima nuclear disaster. The court also upheld the NRA's approval of the estimation of the biggest possible earthquake motion that could hit the power plant on the grounds that the plant operator is taking into account uncertainties involving predictions of natural phenomena in the future.

In sharp contrast, the Fukui District Court required that regulatory standards be stricter to completely prevent any serious nuclear accident and ruled that the estimation of the biggest possible earthquake motion that could hit the Takahama plant has lost credibility.

In other words, the Kagoshima District Court believes that if a nuclear reactor meets the new regulatory standards, the risks of serious accidents can be reduced to permissible levels, while the Fukui District Court is of the view that restarting any nuclear reactor is impermissible if there is any minor risk of accidents. The difference corresponds with that between members of the public over whether idled nuclear plants should be reactivated.

The presiding judge at the Fukui court who dealt with the petition for a ban on restarting the Takahama plant had also issued a similar decision in May last year to ban resumption of operations at the No. 3 and 4 reactors of the Oi Nuclear Power Plant in Fukui Prefecture.
However, the judge's decisions should not be dismissed as an extreme argument. In November last year, the Otsu District Court deemed that restarting the Takahama and Oi plants is "impossible" unless local municipalities around these plants work out evacuation plans, while stopping short of banning the resumption of operations at the power stations. Judicial rulings on the safety of nuclear plants appear to have become stricter since the March 11, 2011 outbreak of the Fukushima nuclear crisis.
The rate of an accident occurring at nuclear plants cannot be lowered to zero even if the regulatory standards are stiffened to the maximum extent. Requiring an absolute zero risk is unrealistic.
The government has reiterated that it will go ahead with reactivating nuclear reactors that are deemed to meet the new regulatory standards, but such a stance will never win understanding from the general public. If the government wants to restart idled nuclear plants, it should show a clear road map toward phasing out atomic power.

From the Economist

Legal fallout

Court cases frustrate efforts to restart Japan's nuclear plants

http://www.economist.com/news/asia/21649557-court-cases-frustrate-efforts-restart-japans-nuclear-plants-legal-fallout

Economist.com

THE world's biggest nuclear power plant runs along nearly 4 kilometres (2½ miles) of the coast of the Sea of Japan. At full pelt it generates enough electricity to supply 2.7m households. But the seven reactors at the Kashiwazaki-Kariwa complex sit idle, along with the rest of Japan's nuclear-power facilities. Four years after meltdown at the Fukushima Dai-ichi power plant, all Japan's 48 usable reactors are the focus of safety concerns. An industry that once produced nearly a third of Japan's electricity remains paralysed. The government badly wants some of the idle reactors put back to work to cut a huge bill for imported fuel. On April 22nd it got a shot in the arm when a court on Kyushu, the third-largest of Japan's four main islands, rejected an attempt to block the restart of two reactors at the Sendai plant. It said the reactors were safe to operate, despite active earthquake faults and a volcano in the area. Kyushu Electric, the plant's owner, believes it could be generating power again by July.

Yet the ruling contrasted with another one handed down a week earlier by a court in Fukui prefecture, down the coast from the Kashiwazaki-Kariwa plant. That decision blocked Kansai Electric Power from restarting two reactors at its Takahama site. It said stricter government-induced regulations after the

Fukushima disaster were no guarantee that another disaster could be prevented. The court warned of "imminent danger" to local citizens if the reactors were restarted.
The decision surprised the government. It is formulating a new energy plan that calls for nuclear power to meet up to 20% of Japan's electricity needs by 2030. The Fukui ruling will not derail that, the chief cabinet secretary, Yoshihide Suga, insists. He says the new regulations are among the world's strictest.
Such confidence in restarting the reactors may be misplaced. Every one of them is the subject of a lawsuit by locals trying to stop them from being fired up again. The government and the energy utilities will continue to argue that although they cannot completely rule out another accident, they have made nuclear power as safe as possible. By rejecting that argument, the Fukui court has set a precedent other courts may follow, says Mutsuyoshi Nishimura, a former climate-change negotiator.
Kansai Electric has challenged the Fukui ruling. Experts say the company will very likely get a higher court to overturn it. But the longer legal tussles drag on, the older the reactors become, putting their eventual operation in doubt. The Nuclear Regulation Authority (NRA), Japan's new watchdog, is reviewing about 20 reactors for compliance with its regulations. Luc Oursel, the late chief executive of Areva, a French nuclear giant, predicted in 2013 that two-thirds of Japan's plants would eventually restart. Few believe that now.
For Tokyo Electric Power (TEPCO), the operator of the ruined Fukushima plant, these issues are a matter of life and death. Kashiwazaki-Kariwa is its only remaining viable nuclear facility. The company says it loses ¥100 billion ($835m) per reactor every year that the reactors are down. The plant's chief, Tadayuki Yokomura, says that TEPCO has poured $2 billion into reinforcing the facility against earthquakes and tsunamis. There is, he insists, no reason why all seven reactors cannot be restarted. The problem is that he has yet to convince the public of that.

Extending for 20 years, KEPCO

May 1, 2015

Kepco applies to extend operating life of two aging reactors in Fukui by 20 years

http://www.japantimes.co.jp/news/2015/05/01/national/kepco-applies-extend-operating-life-two-aging-reactors-fukui-20-years/#.VUMqo5Pwmos

JIJI

Kansai Electric Power Co. on Thursday applied for regulatory approval for extending by 20 years the operational periods of two aging reactors at its Takahama nuclear power plant in Fukui Prefecture because it found no problems with them in its special safety checks.
The application for the reactors 1 and 2, which are now offline, at the Takahama plant was submitted to the Nuclear Regulation Authority.
This is the first time an application for extending an operational period of a reactor aged 40 years or older has been filed.

The revised law on nuclear power plant regulations sets basic operation periods of nuclear reactors at 40 years. Operational periods can be extended only once by up to 20 years if certain conditions are met.
At the Takahama plant, reactor 1 is already over 40 years old, and reactor 2 will reach 40 years in November.
The moratorium period set under the law will expire in July 2016.
The two reactors are the oldest among the 43 reactors in Japan, excluding those that have been decommissioned.
Kepco started its special checks in December to investigate the condition of the two reactors.
After checking the pressure and containment vessels of the reactors with ultrasonic tests and visual examinations, the company concluded they can operate beyond 40 years.
According to Kansai Electric, safety screening for operational period extension will cover pressure and containment vessels as well as pipes, reactor buildings and emergency power generators for a total of about 3,100 items for reactor 1 and some 3,000 items for reactor 2.
The NRA will examine whether Kansai Electric's special safety checks are satisfactory.
In March, Kansai Electric separately applied for NRA screening that is necessary for restarting the two reactors under the new safety standards introduced in July 2013.
If the extensions are approved, Kansai Electric expects the two reactors to resume operations in November 2019 at the earliest, as they require further safety measures before their restart.
Also on Thursday, Kansai Electric told the prefectural government of Fukui that it will launch special checks as early as in mid-May for reactor 3, which is also offline, at its Mihama plant. The reactor will be 40 years old in December next year.

April 30, 2015

Kansai Electric files to extend use of reactors

http://www3.nhk.or.jp/nhkworld/english/news/20150430_40.html

Apr. 30, 2015 - Updated 19:07 UTC+2
Kansai Electric Power Company has applied to extend the operational lifespan of 2 of its nuclear reactors by 20 years.

The company filed the application with the Nuclear Regulation Authority on Thursday. The extension covers the No.1 and No.2 reactors of the Takahama plant in Fukui Prefecture, central Japan.

After the accident at the Fukushima Daiichi nuclear plant in 2011, the government introduced regulations that limit the operational lifespan of reactors to 40 years in principle.

Operation of the 2 Takahama reactors started about 40 years ago.

Power companies that seek to extend the limit must inspect reactors and other equipment for possible deterioration.

This is the first time a power company has applied for an extension under the new system.

Kansai Electric officials say they have concluded that there are no safety problems after inspecting the reactors and containment vessels starting last December.

For the extension to be granted, the reactors must pass screening based on the new requirements to go back online. The application must also be approved by July of next year.

Observers say the screening may take time because of measures required for the aging reactors. Such measures include preventing electric cables from catching fire and lowering radiation leakage in the event of an accident.

The industry ministry envisions nuclear power contributing 20 to 22 percent of the country's total energy mix in fiscal 2030. The ministry stated the percentages in its draft plan for the optimal energy mix.

The draft assumes that multiple nuclear reactors will be granted extensions beyond 40 years.

38-year old Mihama reactor to be inspected shortly

April 30, 2015

Inspection of aging Mihama reactor to start in May

http://www3.nhk.or.jp/nhkworld/english/news/20150430_31.html

Apr. 30, 2015 - Updated 10:15 UTC+2

Kansai Electric Power Company plans to start a special inspection of one of its aging nuclear reactors in mid-May to operate it beyond a new 40-year age limit.

The No. 3 reactor at the plant in Mihama Town, Fukui Prefecture, started operating 38 years ago.

Officials of the utility informed the prefecture and the town of its plan on Thursday.

The government set the age limit for the nation's reactors after the 2011 Fukushima nuclear crisis.

In special inspections, utilities must carry out ultrasonic tests on entire reactors. The checks were previously limited to reactors' welded parts.

The inspections include thorough checks of the strength of containment vessels and analysis of concrete samples.

Utilities must report their findings to the government.

The Mihama reactor would be the third to undergo a special inspection. Kansai Electric carried out such checks for the No. 1 and 2 reactors at its Takahama plant, also in Fukui Prefecture.

Kagoshima residents appeal

May 6, 2015

Kagoshima residents appeal court's go-ahead to restart Sendai reactors

http://www.japantimes.co.jp/news/2015/05/06/national/crime-legal/kagoshima-residents-appeal-courts-go-ahead-to-restart-sendai-reactors/#.VUpu-JPwmic

Kyodo
KAGOSHIMA – Local residents on Wednesday appealed a court decision last month dismissing calls to stop the restart of two reactors at the Sendai nuclear power plant in southwestern Japan's Kagoshima Prefecture.
The appeal, filed with the Fukuoka High Court's Miyazaki branch, disputes the Kagoshima District Court's rejection of a local call for an injunction to stop the restart of the Nos. 1 and 2 reactors at the Kyushu Electric Power Co. plant.
While the government of Prime Minister Shinzo Abe is pushing to restart reactors taken offline after the 2011 Fukushima meltdowns, many in the country remain opposed to such moves due to lingering safety concerns.
On April 22, the district court ruled that there were no "irrationalities" in Japan's new safety standards adopted in the wake of the Fukushima crisis, and that, having cleared those standards, the Sendai plant is fit for operation.
Speaking at a press conference, lawyers representing the residents said many parts of the district court's decision were logically unsound and that the plaintiffs hope for a new ruling before the reactors come back online.
Kyushu Electric hopes to resume operation at the plant by summer.

Experts: Miyama faults unlikely to become active

May 8, 2015

Experts: Faults at Mihama reactor unlikely to move

May 8, 2015 - Updated 09:47 UTC+2
http://www3.nhk.or.jp/nhkworld/english/news/nuclear.htm
A group of experts says faults under a nuclear reactor compound in Fukui Prefecture are unlikely to become active.

At a meeting of the Nuclear Regulation Authority on Friday, the group presented a draft report on the No. 3 reactor at the Mihama power plant. The draft says the group found no proof that the faults were active in the past 130,000 years.

The group plans to ask for opinions from other experts before submitting the report to the authority.

The NRA is to make a final assessment on the faults and the reactor's quake resistance during its screening, which is a prerequisite to restarting the reactor.

The plant's operator, Kansai Electric Power Company, aims to extend the lifespan of the 38-year-old reactor.

To restart the reactor, the firm must pass a screening under regulations introduced after the Fukushima nuclear accident and another screening for extending the lifespan by November 2016.

The firm has decided to decommission 2 other reactors at the plant that are over 40 years old.

Delay in inspections will postpone restart

May 12, 2015

Sendai reactor restart unlikely until late July

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

May 12, 2015 - Updated 04:51 UTC+2

The planned restart of a reactor at the Sendai nuclear plant will be pushed back until late July or later due to a delay in onsite inspections.

The reactor is one of the 2 facilities at the plant that cleared the country's tighter regulations introduced after the 2011 Fukushima Daiichi nuclear disaster.

Kyushu Electric Power Company submitted a revised plan over the ongoing onsite inspections to the country's nuclear regulators on Monday. It extends the inspection process for the No.1 reactor by around one week.

The utility's earlier inspection plan assumed loading nuclear fuel in early June to restart the reactor in mid-July. But the regulators said the schedule was too tight.

Kyushu Electric has not specified the timing for a restart, but it now appears unlikely until late July at the earliest.

The onsite inspections began more than one month ago. But as of last week, only 7 of the roughly 180 items were checked. The utility has assigned more than 200 additional personnel to speed up the process.

Faults under Shika plants may be active

May 14, 2015

Panel says faults under Shika nuke plant may be active

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201505140050

By TOSHIO KAWADA/ Staff Writer

The nation's nuclear watchdog concluded that fault lines running underneath the Shika nuclear power plant in Ishikawa Prefecture may well be active, throwing the prospect of restarting the facility's reactors into doubt.

An expert panel of the Nuclear Regulation Authority, comprising NRA Commissioner Akira Ishiwatari and four external specialists, said May 13 the possibility of the Shika plant standing directly above active faults was very real.

But Yutaka Kanai, vice president of Hokuriku Electric Power Co., the plant operator, said: “We take issue with that conclusion.”

Kanai said the utility will present its “arguments at meetings on screening for restarts.”

The NRA panel plans to release a draft report of its conclusions at its next meeting. If the draft is approved, it will be the second time the nuclear watchdog has reported that fault lines directly beneath a nuclear reactor could be active, following the No. 2 reactor of Japan Atomic Power Co.’s Tsuruga plant in Fukui Prefecture.

Although the Shika plant has been taken offline after the 2011 earthquake and tsunami disaster set off the nuclear crisis in Fukushima, Hokuriku Electric has applied to the NRA for screening to restart its No. 2 reactor. The power company is also seeking to resume operations at the No. 1 reactor.

The company insists there are no active faults beneath the reactors and other key facilities on the plant site, but the expert panel said the S-1 fault line, which runs directly beneath the No. 1 reactor, as well as the S-2 and S-6 faults under cooling pipes connected to the No. 1 and No. 2 turbine buildings, may be active.

Stricter safety standards for nuclear power facilities were established after the Fukushima disaster, which ban plant operators from locating reactors and other key equipment directly atop active fault lines.

If Hokuriku Electric is unable to overturn the decision by the NRA panel, the No. 1 reactor will have to be decommissioned. Because piping is considered among key equipment under the new safety standards, the No. 2 reactor may also have to be decommissioned unless the utility relocates the pipes.

May 13, 2015

Experts say faults under Japan nuclear plant may be active

http://mainichi.jp/english/english/newsselect/news/20150513p2g00m0dm092000c.html

TOKYO (Kyodo) -- Geological experts on a panel under the Nuclear Regulation Authority said Wednesday that faults running beneath a nuclear plant in central Japan may be active, clouding the prospects for resumption of its operations.

Four outside experts of the five-member panel told a meeting it is possible the fault running right under the No. 1 reactor at Hokuriku Electric Power Co.'s two-unit plant in Shika, Ishikawa Prefecture, is active. If the regulator finalizes the judgment based on the panel's opinion, the utility would have no option but permanently shutting down that unit.

The experts also pointed out that two other faults running beneath the plant's emergency equipment could be active.

A regulatory official said the No. 2 unit could avoid a permanent shutdown, but that complex construction work would be required to greatly enhance the facility's safety before restarting it.

In quake-prone Japan, building nuclear reactors or other important facilities directly above active faults is prohibited. The issue came into the spotlight after the 2011 Fukushima meltdowns that resulted in all the country's commercial reactors coming offline by September 2013.

Panel members have "largely agreed" on the evaluation of the faults, said Akira Ishiwatari, the regulator's commissioner who heads the panel, adding he will compile a draft report and present it at the next meeting.

Hokuriku Electric maintains that the faults are not active. "We had it checked by experts when we built the No. 1 unit. I don't think there was a major oversight," Executive Vice President Yutaka Kanai told reporters.

To restart nuclear reactors, operators must pass the regulator's safety screening based on a set of new regulations adopted after the Fukushima Daiichi disaster. Hokuriku Electric has already applied for screening of the No. 2 reactor.

Amid an increase in imported fuel costs for thermal power plants in the absence of nuclear power, utilities are desperate to restart their nuclear reactors. However, many hurdles including the issue of active faults stand in the way.

A reactor at Japan Atomic Power Co.'s Tsuruga nuclear plant on the Sea of Japan coast is likely to be scrapped after a different panel concluded in March that at least one of the faults running under it could move in the future.

At least two key geological faults under Tohoku Electric Power Co.'s Higashidori plant in northeastern Japan are also believed to be active.

The situation could affect the government's plan to continue to use nuclear power even after the Fukushima crisis. It plans to cover around 20 percent of the total electricity supply with nuclear power in 2030, compared with 28.6 percent in fiscal 2010 when the Fukushima accident occurred.

Prime Minister Shinzo Abe seeks to restart nuclear reactors that have met the regulator's requirements as soon as possible, but a majority of the public remains opposed to resumption.

May 13, 2015(Mainichi Japan)

See also :

Shika nuclear plant may be sitting on active seismic fault: NRA panel

http://www.japantimes.co.jp/news/2015/05/14/national/science-health/faults-under-shika-nuclear-plant-may-be-active-experts-warn/#.VVRYDZPwmic

Kyodo
May 14, 2015

The news that a nuclear plant on the Sea of Japan coast may have been built on at least one active seismic fault line has cast doubt on whether the plant in Shika, Ishikawa Prefecture, will ever be restarted.

Four outside experts on the five-member panel from the Nuclear Regulation Authority revealed at a meeting Wednesday that it is possible the fault running beneath the No. 1 reactor of the two-unit plant run by Hokuriku Electric Power Co. is active.

If the regulator issues a judgment reflecting that opinion, the utility would have no option but to shut down the unit permanently.

Furthermore, the panel said two other faults running beneath the plant's emergency equipment could be active, too.

A regulatory official said the No. 2 unit could avoid decommissioning but that complex construction work would be required to bolster its safety before a restart.

In quake-prone Japan, it is prohibited to build nuclear reactors or other important facilities directly on active fault lines. The issue was thrust into the public spotlight after the triple core meltdown at the Fukushima No. 1 power plant in March 2011 that caused all of the nation's commercial reactors to be taken offline by September 2013.

Panel members have "largely agreed" on the evaluation of the faults, said NRA Commissioner Akira Ishiwatari, who heads the panel. Ishiwatari said he will compile a report on the matter and present it at the next meeting.

Hokuriku Electric maintains that the faults are not active.

"We had it checked by experts when we built the No. 1 unit. I don't think there was a major oversight," Executive Vice President Yutaka Kanai told reporters.

To restart a nuclear reactor, the utility that owns it must pass a safety screening based on new regulations adopted by the NRA, which was set up after the Fukushima crisis began. Hokuriku Electric has already requested a safety screening for the No. 2 reactor.

Amid an increase in imported fuel costs for thermal power plants in the absence of nuclear power, utilities are desperate to restart their nuclear reactors. However, many hurdles stand in the way.

A reactor at Japan Atomic Power Co.'s Tsuruga nuclear plant on the Sea of Japan coast is likely to be scrapped after a different panel concluded in March that at least one of the faults running under it could move in the future.

At least two key geological faults under Tohoku Electric Power Co.'s Higashidori plant in Tohoku are also believed to be active.

The situation could affect the government's plan to continue to use atomic power after the Fukushima crisis. It aims for reactors to account for around 20 percent of the nation's total power by 2030, compared with 28.6 percent in fiscal 2010 — when the Fukushima No. 1 disaster struck.

Prime Minister Shinzo Abe intends to restart nuclear reactors that pass the NRA's safety tests as soon as possible, but the majority of the public remains opposed.

Ikata likely to clear screening

May 15, 2015

Ikata reactor to effectively clear NRA screening

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

May 15, 2015 - Updated 15:36 UTC+2
Japan's nuclear regulator is expected to compile a draft assessment on safety measures for a reactor at the Ikata plant in western Japan.

Completing the assessment is regarded as a major step forward in the reactor's restart.

The Nuclear Regulation Authority is to present the draft on the plant's No.3 reactor in Ehime Prefecture at its meeting on May 20th.

The NRA has been discussing for nearly 2 years whether Shikoku Electric Power's safety measures meet new government requirements set after the Fukushima Daiichi nuclear crisis.

If the commissioners find no problem with the assessment, the NRA will hear public comments for 30 days and formally approve the assessment.

The NRA is screening, or has screened, 24 reactors at 15 power plants. Ikata is the 3rd plant to make it to the assessment stage after the Sendai plant in Kagoshima Prefecture and the Takahama plant in Fukui Prefecture.

Observers say Ikata's restart could be late this year at the earliest. It needs to get approval for equipment designs and pass onsite inspections as well as get local consent.

NRA approves restart of Ikata

May 20, 2015

NRA approves restart for third nuclear plant

http://www.japantimes.co.jp/news/2015/05/20/national/japan-approves-third-nuclear-plant-restart/#.VVw8wEbwmic

Reuters, Kyodo, Bloomberg, AFP-JIJI

Japan's nuclear regulator signed off on the basic safety of a reactor at a third nuclear plant on Wednesday, as the country inches toward rebooting its atomic industry more than four years after the crisis began at Tepco's Fukushima No.1 facility.

The decision will be a boost for operator Shikoku Electric Power Co., which relied on its sole Ikata nuclear power station in southwestern Japan for about 40 percent of its electricity output before the meltdowns at Fukushima led to the shutdown of all the country's reactors.

But the reactor is not expected to go back online before winter, as Shikoku Electric has yet to obtain local approval and finish other necessary procedures.

For the government of Prime Minister Shinzo Abe, resuming nuclear power, which provided about a third of the electricity supply before the triple meltdown in Fukushima, is key to lifting the economy out of two decades of anaemic growth.

Japan has switched to fossil fuels to compensate for the closure of reactors, pushing imports of liquefied natural gas to a record-high ¥7.78 trillion ($65 billion) in the financial year ended March 31.

The safety approval is still only one of three needed before the Nuclear Regulatory Authority (NRA) gives its final sign off. The consent of local authorities, which is seen as a formality, is also required, along with operational checks.

At a meeting on Wednesday, the NRA's commissioners signed off on a provisional assessment that says the Ikata reactor meets new design standards introduced in the wake of Fukushima. The decision will be open to public comment for about a month before being formalized.

Located about 700 km (660 miles) west-southwest of Tokyo on Shikoku Island, the Ikata No. 3 reactor started operations in 1994 and has a capacity of 890 megawatts.
The future of the Ikata plant's two other reactors, each with capacity of 566 megawatts, is unclear. One is almost 40 years old, which is the lifetime limit for reactors in Japan without a special extension that will be costly to achieve.
Shikoku Electric hasn't applied for restarts of that reactor or the No. 2 unit, which began operations in 1982.
Two other nuclear plants operated by Kansai Electric Power and Kyushu Electric Power have passed the first stage of regulatory checks.
Operators also have to overcome legal hurdles. Anti-nuclear activists have stepped up petitioning the judiciary to block restarts, with a majority of the public opposed to atomic power.
Residents near the Ikata plant filed a lawsuit in December 2011 to mothball the station, but a decision has yet to be made.
In a related move, the Fukui District Court has rejected Kansai Electric Power Co.'s appeal of a ruling that prevents the utility from restarting two reactors at its Takahama plant in Fukui Prefecture, according to Tadashi Matsuda, a representative for the plaintiffs who won the case.
The court dismissal was decided Monday but not announced to the media. A court official declined to comment when contacted Tuesday. Kansai Electric representatives couldn't be reached for comment.
The Fukui District Court issued an injunction in April preventing the utility from moving ahead with plans to restart the reactors.
The court said at the time that new safety regulations introduced following the Fukushima disaster of 2011 are still too lax to ensure the safety of the two reactors at the Takahama station.
Kansai Electric, the utility most dependent on nuclear power in Japan, had called the ruling unacceptable.
The rejected appeal throws yet another roadblock in the utility's path to resuming operations at its nuclear plants.
The meltdowns at Tepco's wrecked Fukushima No. 1 plant forced the country's entire fleet of reactors offline in the months that followed, amid deepening public distrust of atomic energy.
The central government says the economy needs nuclear power — a technology that once supplied more than a quarter of Japan's electricity — to meet its energy demand.

NRA approves draft assessment on Ikata

http://www3.nhk.or.jp/nhkworld/english/news/20150520_22.html

May 20, 2015 - Updated 05:33 UTC+2
Japan's nuclear regulator has taken steps toward restarting the Ikata plant in Ehime Prefecture, western Japan.

The Nuclear Regulation Authority unanimously approved its draft assessment on safety measures for the plant's No. 3 reactor on Wednesday.

The draft assessment effectively approves safety measures set forth by the plant's operator, Shikoku

Electric Power Company, and clears the way for restarting the reactor.

The NRA says the utility's measures meet new government requirements introduced after the Fukushima Daiichi nuclear accident in March 2011.

Regulators say the measures, which include raising the maximum magnitude of a possible earthquake and installing a command center capable of withstanding emergencies, are reasonable.

They also note that the utility has addressed the issue of using mixed-oxide fuel, which includes plutonium extracted from spent nuclear fuel.

They say effective plans are in place to prevent meltdowns in severe accidents.

The assessment was based on the premise that the utility will not restart the No.1 and No.2 reactors. Putting them back online would require more screenings envisioning simultaneous accidents of multiple reactors, including No.3 reactor.

Nuclear Regulation Authority Chairman Shunichi Tanaka says regulators will continue a thorough assessment in the next stage which includes approving the details of equipment designs.

Ikata is the third plant to reach the assessment stage after the Sendai plant in Kagoshima Prefecture and the Takahama plant in Fukui Prefecture.

The NRA will now hear public comments for 30 days before formally approving the assessment.

But quake-proofing work is scheduled to take until autumn of this year and Shikoku Electric must receive approval for equipment designs, pass inspections and obtain local consent before restarting the reactor.

Observers say a restart before winter is unlikely.

May 19, 2015

Ikata reactor expected to clear NRA screening

http://www3.nhk.or.jp/nhkworld/english/news/20150520_05.html

May 19, 2015 - Updated 21:47 UTC+2

Japan's nuclear regulator is to submit a draft assessment on the safety measures for a reactor at the Ikata plant in western Japan.

The Nuclear Regulation Authority will present the draft assessment for the No.3 reactor at the plant in Ehime Prefecture at a meeting on Wednesday.

The NRA has been discussing for nearly 2 years whether the safety measures of the operator, Shikoku Electric Power, meet the new government requirements that were introduced after the Fukushima Daiichi nuclear crisis.

The regulator asked Shikoku Electric Power Company to raise the maximum magnitude of a possible earthquake, and to install a command center that would be used to deal with a severe accident.
The operator decided to take additional measures such as improving quake resistance and installing pumps for pouring water into reactors or containment vessels in the event of severe accidents.

If the commissioners find no problems with the draft, the NRA will hear public comments for 30 days and formally approve the assessment.

Ikata is the 3rd plant to reach the assessment stage after the Sendai plant in Kagoshima Prefecture and the Takahama plant in Fukui Prefecture.

Observers say the Ikata reactor could be restarted later this year after equipment designs are approved and onsite inspections are passed. Local consent must also be obtained.

Fukui court rejects Kepco's appeal

May 19, 2015

Fukui court rejects Kansai Electric appeal of reactor ruling

http://www.japantimes.co.jp/news/2015/05/19/national/crime-legal/fukui-court-rejects-kansai-electric-appeal-of-reactor-ruling/#.VVw_S0bwmic

Bloomberg, AFP-JIJI
The Fukui District Court has rejected Kansai Electric Power Co.'s appeal of a ruling that prevents the utility from restarting two reactors at its Takahama plant in Fukui Prefecture, according to Tadashi Matsuda, a representative for the plaintiffs who won the case.
The court dismissal was decided Monday but not announced to the media. A court official declined to comment when contacted Tuesday. Kansai Electric representatives couldn't be reached for comment.
The Fukui District Court issued an injunction in April preventing the utility from moving ahead with plans to restart the reactors.
The court said at the time that new safety regulations introduced following the Fukushima disaster of 2011 are still too lax to ensure the safety of the two reactors at the Takahama station.
Kansai Electric, the utility most dependent on nuclear power in Japan, had termed the ruling unacceptable.
The rejected appeal throws yet another roadblock in the utility's path to resuming operations at its nuclear plants more than four years after the meltdowns at Fukushima No. 1.
The accident forced Japan's entire fleet of reactors offline over the following months amid deepening public suspicion over the technology.

The central government says the economy needs nuclear power — a technology that once supplied more than a quarter of Japan's electricity — to meet its energy demand.
Prime Minister Shinzo Abe has backed an industry push to return to nuclear power, with manufacturers complaining about the high cost of electricity produced from dollar-denominated fossil fuels.

Ikata No.3 gets OK from NRA

Ehime reactor effectively clears NRA screening

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201505200072
May 20, 2015
By TOSHIO KAWADA/ Staff Writer
The nation's nuclear watchdog effectively gave the green light May 20 to restart a reactor at a third nuclear power plant.
The decision applies to the No. 3 reactor at the Ikata nuclear power plant in Ehime Prefecture operated by Shikoku Electric Power Co.
The Nuclear Regulation Authority introduced stricter safety standards after the triple meltdown at the Fukushima No. 1 power plant triggered by the earthquake and tsunami disaster in March 2011.
All nuclear power plants in Japan have been shut down due to the disaster.
It has already assessed that the No. 1 and No. 2 reactors at the Sendai plant in Kagoshima Prefecture, as well as the No. 3 and No. 4 reactors of the Takahama plant in Fukui Prefecture, comply with the new regulations.
The latest decision, presented in a 427-page draft report the NRA drew up on its safety screening, will be finalized as early as July after it invites public opinion on technical issues. The public will have 30 days from May 21 to offer input.
Shikoku Electric will not likely be able to resume operations at the plant this year because the NRA still needs to inspect equipment, a process that is expected to take at least three months.
In addition, work to upgrade the facility will also likely continue until the fall.
Thus, the earliest the reactor can reasonably be expected to restart is this winter, assuming that the plant operator smoothly completes the necessary administrative procedures to gain formal final approval and wins consent from Ehime Prefecture and Ikata town.
Shikoku Electric plans to restart the reactor using plutonium-thermal power generation, in which mixed-oxide fuel consisting of plutonium and uranium is used.
The NRA began its screening process in response to Shikoku Electric's application submitted in July 2013, and concluded the utility's preparations for earthquakes and tsunami, as well as other measures to guard against severe accidents, meet the new safety regulations.

Sendai: One step closer to restart

Sendai nuclear plant to move closer to restart

http://www3.nhk.or.jp/nhkworld/english/news/20150522_03.html

Nuclear & Energy
May 21, 2015 - Updated 22:41 UTC+2

The Sendai nuclear power plant in southwestern Japan is likely to move one step closer to restart.

Japan's nuclear regulator will approve the designs of all the newly installed facilities for its No.1 reactor as early as on Friday.

Operator Kyushu Electric Power Company has been slow in submitting some of the design documents to regulators. They include the designs of the facilities shared with the No.2 reactor, such as the control room's air conditioning.

The regulator says it has finally confirmed the quake-resistance for these designs and that all the designs for safety purposes will be approved.

The next step is an in-person inspection by officials that leads to the reactor's restart. The regulator has been conducting inspections since March. But it has completed less than 10 percent of more than 200 inspection items as of Sunday.

This will set the restart date of the No.1 reactor to late July at the earliest. The operator says it plans to restart the plant's No.2 reactor in August or shortly afterward.

Sendai restart

May 22, 2015

Regulator OKs Sendai plant facilities' designs

http://www3.nhk.or.jp/nhkworld/english/news/20150522_30.html

May 22, 2015 - Updated 10:10 UTC+2
Japan's nuclear regulator has approved the designs of all the newly installed facilities for the No.1 and No.2 reactors at the Sendai nuclear power plant.

The approval moves the Sendai nuclear power plant in southwestern Japan one step closer to restart.

Operator Kyushu Electric Power Company had been slow in submitting some of the design documents to

the regulator. They include the designs of shared facilities, such as the control room's air conditioning.

On Friday, officials of the regulator said they finally confirmed the quake-resistance for these designs and that all the designs for safety purposes were approved.

The next step is an in-person inspection by officials that leads to the No.1 reactor's restart. The regulator has been inspecting the newly installed facilities for the reactor since March. But it has completed less than 10 percent of about 200 inspection items as of Sunday.

This will set the restart date of the No.1 reactor to late July at the earliest.

Regarding the No.2 reactor, the operator says it plans to restart it in August or shortly afterward. The power company next week plans to submit to the regulator documents asking for an in-person inspection of the reactor.

Sendai No.2 to restart late September ?

May 25, 2015

Utility sets September reactor restart date

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

May 25, 2015 - Updated 11:20 UTC+2

Kyushu Electric Power Company says it hopes to restart one of its reactors at the Sendai nuclear plant in southern Japan in late September, giving a more concrete target date than previously announced.

The utility revealed this on Monday in a plan submitted to the Nuclear Regulation Authority for on-site inspections of the No.2 reactor at the plant in Kagoshima Prefecture.

The inspections by the regulators are the final step for putting the reactor back online. Under the plan, the inspections will start on June 10th.

Kyushu Electric hopes to load nuclear fuel into the reactor in late August and pull out the control rods about a month later to reactivate the reactor.

The utility says it aims to check the overall functions of the reactor and connect it to the power grid in late October.

The firm used to say that it was planning to restart the reactor after August.

The regulators have already begun their inspections of the No.1 reactor at the same plant. The operator

aims to restart this reactor in late July. But the regulators have completed less than 20 percent of the roughly 200 items on the checklist.

With the inspections of the No.2 reactor about to start, the process could take longer than planned.

The 2 reactors are the first to clear the tighter regulations introduced after the Fukushima nuclear accident.

Sendai clears final screening

May 27, 2015

NRA approves emergency plans for Sendai plant

http://www3.nhk.or.jp/nhkworld/english/news/20150527_26.html

May 27, 2015 - Updated 06:43 UTC+2
Japan's nuclear regulator has endorsed a plan submitted by the operator of the Sendai nuclear power plant in southwestern Japan. It's for dealing with emergencies.

The Nuclear Regulation Authority, or the NRA, approved the plans for the No.1 and 2 reactors at the power station in Kagoshima Prefecture on Wednesday.

The operator, the Kyushu Electric Power Company, has now obtained all of the regulator's necessary approvals for restarting the reactors at the plant.

The latest screening will allow the power company to load nuclear fuel after the NRA finishes necessary inspections, and receive checks on its emergency drills.

NRA Chairman Shunichi Tanaka said that education and drills for workers to prepare in case of serious accidents are very important, and that he hopes these matters will be checked without fail.

The regulators have cleared all the necessary documents for the Sendai plant. It's the first time this has happened since tougher rules were introduced after the 2011 nuclear accident.

Only on-site pre-operational inspections by the NRA are left for the utility before it is allowed to restart the reactors.

Kyushu Electric hopes to restart the No. 1 reactor in late July after loading nuclear fuel into the reactor next month. It also plans to reactivate the No.2 reactor in late September. But the pre-operational checks since late March are falling behind schedule, and the delay may affect the utility's restarting plan.

Sendai nuclear reactors clear final screening

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201505270067

By TOSHIO KAWADA/ Staff Writer

Kyushu Electric Power Co. cleared the final screening hurdle for a resumption of operations at its Sendai nuclear power plant in Kagoshima Prefecture.

The Nuclear Regulation Authority on May 27 approved the operational and accident-response manuals submitted by Kyushu Electric Power.

The utility will now conduct checks of the equipment at the nuclear power plant before reactivating the reactors. The No. 1 reactor could restart as early as late July. The utility expects to resume operations at the No. 2 reactor by late September.

It submitted the paperwork for three separate screenings in July 2013.

In September 2014, the NRA approved the basic direction of safety measures at the Sendai plant that were required under new standards implemented after the 2011 accident at the Fukushima No. 1 nuclear power plant.

The utility also submitted construction plans to change reactor design in line with its safety measures. The NRA approved the construction plan for the No. 1 reactor in March 2015 and for the No. 2 reactor on May 22.

The manuals that received approval on May 27 contained procedures for dealing with major accidents, such as a huge volcanic eruption.

The guidelines call for constant monitoring of volcanic activity and if a major eruption appears imminent, the president of Kyushu Electric Power is to issue instructions to stop operations at the Sendai reactors and remove the nuclear fuel.

Kyushu nuclear plant clears regulator's safety screening

http://mainichi.jp/english/english/newsselect/news/20150527p2g00m0dm060000c.html

The Sendai Nuclear Power Plant is pictured in Satsumasendai, Kagoshima Prefecture, in this Nov. 7, 2014 file photo. (Mainichi)

TOKYO (Kyodo) -- A nuclear plant owned by Kyushu Electric Power Co. cleared all of the regulator's safety screening Wednesday, with only on-site pre-operational checks left for the utility before it is allowed to restart the Sendai complex in southwestern Japan.

The Nuclear Regulation Authority approved the same day Kyushu Electric's safety management rules required for restarting the plant. The company now plans to reactivate in late July the No. 1 unit at its Sendai plant in Kagoshima Prefecture after completing the ongoing pre-operational checks of the plant's equipment.

The two-unit Sendai complex is expected to become the first nuclear facility in Japan to go back online under a set of new, tighter regulations imposed following the 2011 Fukushima meltdowns. Kyushu Electric plans to restart the No. 2 unit in late September.

But the pre-operational checks are already falling behind schedule, which may affect the utility's restart plan.

The nuclear crisis at Tokyo Electric Power Co.'s Fukushima Daiichi complex, triggered by a huge earthquake and tsunami in March 2011, resulted in eventually shutting down all of Japan's commercial reactors over safety concerns.
Following the disaster, two nuclear reactors at Kansai Electric Power Co.'s Oi plant were temporarily brought back online in 2012 with the government citing concerns about power shortages. But no reactors have been restarted under the post-Fukushima regulations introduced in 2013.
The government of Prime Minister Shinzo Abe seeks to reboot reactors that have cleared the regulator's screening as soon as possible, saying that continued use of nuclear power is necessary for keeping electricity bills low and boosting economic growth.
However, polls have shown that the majority of Japan's public are opposed to restarting nuclear plants.

NRA criticises Kepco

May 28, 2015

Kansai Electric urged to revise restart documents

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
May 28, 2015 - Updated 10:16 UTC+2
Japan's nuclear regulatory agency has criticized Kansai Electric Power Company for a delay in submitting documents necessary to decide whether 2 of its older nuclear reactors can keep operating.

The Nuclear Regulation Authority made the criticism at a meeting on Thursday to examine the results of a special inspection that the utility conducted at the No.1 and 2 reactors of its Takahama plant in Fukui Prefecture.

This is part of a screening process following the utility's application in April to extend the operational lifespan of the reactors by 20 years, beyond a standard 40 years.

The government introduced the 40-year limit after the 2011 Fukushima accident. Utilities hoping to extend the limit for their reactors must put them under close scrutiny and prove that they have no safety problems.

Regulators said Kansai Electric has not yet submitted documents explaining in detail the designs of equipment at the reactors. They also said other documents attached to the April application include outdated data.

Officials of Kansai Electric said it is taking time to reflect in the documents a decision made last May to prepare for the possibility that the plant will be hit by an earthquake more powerful than previously assumed.

For Kansai Electric to win approval, the reactors must pass screening in a special inspection by July next year, as well as a new set of requirements introduced after the Fukushima accident.

NRA begins inspection of Sendai Plant

June 8, 2015

Nuclear regulators inspecting Sendai plant

Jun. 8, 2015 - Updated 09:42 UTC+2

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Japanese nuclear regulators have begun inspecting a nuclear power plant in southwestern Japan to see if its operator is complying with new safety management rules. These include emergency responses.

Inspectors from the Secretariat of the Nuclear Regulation Authority on Monday began the 3-week probe at the Sendai plant in Kagoshima Prefecture.

Last month, the NRA approved the safety management rules for the No.1 and No. 2 reactors drawn up by operator Kyushu Electric Power Company.

The rules were the first to win approval based on tougher regulations that were introduced after the 2011 accident at the Fukushima Daiichi plant.

The inspectors will check if the utility has prepared detailed manuals in line with its new rules.

If they find any serious violations, Kyushu Electric may not be allowed to restart reactors at the plant until it takes measures to address them.

The utility hopes to restart the No.1 reactor in mid-August. But equipment inspections are falling behind schedule.

Checking Sendai plant

June 10, 2015

Check of Sendai reactor starts

Jun. 10, 2015 - Updated 09:13 UTC+2

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Nuclear regulators have begun checking a reactor at a power plant in southwestern Japan ahead of a possible restart.

The No.1 and 2 reactors at the Sendai plant in Kagoshima Prefecture last year were the first to clear tougher regulations introduced after the 2011 Fukushima accident.

Since the end of March, Japan's Nuclear Regulation Authority has checked new safety equipment for the plant's No.1 reactor to see whether it was installed as planned and works properly.

The regulators began checking the No. 2 reactor on Wednesday. They examined documents and held hearings of officials from the plant's operator, Kyushu Electric Power Company.

The checks covered about 100 facilities and equipment that are used by both reactors. The authority says it wants to finish checking them so it can restart the No.1 reactor first.

Kyushu Electric hopes to restart the No.1 reactor in mid-August and the No. 2 in late September.

All of Japan's commercial nuclear reactors are offline.

Setback for Sendai

10.06.2015_No119 / News

Setback For Sendai After Discovery Of 'Incomplete Documents'

http://www.nucnet.org/all-the-news/2015/06/10/setback-for-sendai-after-discovery-of-incomplete-documents
Security & Safety
10 Jun (NucNet): Japan's Nuclear Regulation Authority (NRA) has begun redoing parts of pre-service inspections it had already completed at the Sendai-1 nuclear power plant after the discovery of "numerous incomplete documents and erroneous written entries", the Japan Atomic Industrial Forum (Jaif) said today.
Pre-service inspections are the final stage before a nuclear power plant can be restarted. Kyushu Electric Power Company, the owner and operator of the 846-megawatt pressurised water reactor unit in Kagoshima prefecture, southern Japan, has now postponed the scheduled restart of the unit from early July to mid-August 2015.

Jaif warned today that because of the number of errors that need to be corrected, a restart this summer is unlikely.

The NRA said the omissions and errors were "not mere entry mistakes", but mistakes of a nature that require "the confirmation of facts". The NRA intends to carry out further inspections in the area of quality control, Jaif said.

Jaif said errors included discrepancies between data that Kyushu Electric Power Company had provided on fuel lines to emergency power facilities and the data on those fuel lines contained in original records provided by the manufacturer at the time of installation.

Pre-service inspections to confirm the performance of equipment and facilities at Sendai-1 began at the end of March 2015, Jaif said.

According to Kyushu Electric Power Company, around 420 personnel were engaged in inspections, but this has not been enough to keep to its schedule.

Pre-service inspections began at Sendai-2 on 10 June 2015. Jaif did not say if those inspections had been stopped or if they needed to be carried out again.

Units 1 and 2 at Sendai both cleared the NRA's safety examinations in September 2014, which meant they met new regulatory standards imposed after the March 2011 Fukushima-Daiichi accident. They were the first reactors approved for restart under the new standards.

All of Japan's 48 commercial reactor units were shut down for safety checks and upgrades following Fukushima-Daiichi.
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Restart Hamaoka no.3 reactor?

June 16, 2015

Chubu Electric pushes Hamaoka reactor toward restart; residents divided

http://www.japantimes.co.jp/news/2015/06/16/national/chubu-electric-pushes-hamaoka-reactor-toward-restart-residents-divided/#.VYBo90bwmou

Kyodo
Chubu Electric Power Co. applied Tuesday for Nuclear Regulation Authority safety screening so it can restart the No. 3 reactor at its Hamaoka nuclear plant.
Located on the Pacific coast in Omaezaki, Shizuoka Prefecture, the facility is in a region that studies suggest could be devastated by a major earthquake.
Chubu Electric said it plans to take measures by September 2017 to enhance the safety of the No. 3 unit against risks from earthquakes and tsunami.
In February 2014, it applied for a safety assessment of the No. 4 unit. It and the No. 5 reactor were shut down in May 2011 after Prime Minister Naoto Kan of the Democratic Party of Japan requested that operations be suspended amid fears that a powerful earthquake predicted in the area could trigger another nuclear crisis. The Fukushima disaster was playing out at the time.
Residents in Shizuoka Prefecture expressed mixed reaction Tuesday.
"I can't trust the safety of a nuclear plant even if it passes the screening," said a woman in her 40s who operates a shop in Omaezaki.
A man in his 60s who owns a business in the city said the plant should not be restarted.
"Higher electricity bills are hitting my business hard, but that can't be traded for safety," he said.

Katsushi Hayashi, who belongs to a local citizens' group, said the application for restart "goes against the will of the people in Shizuoka."
However, some residents said the restart may be necessary for development of the local economy.
"It's true that many people have jobs thanks to the Hamaoka plant, although I support phasing out nuclear power," said a 43-year-old housewife who lives near the plant.
A man in his 30s who works at a local restaurant said, "We have no choice but to allow the restart if it would contribute to the local economy."
At the time of the Fukushima disaster, the No. 3 unit at the five-reactor Hamaoka plant was offline for scheduled maintenance and inspections. Reactors 1 and 2 ended commercial operation in 2009.
Chubu Electric wants to resume power generation at the complex as soon as possible to reduce its reliance on expensive fossil fuel imports.
Currently all of Japan's commercial reactors remain offline pending NRA safety reviews. Prior to the Fukushima disaster they provided nearly a third of the nation's power.
The NRA's current safety standards were adopted in the wake of the Fukushima disaster.
See also :

Chubu Electric applies for safety review of Hamaoka No. 3 nuclear unit

http://mainichi.jp/english/english/newsselect/news/20150616p2g00m0dm057000c.html
TOKYO (Kyodo) -- Chubu Electric Power Co. applied Tuesday for safety screening of the No. 3 reactor at its Hamaoka nuclear plant which is believed to be located at the potential epicenter of a future massive earthquake.
To resume operating, the Nuclear Regulation Authority must certify that a reactor satisfies more stringent safety standards adopted in the wake of the 2011 Fukushima nuclear plant disaster.
Chubu Electric said it plans to take measures by September 2017 to enhance the safety of the No. 3 unit against possible earthquake and tsunami hazards.
In February 2014, the utility applied for the nuclear regulator's safety assessment of the No. 4 unit at the plant on the Pacific coast in Shizuoka Prefecture.
Currently all of Japan's commercial nuclear reactors, which prior to the Fukushima disaster provided nearly a third of the electricity consumed in Japan, the world's third-largest economy, remain offline pending NRA safety reviews.
In May 2011, the No. 4 and No. 5 units at the Hamaoka station -- Chubu Electric's sole nuclear plant -- were shut down after then Prime Minister Naoto Kan of the now-opposition Democratic Party of Japan requested all operations at the plant be suspended due to concern that a powerful earthquake predicted in the area could trigger another nuclear crisis like the Fukushima triple-reactor meltdowns.
When the Fukushima disaster occurred in March 2011, the No. 3 unit at the five-reactor Hamaoka plant was offline for regular checkups. The No. 1 and No. 2 units ended commercial operation in 2009.
Chubu Electric wants to resume operating the complex as soon as possible amid increased imported fuel costs for fossil power in the absence of nuclear power.
But the outlook remains uncertain partly because Shizuoka Prefecture has been reluctant to give a green light to restarting the plant due to safety concerns.

June 16, 2015

Screening sought for another Hamaoka reactor

http://www3.nhk.or.jp/nhkworld/english/news/20150616_28.html

Jun. 16, 2015 - Updated 10:39 UTC+2

Chubu Electric Power Company has applied for screening of a second reactor at its Hamaoka nuclear plant in central Japan, to determine whether related safety measures meet new government requirements.

The plant on the Pacific coast of Shizuoka Prefecture is in an area where, scientists say, a major earthquake could occur in the near future.

Chubu Electric filed an application for the plant's No. 3 reactor with the Nuclear Regulation Authority on Tuesday. The screening is a prerequisite for restarting the reactor.

The utility last year applied for screening of the plant's No. 4 reactor, which is under the regulator's scrutiny.
The firm says that like safety measures taken for the No. 4 reactor, those for the No. 3 are based on a higher estimate of maximum acceleration during an earthquake.

The firm also built a 22-meter-high breakwater to protect the plant from tsunami after revising its estimate for tsunami height to about 21 meters.

The utility's senior official Hiromu Masuda said it's important to explain the safety measures in detail to not only the regulator but also local residents.

Following the Fukushima Daiichi nuclear accident, Chubu Electric halted 2 reactors at Hamaoka at the request of the government.

The No. 3 reactor was offline for regular checks and remains so.

Regulatory officials are discussing the possibility of earthquakes and tsunami in the area, leading to a delayed screening for the No. 4 reactor.

Local municipalities oppose restarting the plant.

Sendai: Fuel laoding delay

June 22, 2015

Fuel loading delay at nuclear plant

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Jun. 22, 2015 - Updated 03:51 UTC+2

The operator of a nuclear power plant in southwestern Japan says there may be a short delay in fuel loading at a reactor scheduled for an August restart.

Kyushu Electric Power Company initially planned to start loading 157 units of nuclear fuel into the No. 1 reactor at Sendai, Kagoshima Prefecture, on July 4th.

Officials are now considering delaying the schedule to July 7th due to a reexamination of procedures.

The loading of the fuel units will likely take 4 days to complete.
The No.1 and 2 reactors at the Sendai plant in Kagoshima Prefecture are the first to clear tougher regulations introduced after the 2011 Fukushima accident.

Safety checks have been underway at the No.1 reactor since March, ahead of its planned restart. Once the fuel units have been installed, pipes and containment vessels will be examined.

Kyushu Electric Power Company officials are hoping to restart the reactor by mid-August.

Safety screening starts at Hamaoka plant

June 23, 2015

Regulators begin safety review of Hamaoka No. 3 nuclear reactor

http://mainichi.jp/english/english/newsselect/news/20150623p2g00m0dm115000c.html

TOKYO (Kyodo) -- Japan's nuclear regulators began safety screening Tuesday at the No. 3 reactor at Chubu Electric Power Co.'s Hamaoka nuclear plant which is believed to be sitting at the epicenter of a potential future earthquake.
During Tuesday's meeting, Nuclear Regulation Authority Commissioner Toyoshi Fuketa said the regulator will put a priority on assessing the safety of the No. 4 unit first -- signaling that the No. 3 unit would not go back online before the No. 4 reactor obtains a safety clearance.
Chubu Electric applied for the safety assessment of the No. 4 unit at the plant, located on the Pacific coast in central Japan, in February 2014.
To go back online, a reactor needs to pass the regulator's screening based on more stringent safety requirements adopted after the Fukushima Daiichi nuclear crisis triggered by a massive earthquake and tsunami in 2011. Chubu Electric is spending more than 300 billion yen to boost the Hamaoka plant's preparedness against possible earthquake and tsunami hazards.
However, assessment of the plant is expected to take a long time as the regulator is cautiously evaluating whether the safety measures are effective, and both the Nos. 3 and 4 reactors may remain offline for a while.

The outlook for restarting the plant is also unclear because Shizuoka Prefecture, which hosts the complex, remains wary about giving the green light. Shizuoka Gov. Heita Kawakatsu has said he wants to put the issue to a referendum.
In May 2011, the Hamaoka station -- Chubu Electric's sole nuclear plant -- was shut down after then Prime Minister Naoto Kan requested all operations at the facility be suspended, due to concerns that a powerful earthquake predicted in the area could trigger another nuclear crisis like the Fukushima meltdowns

Change quake preduction or not?

July 2, 2015

Nuclear watchdog threatens to abort screening of Mihama plant

http://mainichi.jp/english/english/newsselect/news/20150702p2a00m0na010000c.html

The Nuclear Regulation Authority (NRA) has threatened to terminate safety screenings for reactivating the Mihama nuclear power plant's No. 3 reactor if its operator, Kansai Electric Power Co. (KEPCO), fails to finalize a maximum seismic projection for the plant's premises by the end of August, it has been learned.
The nuclear watchdog announced the decision on July 1 over the plant's No. 3 reactor in Fukui Prefecture, whose operational life will reach the 40-year limit at the end of November next year. The move comes after KEPCO showed reluctance to raise the maximum earthquake ground motion for the plant site.
KEPCO is seeking to extend the operational life of the No. 3 reactor and filed for safety screenings in March. In order to bring about the extension, however, the utility will need to have inspections on the reactor completed by the end of November 2016, including anti-dilapidation measures.
At a regular meeting on July 1, the NRA estimated that it will take around 15 months from finalizing basic ground motion -- which serves as seismic design standards for reactors -- until screenings on other matters are completed at the plant, meaning that the utility must finalize the basic earthquake ground motion by the end of August.
Basic earthquake ground motion greatly varies depending on the predicted depths of an epicenter. KEPCO estimates that a quake whose epicenter's upper edge is four kilometers deep could hit the Mihama plant, while setting the figure at three kilometers deep for the nearby Takahama and Oi nuclear stations, respectively. The NRA has called on KEPCO to review the figure for the Mihama plant to make it on par with those for the other two plants.
If KEPCO reviews and finalizes basic ground motion for the Mihama facility, it will require additional seismic reinforcement work, possibly raising the costs for safety measures. If the utility sticks to the four-kilometer-deep epicenter scenario, however, it will not be able to finalize basic ground motion by the deadline, possibly leading to the decommissioning of the reactor.
During a July 1 press briefing, NRA Chairman Shunichi Tanaka said, "(If KEPCO fails to finalize basic ground motion by the end of August) we must consider measures including suspension of screenings. The operator (KEPCO) needs to be aware of that."
A senior KEPCO official told the Mainichi Shimbun, "We will consider whether to change our quake predictions before the next meeting for safety screenings is convened."
The upper limit of a reactor's operational life is set at 40 years, but it can be extended by up to 20 years only once.

Sendai (No.1) to start loading fuel on July 7

July 3, 2015

Sendai reactor fuel to be loaded from July 7

http://www3.nhk.or.jp/nhkworld/english/news/20150703_36.html

Jul. 3, 2015 - Updated 12:31 UTC+2

Officials at the Sendai nuclear power plant in southwestern Japan say they plan to start loading fuel into one of the reactors next Tuesday.

The Kyushu Electric Power Company reported the plan to the Nuclear Regulation Authority on Friday. Earlier the same day, pre-loading inspections were completed at the Number 1 reactor.

The utility expects it will take 4 days to insert 157 nuclear fuel assemblies into the reactor. Workers will use a crane to transfer the fuel rods one by one from a storage pool in an adjacent building.

Kyushu Electric will then check emergency equipment to inject coolant into the reactor and a device to insert control rods.

Workers will also undergo a drill to rehearse their response to a severe accident.

If all goes as planned, the utility will remove the control rods to activate the reactor in mid-August.

The Sendai plant's Number 1 and Number 2 reactors became the first to clear safety screenings last year.

The screenings were required under the country's new, stricter regulations introduced after the 2011 Fukushima nuclear accident.

The Number 1 reactor began undergoing equipment inspections in late March ahead of the Number 2 reactor.

All of Japan's 43 reactors are currently offline.

Sendai No.1 reactor to start earlier than planned

July 4, 2015

Kyushu Electric to load nuclear fuel into Sendai plant reactor ahead of restart

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201507040027

HIGASHIYAMA/ Staff Writer
Kyushu Electric Power Co. will begin loading nuclear fuel into a reactor at the Sendai nuclear power plant in Kagoshima Prefecture on July 7 ahead of its planned restart in August.
The Nuclear Regulation Authority gave the plant operator the green light to start loading the fuel into the No. 1 reactor after the nuclear watchdog inspected the plant's equipment on July 3.
The reactor is planned to be restarted in mid-August after Kyushu Electric undergoes a month-long preparation.
The latest inspection was a part of the "pre-operation tests" to confirm that safety equipment is properly installed and can function at the plant to meet the NRA's new safety standard. The NRA determined July 3 that fuel can be properly loaded into the reactor in the light of the new regulation.
Before the reactor restart, the NRA will proceed with the remaining stages of pre-operation inspections to determine if the reactor can be actually restarted and conduct "security checks" on operational procedures.
During the fuel installation, Kyushu Electric workers will move bundles of nuclear fuel rods from a storage pool adjoining the reactor building into the reactor one by one. It will take about four days to load all 157 fuel rod bundles into the reactor, Kyushu Electric officials said.

Loading at Sendai soon to start - Protests

July 7, 2015

Operator to load nuclear fuel into reactor for planned 1st restart

Protesters demonstrate against reactivation of the Sendai nuclear power plant's No. 1 reactor in front of the plant's front gate in Satsumasendai, Kagoshima Prefecture, on July 7, 2015. (Mainichi)

http://mainichi.jp/english/english/newsselect/news/20150707p2g00m0dm018000c.html

FUKUOKA (Kyodo) -- Kyushu Electric Power Co. will start loading nuclear fuel into a reactor at its Sendai complex Tuesday ahead of its restart planned in mid-August under more rigorous safety requirements adopted after the 2011 Fukushima triple-reactor meltdowns.
The reboot of the reactor will mark the revival of Japan's nuclear power generation that has been idled amid safety concern following the world's worst nuclear disaster since the 1986 Chernobyl accident. None of Japan's commercial reactors have been online for nearly two years.
The government and utilities, faced with higher imported fuel costs, have sought to reactivate nuclear reactors that have met the new safety standards. The majority of the public, however, opposes the restart amid persistent safety concern and the ongoing work for decommissioning the radiation-leaking Fukushima Daiichi power plant.
According to a Kyushu Electric official, the operator will insert a total of 157 fuel rod assemblies into the Sendai No. 1 reactor, which will take about four days. Following the Nuclear Regulation Authority's screening of equipment, the utility plans to reactivate the unit and begin generating electricity in mid-August.
All of Japan's commercial nuclear reactors had been shut down by May 2012 due to heightened concern over the use of atomic power in the wake of the Fukushima disaster triggered by a huge earthquake and tsunami in March 2011.
Two reactors owned by Kansai Electric Power Co. were reactivated in July 2012 to address possible power shortages but they entered a period of mandatory routine checkups in September 2013, leaving Japan without nuclear power supply again.
In September 2014, the No. 1 unit at the Sendai plant, located in southwestern Japan, became the first nuclear facility to obtain a safety clearance from the regulator based on the post-Fukushima safety standards, a process necessary for any reactor before being allowed to go back online.
Kyushu Electric also plans to bring the Sendai No. 2 reactor back online in October. Two other reactors at Kansai Electric's Takahama plant have also obtained the regulator's safety clearance, but the outlook for their restart is uncertain due to a recent court decision to ban the utility from bringing them back online.
In its long-term energy policy, the government has pledged to continue utilizing nuclear power as a key source of electricity. It seeks to have nuclear power account for 20 percent to 22 percent of the total electricity supply in 2030, compared with around 30 percent before the nuclear crisis.
July 07, 2015 (Mainichi Japan)

July 6, 2015

Loading fuel at Sendai power plant soon to start

http://www3.nhk.or.jp/nhkworld/english/news/20150707_01.html

Jul. 6, 2015 - Updated 19:08 UTC+2
The operator of the Sendai nuclear power plant in southwestern Japan plans to start loading fuel into one of the reactors on Tuesday in preparation for restarting it.

The Kyushu Electric Power Company has scheduled 4 days for the work of placing 157 nuclear fuel assemblies into the Number 1 reactor. Workers will use a crane to transfer the fuel rods one by one from a

storage pool in an adjacent building.

The utility says it will rotate workers so it can conduct the work around the clock. It also says safety is the highest priority.

Kyushu Electric halted the operation of the Number 1 reactor 2 months after the 2011 disaster in northeastern Japan. All of its fuel was removed by the end of January 2013.

The company plans to restart the reactor in mid-August. In the meantime, emergency equipment that injects coolant into the reactor and other facilities crucial to safety will be checked.

Workers will also take part in a drill on how to respond to a severe accident.

Last year, the plant became the first to have safety measures approved under new regulations for nuclear plants introduced after the 2011 Fukushima accident.

Equipment at the plant's 2 reactors is now being checked ahead of the restart.

Sendai starts loading

July 7, 2015

Kyushu Electric starts transferring nuclear fuel into Sendai reactor

Protesters opposed to the resumption of operations at the Sendai nuclear power plant in Kagoshima Prefecture gather in front of the main gate on July 7. (Jun Kaneko)

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201507070096

By JUNICHIRO NAGASAKI/ Staff Writer
Kyushu Electric Power Co. on July 7 began moving nuclear fuel into a reactor on expectations it will be the first in Japan to restart under tougher safety regulations implemented after the Fukushima disaster.
All 157 nuclear fuel rod bundles will be transferred to the No. 1 reactor at the Sendai nuclear plant in Satsuma-Sendai, Kagoshima Prefecture, over a four-day period.
Cranes were used to move each fuel rod bundle from a storage pool in an adjacent building, and work will continue around the clock to complete the process by July 10.
Kyushu Electric Power is seeking to restart the No. 1 reactor in mid-August after the Nuclear Regulation Authority completes the final phases of its safety screening.
NRA officials will continue with their equipment screening even after the nuclear fuel is moved into the reactor. The screening is expected to take another month or so and will include confirmation that water gauges in the reactor and equipment to inject coolant are functioning properly.
The NRA will also check Kyushu Electric Power's measures to deal with emergencies, including training exercises on how to respond to severe accidents.
If the screening process goes smoothly, Kyushu Electric Power could start up the No. 1 reactor by mid-August. Once the reactor resumes operations, NRA officials will conduct a final inspection before power generation can begin on a commercial basis by as early as mid-September.
The NRA approved the resumption of operations at the Sendai plant in September 2014, the first nuclear plant to receive such approval.
Kyushu Electric Power is also seeking to resume operations at the No. 2 reactor by mid-October at the earliest.

Fuel is loaded into Kagoshima reactor as first restart nears

http://www.japantimes.co.jp/news/2015/07/07/national/fuel-loaded-kagoshima-reactor-first-restart-nears/#.VZzvDvnwmid

by Eric Johnston
Staff Writer
OSAKA – Kyushu Electric Power Co. on Tuesday afternoon began loading fuel into the No. 1 reactor at its Sendai power station in preparation for a restart in mid-August, the first under safety standards adopted in response to the Fukushima crisis.

The 890,000-kilowatt unit in the city of Satsumasendai, on the west coast of Kagoshima Prefecture, will also be the first to be brought back on line since 2012.
But local concerns remain about the possibility of damage due to volcanic activity and how people living within 30 km of the two-reactor plant would be evacuated if a disaster hits.

A spokeswoman for Kyushu Electric said the fuel loading is a 24-hour operation and involves inserting into the reactor 157 fuel rod assemblies currently stored in an adjacent fuel pool. The first fuel was loaded early Tuesday afternoon, she said, and the last of the assemblies are expected to be inserted by Friday.
If there are no problems with loading the fuel and starting up the reactor, further safety checks of the electricity grid will be conducted. If given the all-clear, Kyushu Electric will begin selling nuclear-generated electricity by mid-September.
The Sendai No. 1 reactor passed the Nuclear Regulation Authority's safety standards last September, making it the first reactor since the March 11, 2011, quake and tsunami and three meltdowns at the Fukushima No. 1 plant to be cleared for restart under the new rules.
With the exception of Kansai Electric Power Co.'s Oi No. 3 and No. 4 reactors in Fukui Prefecture, which were online from July 2012 to September 2013, all of Japan's commercial reactors have been offline since the disaster.
The NRA has also cleared the Sendai No. 2 reactor, which Kyushu Electric hopes to restart by mid-October. Since the stricter requirements for restarts went into effect in July 2013, operators have applied for safety inspections on 25 reactors at 15 plants nationwide.
The loading of the fuel into the Sendai No. 1 reactor came the same day as the government announced revisions to the basic disaster response plan that, it says, will improve communications and coordination between Tokyo and local entities if a natural and nuclear disaster occur at the same time.
But Ryoko Torihara, a resident of Satsumasendai and a long-term anti-nuclear activist, said that the NRA, Kyushu Electric and local officials are rushing to a restart without a thorough analysis of the risk of volcanic damage and with questions remaining about evacuation plans.
"It's quite strange the NRA did not have any volcanic experts on its committee when it accepted the word of Kyushu Electric that the possibility of a gigantic volcanic eruption, called a caldera eruption, was extremely small," she said. In addition, evacuation plans for those within 30 km of the plant are vague. There are questions about how to assist the infirm, or even whether there would be enough bus drivers to help get people out, she said.

July 7, 2015

Nuclear fuel loading begins at Sendai plant

http://www3.nhk.or.jp/nhkworld/english/news/20150707_22.html

Jul. 7, 2015 - Updated 09:24 UTC+2
Work has begun to load nuclear fuel into a reactor at the Sendai nuclear power plant in Kagoshima prefecture. The procedure will prepare it to restart, after becoming the first to meet new Japanese government requirements following the 2011 Fukushima accident.

Kyushu Electric Power Company plans to load 157 nuclear fuel assemblies into the Number 1 reactor over 4 days starting from Tuesday.

Cranes and other equipment are being used to transfer them one by one from a storage pool in an adjacent building. The utility says it will rotate workers so the operation can continue around the clock.

Kyushu Electric halted the operation of the Number 1 reactor 2 months after the 2011 disaster. All of its fuel was removed by the end of January 2013.

Preparations to restart the Number 1 reactor are in the final stages. The operator plans to hold accident-response drills and inspect emergency facilities before restarting the reactor in mid-August.

Fuel loading completed

July 9, 2015

Nuclear fuel loaded into Sendai reactor

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Jul. 9, 2015 - Updated 23:50 UTC+2
Workers at the Sendai nuclear power plant in western Japan have finished loading fuel into a reactor. Now the preparation work will enter the final stage for the operator to reactivate the reactor in mid-August.

Kyushu Electric Power Company said workers finished putting 157 nuclear fuel rod bundles into the Number 1 reactor of the plant in Kagoshima Prefecture shortly after midnight on Friday. The company started the work on Tuesday.

Company engineers will check whether the units are in proper position on Friday.

The operator plans to hold accident-response drills and inspect emergency facilities before restarting the reactor.

Kyushu Electric halted operation of the Number 1 reactor of the plant 2 months after the 2011 Fukushima Daiichi accident. All of its fuel was removed by the end of January 2013.

Last year, the plant cleared new regulations introduced following the 2011 disaster. It was the first nuclear facility in Japan to do so.

NRA will remain careful

July 9, 2015

Nuclear regulators to continue careful screening

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Jul. 9, 2015 - Updated 03:27 UTC+2
The head of Japan's Nuclear Regulation Authority says regulators will continue to be careful in screening reactors for restart even though the process may be slow.

Shunichi Tanaka spoke at a news conference on Wednesday, the second anniversary of the implementation of new regulations for nuclear plants. The stricter rules were introduced after the 2011 Fukushima Daiichi accident.

Not a single reactor has been put back online in the past 2 years, including those at Sendai nuclear plant in southern Japan, which were the first to pass the screening.

Tanaka said the authority is looking at 25 reactors at 15 plants. He said the process is taking time, but that their job is not easy.

Tanaka said some people seem unable to wait, but rushing means ignoring safety and returning to the past.
He suggested the authority will remain careful, while improving its efficiency.

Some experts have pointed out there are no scientific grounds for limiting a nuclear plant's operation to 40 years in principle.

Tanaka defended the life-span limit, saying the United States and France also conduct very strict screening over whether to allow operation over 40 years. He said he does not have enough knowledge to say whether or not 40 years is scientifically valid and if a change to that rule is required.

Nuclear Watch: Loading for Restart

Loading for Nuclear Restart

http://www3.nhk.or.jp/nhkworld/english/news/nuclearwatch/20150707.html

Moves are underway towards a restart at a nuclear power plant in southwest Japan. Workers at Kyushu Electric Power Company's Sendai plant have been loading fuel into one of its reactors. The plant will be the first to restart since the government introduced new regulations after the 2011 Fukushima disaster. Utility officials say workers are using cranes to transfer more than 150 fuel-rod units into the plant's Number 1 reactor, which has been without fuel for about 2 1 / 2 years. The fuel is being stored in a pool next to the building that houses the reactor.

Workers will spend four days transferring the individual units, on a shift rotation so the operation can continue around the clock. The fuel will be kept underwater to contain radiation.

Utility officials plan to restart the reactor following safety checks in about a month.

"The government plans to push forward with restarting nuclear plants that have satisfied the new guidelines in screenings by the Nuclear Regulation Authority. My feeling is that we've finally come this far toward the first restart under the new restrictions," says Japanese Industry Minister Yoichi Miyazawa.

The Sendai plant is the first to meet the government's new requirements. All of Japan's nuclear reactors are currently offline.

The developments at the Sendai plant have drawn opposition from residents and anti-nuclear activists. A group of protesters gathered outside the plant to voice opposition.

About 100 demonstrators took part in the rally. Some of them held signs that warned the fuel-loading is the first step toward an accident. One participant says what occurred in Fukushima could be repeated at the Sendai plant. "We can't just put aside the intense anger we feel. We urge the utility to stop the work immediately and give up on the restart," says anti-nuclear activist Ryoko Torihara.

The protesters criticized officials at Kyushu Electric for being callous. They accuse the utility of ignoring the public's desire for a nuclear-free society.

Almost half the fuel already loaded at Sendai No.1

July 9, 2015

Nuclear fuel loading process at Kyushu reactor nears halfway point

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201507090043

By JUNICHIRO NAGASAKI/ Staff Writer

SATSUMA-SENDAI, Kagoshima Prefecture--Workers at the Sendai nuclear power plant here have loaded nearly half of the nuclear fuel into a reactor that is expected to resume operations in mid-August.

The process to install 157 bundles of nuclear fuel rods into the plant's No. 1 reactor started at 1:39 p.m. on July 7. The plant operator, Kyushu Electric Power Co., said 61 bundles, or nearly 40 percent of total, had been loaded as of 4 p.m. on July 8.

"It is a focal step in our effort to restart the reactor, and we are determined to proceed gradually and carefully with the operation," said Satoru Kojo, director of the plant's general management office.

The utility plans to complete the operation by July 10. If the reactor passes final safety screenings, it will be the first to resume operations under stricter safety regulations that were introduced following the Fukushima nuclear disaster in March 2011.

About 50 workers are engaged in the round-the-clock operation.

Around 2:30 p.m. on July 8, workers using a crane meticulously inserted the 57th bundle of fuel rods into the reactor vessel. Media reporters were allowed to observe the process, which took place underwater to contain radiation from the rods.

The bundles are 4.1 meters tall, 21 centimeters wide on each side, and weigh 700 kilograms. They each hold 264 fuel rods.

Kyushu Electric also showed the operation to move the bundles one by one from a storage pool in a building adjoining to the No. 1 reactor building.

The fuel was hoisted by another crane, inserted in a rod-shaped container and transferred to the reactor building through a tube, which was also placed under water. The alignment of the bundles for the reactor is predetermined, so each batch is identified with letters based on their layout in the storage pool.

The distance between the storage pool and reactor is about 50 meters. It takes workers about 20 minutes to install a single batch.

The Nuclear Regulation Authority, the country's nuclear watchdog, is conducting the remaining stages of facility inspections to determine if the reactor can be actually restarted. The safety checks will continue even after all the fuel is installed in the reactor.

If the NRA gives the green light, Kyushu Electric will remove the control rods from the reactor in mid-August to restart the plant.

Safety clearance for Ikata no.3 reactor

July 15, 2015

Ikata No. 3 reactor clears another hurdle toward restart

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201507150065

By MASANOBU HIGASHIYAMA/ Staff Writer

An idled reactor operated by Shikoku Electric Power Co. moved closer to restarting July 15 after the Nuclear Regulation Authority gave its blessing to safety measures implemented by the utility.
Although it has cleared a key hurdle in line with stricter safety standards introduced in the aftermath of the 2011 Fukushima nuclear disaster, Shikoku Electric Power will still have to pass equipment screening for its No. 3 reactor at the Ikata nuclear power plant in Ehime Prefecture and gain the consent of local government leaders.
Operations could resume as early as this coming winter.
This marks the third time the NRA has given its approval to new safety measures at nuclear plants. The other instances involved the No. 1 and No. 2 reactors at the Sendai nuclear power plant in Kagoshima Prefecture operated by Kyushu Electric Power Co. and the No. 3 and No. 4 reactors at the Takahama nuclear power plant in Fukui Prefecture operated by Kansai Electric Power Co.
The NRA compiled a draft report on its safety screening at the Ikata reactor in May and received 3,464 public comments that led to revisions in the wording of the report.
The No. 3 reactor uses plutonium-thermal power generation, in which mixed-oxide fuel consisting of plutonium and uranium is used.
One of the largest fault lines in Japan passes close by the plant site. The NRA called on Shikoku Electric Power to raise its estimated intensity of a possible earthquake striking the area during the safety screening because of the proximity of the fault line.
That led, in turn, to the need for a greater number of facilities on the plant site to deal with accidents as well as anti-quake measures for the piping used in the reactor.
The work to implement such measures is expected to take until this autumn.
The NRA will now screen the detailed design of equipment as well as operating procedures.
Neither Ehime Governor Tokihiro Nakamura nor Ikata Mayor Kazuhiko Yamashita have come out with a clear stance on a resumption of operations at the No. 3 reactor.

July 15, 2015

Ikata reactor in Ehime wins safety approval as nation's nuclear plants inch closer to restarts

http://www.japantimes.co.jp/news/2015/07/15/national/ikata-reactor-ehime-wins-safety-approval-nations-nuclear-plants-inch-closer-restarts/#.VaYSzPnwmid

Kyodo
A reactor at an idled nuclear plant owned by Shikoku Electric Power Co. in Ehime Prefecture obtained safety clearance from regulators Wednesday, moving it a step closer to restarting as the government seeks to revive atomic power plants halted in the wake of the 2011 Fukushima crisis.
With the Nuclear Regulation Authority approving Shikoku Electric's boosted safety measures against possible earthquake and tsunami hazards, the No. 3 unit at the Ikata power station has joined a total of

four reactors at two other plants in obtaining safety approval based on more rigorous rules adopted after the triple meltdown at the Fukushima No. 1 nuclear power plant.
However, it remains uncertain when the unit will be able to go back online as Shikoku Electric must still obtain the go-ahead from local municipalities and complete the remaining procedures for the NRA safety review before being allowed to resume operations.
Some residents near the plant have voiced concerns that an evacuation plan created by local authorities is not comprehensive enough. As the Ikata complex is located at the base of a very narrow Sada Misaki Peninsula, critics have warned that people living to the west of the plant may be left without an overland escape route in the event of a serious accident.
At the regulator's behest, Shikoku Electric set tougher quake-resistance safety criteria for the Ikata plant's facilities and invested heavily in enhancing safety measures, including the construction of a new, quake-proof emergency response facility.
The utility projects that its earnings will improve by around ¥5 billion per month if the 890-megawatt No. 3 unit is reactivated and fossil power generation is reduced.
Japan is preparing for restarting a reactor at Kyushu Electric Power Co.'s Sendai plant as early as mid-August, which will mark the first resumption of a nuclear facility under the more stringent regulations introduced after Fukushima, the world's worst nuclear disaster since Chernobyl in 1986. It has been nearly two years since any of the nation's commercial reactors were last online.
Last September, two reactors at the Sendai plant became the first to obtain safety approval from the regulator, followed by two more reactors at Kansai Electric Power Co.'s Takahama plant last February.
A total of 25 reactors at 15 plants await safety screening by the watchdog before the resumption of operations can be considered.

See also :

Nuclear plant in western Japan gets safety OK, edges nearer restart

TOKYO (Kyodo) -- An idled nuclear plant owned by Shikoku Electric Power Co. obtained safety clearance from regulators Wednesday, moving it a step closer to restarting as the government seeks to revive Japan's nuclear industry that has been at a standstill following the 2011 Fukushima crisis.
With the Nuclear Regulation Authority approving Shikoku Electric's enhanced safety measures against possible earthquake and tsunami hazards as well as other severe accidents, the No. 3 unit at the Ikata power station has joined a total of four reactors at two other plants in securing safety approval based on more rigorous regulations adopted after the Fukushima meltdowns.
Japan's Chief Cabinet Secretary Yoshihide Suga said at a regular press conference Wednesday the government will "proceed with the restart" of the Ikata reactor based on its basic energy policy that specifies atomic power as a key energy resource.
But it is uncertain when the unit, located in Ehime Prefecture in western Japan, will be able to go back online as Shikoku Electric still needs to obtain the go-ahead from local municipalities and complete remaining procedures for the NRA safety review before being allowed to resume operation.
Some residents living near the plant have voiced concerns that an evacuation plan compiled by local authorities is not comprehensive enough. As the Ikata complex is located at the base of a very narrow peninsula called Sadamisaki, critics have warned that people living to the west of the plant may be left without an overland escape route in the event of a serious accident.

Ehime Gov. Tokihiro Nakamura has not made clear his stance on restarting the plant.
Shikoku Electric projects that its earnings will improve by around 5 billion yen ($40.5 million) per month if the 890-megawatt No. 3 unit is reactivated and fossil fuel power generation is reduced. It hopes to restart the unit as soon as possible but industry observers say it may not happen this year.
At a meeting Wednesday morning, NRA Chairman Shunichi Tanaka instructed regulatory officials to continue their "rigorous review."
Shikoku Electric said in a statement it will "make utmost efforts" to ensure safety of the plant. The utility also plans to make house-to-house visits within a 20-kilometer radius of the nuclear complex to explain its safety measures to the residents.
At the regulator's behest, Shikoku Electric has set tougher quake-resistance safety criteria for the Ikata plant's facilities and invested heavily in enhancing safety measures, including the construction of a new, quake-proof emergency response facility.
Nevertheless, an antinuclear citizens' group based in Ehime criticized the move toward restarting, saying it plans to make an administrative appeal against the nuclear regulators' decision.
The regulators are "underestimating the scale of (possible) earthquakes" that could hit the plant, the group's member Tsukasa Wada said at a press conference in the city of Matsuyama.
Japan is preparing to restart a reactor at Kyushu Electric Power Co.'s Sendai plant as early as mid-August, which will mark the first resumption of a nuclear facility under the more stringent regulations introduced after Fukushima, the world's worst nuclear disaster since Chernobyl in 1986. It is nearly two years since any of Japan's commercial reactors were last online.
In September last year, two reactors at Kyushu Electric's Sendai plant became the first to obtain safety approval from the regulator, followed by two other reactors at Kansai Electric Power Co.'s Takahama plant in February.
A total of 25 reactors at 15 plants are awaiting safety screening by the regulator before resumption of operations can be considered.

Reactor restart in Ehime nearing approval

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Jul. 15, 2015 - Updated 06:54 UTC+2
Japan's nuclear regulators have taken one step further in approving the restart of a nuclear reactor in Ehime Prefecture, western Japan.

They have accepted the plant operator's safety measures, saying they meet the government's new standards.

The Nuclear Regulation Authority unanimously accepted the measures at a regular meeting in Tokyo on Wednesday. This paves the way for Shikoku Electric Power Company to restart the No.3 reactor at its Ikata plant.

The NRA gave a preliminary assessment of the plant's safety in May, and then solicited public opinion.

Critics said the operator's assumption about the magnitude of a possible earthquake was too low, and that measures to prevent a hydrogen explosion were insufficient.

The regulators say they have confirmed that the utility has taken sufficient steps to manage these concerns.

NRA Chairman Shunichi Tanaka says stringent checks will remain in place before issuing final approval.

The No.3 reactor at the Ikata plant is one of 6 the NRA is assessing since the government tightened regulations two years ago.

The Ikata plant will be the third to gain approval to restart a reactor, following the Sendai plant in Kagoshima Prefecture and the Takahama plant in Fukui Prefecture.

Shikoku Electric must still win approval for the design of its equipment, and pass inspections. It also needs local government consent to restart the reactor.

Observers estimate a restart near the end of this year at the earliest.

Reservations about Ikata restart

July 16, 2015

Ehime governor and Ikata mayor cautious over restart of Ikata's No. 3 reactor

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201507160075

By MASANOBU HIGASHIYAMA/ Staff Writer

The governor of Ehime Prefecture and the mayor of Ikata remain cautious of the Nuclear Regulation Authority's decision on July 15 to approve newly installed safety measures at the No. 3 reactor at the nuclear plant here.

"We're only at the stage where a technical decision that says the plant meets the new standards was made," Ehime Governor Tokihiro Nakamura told reporters after the decision was announced. "We cannot yet debate the wisdom of restarting the plant when the central government hasn't even requested the resumption of operations."

For his part, Ikata Mayor Kazuhiko Yamashita issued a statement that said: "We understand the decision confirms the safety of the No. 3 reactor. We will make a judgment based on the opinions of the town assembly."

Neither of the leaders made specific statements regarding the local population's acceptance on reactivating the Ikata nuclear plant.

The stricter safety measures approved by the nuclear watchdog agency were implemented nationwide as a result of the 2011 nuclear disaster in Fukushima Prefecture.
The NRA has already determined the No. 1 and 2 reactors at the Sendai nuclear power plant in Satsuma-Sendai, Kagoshima Prefecture, and the No. 3 and 4 reactors at the Takahama nuclear power plant in Takahama, Fukui Prefecture, are safe to restart.
Shikoku Electric Power Co., the operator of the Ikata nuclear power plant, originally submitted a request to restart the facility in July 2013.
A key safety concern at the plant is the Median Tectonic Line, one of the nation's most active faults, that passes near the facility. The new safety measures take into account the possibility that a more powerful earthquake could hit compared with previous calculations.
"We needed time, as we debated a range of fundamental issues, such as the assumption about earthquakes," said NRA chairman Shinichi Tanaka.
The nuclear watchdog will now review detailed construction plans for the plant and safety procedures that are to be carried out, including those to be implemented during emergencies.
The utility also plans to install quake-resistant pipes and make other adjustments to the plant by this fall.
It will likely take several months for the NRA to conduct its screening once the construction work is finished, which means the power plant would be ready to restart this winter, at the earliest.
Meanwhile, Ikata Genpatsu o Tomeru Kai (Association for putting a stop to the Ikata nuclear power plant) in Matsuyama, expressed strong concern in a news conference held the same day over the NRA's latest decision. The citizens group said it plans to file an objection based on the Administrative Appeal Law.
"Meeting the new standards does not guarantee the plant will be exempt from large-scale accidents," said an official with the group.

Shika plant and fault lines

July 18, 2015

NRA still antsy about fault lines under Shika nuclear plant

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201507180040
By MASANOBU HIGASHIYAMA/ Staff Writer
An expert panel with the nation's nuclear watchdog remains unswerving in its assessment that fault lines running under the Shika nuclear power plant in Ishikawa Prefecture may well be active.
The position, stated in a draft report compiled July 17 that reflects an earlier finding, throws the prospect of restarting the facility's reactors into doubt.
The plant's operator, Hokuriku Electric Power Co., will have to decommission the No. 1 reactor at the plant if it is unable to overturn the finding by the expert panel of the Nuclear Regulation Authority.
The utility is set to dispute the veracity of the panel's analysis by citing "factual error" in the assessment.
Under new safety regulations for nuclear power plants introduced after the 2011 Fukushima nuclear disaster, no key facility or plant equipment--such as a reactor building or piping for cooling water--may be built on an active geological fault.
The report followed a tentative assessment the panel made in May. The panel comprises four outside specialists of geological faults and an NRA commissioner, Akira Ishiwatari.

The panel members will seek the advice of other experts before issuing an official report on the assessment of the fault at the Shika plant.
The fault in question, S-1, runs beneath the No. 1 reactor building.
The panel concluded it was impossible to rule out the possibility that the fault is active, citing evidence in the ground strata at the time of plant's construction.
Panel members also pointed out that other faults, S-2 and S-6, both of which run under the piping for cooling water used by the No. 1 and No. 2 reactors, may also be active.
However, they concluded that the impact of slippages of those faults on the equipment could be limited as the faults lie deep below the surface.
The NRA will also screen the No. 2 reactor, the other reactor at the Shika plant, to assess whether the facility can clear the new safety hurdles if Hokuriku Electric takes additional measures to reinforce the site.
A geological fault right beneath a key nuclear power facility could destroy the site simply because of slippage. A catastrophe would not necessarily be caused by the shaking of an earthquake.
Under the new regulations, an active fault is defined as one that has likely shifted during the past 120,000 to 130,000 years.
The Shika nuclear power plant is one of the nation's five commercial nuclear power plants that experts have looked into to assess if they have active faults.
The panel's conclusion marked the second time that an active fault has been suspected under a reactor building. **The same problem affects the Tsuruga nuclear power plant** operated by Japan Atomic Power Co.

Shika nuke plant reactor likely to be decommissioned due to possible active fault

http://mainichi.jp/english/english/newsselect/news/20150718p2a00m0na001000c.html
The No. 1 reactor at the Shika Nuclear Power Plant in Ishikawa Prefecture is likely to be decommissioned after a panel of experts concludes that a fault just below the unit may be active.
The panel, set up within the Nuclear Regulation Authority (NRA), is expected to compile a report on the No. 1 reactor after consulting with other experts before submitting it to the NRA.
At a news conference in Tokyo on July 17, Yutaka Kanai, president of Hokuriku Electric Power Co. that operates the nuclear plant, said, "We're confident that the fault isn't active."
In a draft of the report, the panel of experts states that the possibility cannot be ruled out that part of the 780-meter-long "S-1" fault, situated just below the No. 1 reactor building, moved 120,000 to 130,000 years ago or later. The conclusion is based on geological diagrams of the area's past strata as well as photos.
Hokuriku Electric insisted that the fault is not active based on volcanic ash in the stratum and other factors. However, the panel dismissed the utility's claim, saying it cannot be proven with the hard evidence available.
The panel has drawn a similar conclusion on a fault just beneath a key facility of the power station's No. 2 reactor. If large-scale reinforcement work needs to be done on the reactor, Hokuriku Electric's plan to reactivate the No. 2 unit will likely be severely delayed.

Could be August 10

July 25, 2015

Sendai nuclear plant to restart as early as Aug.10

Jul. 25, 2015 - Updated 09:35 UTC+2
http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

The operator of the Sendai nuclear power plant in southern Japan submitted an application on Friday to the country's regulator to get final approval for putting one of its reactors online.

Kyushu Electric Power Company is hoping to turn on the reactor as early as August 10th.

The utility has completed the assembly of the reactor core after loading nearly 160 fuel rod assemblies into the plant's No.1 reactor in early July.

It has also finished checking a water level gauge system for the containment vessel and confirmed that it is working normally.

Kyushu Electric Power will also conduct a drill starting from Monday to train for a possible severe accident. The exercise is mandated by the government's new regulations to be performed before a reactor is restarted.

If no problems are found, the No. 1 reactor will go online as early as August 10th.

Last year the plant cleared the government's new regulations introduced after the accident at the Fukushima Daiichi plant. It was the first nuclear facility in Japan to do so.

August 10th

July 31, 2015

Utility hopes to reactivate reactor on August 10th

http://www3.nhk.or.jp/nhkworld/english/news/20150731_38.html
Jul. 31, 2015 - Updated 12:08 UTC+2
A nuclear power plant operator in southern Japan hopes to restart one of its reactors next month. It would be the first to operate under new regulations introduced after the Fukushima accident.

Kyushu Electric Power Company told the Nuclear Regulation Authority on Friday that it plans to reactivate the Number One reactor of the Sendai plant on August 10th at the earliest.

The company will carry out final checks on the reactor to make sure the containment vessel has no leaks and cooling equipment functions properly. Officials will also check procedures for reactivating the reactor.

The 2-reactor plant in Kagoshima Prefecture last year became the first nuclear power plant to meet the new regulations.

Kyushu Electric loaded fuel into the reactor earlier this month. Officials held an emergency drill this week, employing the scenario that a cooling system malfunction causes nuclear fuel to start melting down.

The government newly added this drill to a list of tests required to restart nuclear power plants.

The utility says when the reactor is once again operational, it will sustain a nuclear chain reaction in about 15 hours and start generating power in 3 days' time.

If everything goes as planned, the Sendai plant will become the first nuclear facility in the country to resume operations in almost 2 years.

40 tons of new spent fuel to store

August 3, 2015

Restart of Sendai reactors will result in 40 tons of spent fuel

http://www.japantimes.co.jp/news/2015/08/03/national/restart-of-sendai-reactors-will-result-in-40-tons-of-spent-fuel/#.Vb8ia_nwmos

JIJI
If the two idle reactors at Kyushu Electric Power Co.'s Sendai nuclear power plant in Kagoshima Prefecture are reactivated as anticipated, the plant will have to store around 40 tons of new spent fuel.
gh the plant's storage capacity is unlikely to be filled in the near future, the amount will constantly increase until a final fuel disposal facility is built.
The Kagoshima Prefectural Government has nixed building the disposal facility in the prefecture.
To get back online, the two reactors need to each use 44 of their total 157 fuel assemblies, Kyushu Electric officials said.
Kyushu Electric Power hopes to restart one of the reactors, which have met the Nuclear Regulation Authority's new safety standards, by next Monday at the earliest, and the other in October.
According to the Natural Resources and Energy Agency, the plant's capacity for storing spent fuel is 1,290 tons. The restart of the reactors will push the amount in storage from 890 tons, or 69 percent of capacity, to 940 tons, or around 73 percent.
In related news Monday, Japan Nuclear Fuel Ltd. said radiation detectors have broken down at its spent fuel reprocessing plant in the village of Rokkasho, Aomori Prefecture.
According to JNFL and other sources, the two systems for detecting leaks of high-level radioactive liquid waste stopped after an alarm went off around 6:50 p.m. Sunday.
The plant, designed to extract uranium and plutonium from spent fuel, has yet to be completed. It is a key component of the national nuclear fuel cycle project.
Officials at JNFL, the operator of the plant, said they believe no leak has occurred because water levels of the liquid waste were unchanged.
The operator also found problems with pressure gauges at the plant around 8:30 p.m. Sunday.
JNFL is investigating the link between these troubles and lightning reported in nearby areas at that time.

The company aims to complete the plant next March. The facility is currently undergoing an NRA safety screening.

Sendai: Not all legal procedures completed

August 5, 2015

NRA approves long-term operating plan for Sendai nuclear plant

http://www.japantimes.co.jp/news/2015/08/05/national/nra-approves-long-term-operating-plan-sendai-nuclear-plant/#.VcH2OPnwmos

Kyodo
The Nuclear Regulation Authority on Wednesday approved Kyushu Electric Power Co.'s management plans, which are required to operate its reactor at the Sendai plant for more than 30 years.
The approval came days before the unit's planned restart under stricter safety requirements imposed following the 2011 Fukushima nuclear disaster.
The nuclear watchdog endorsed the steps even though Kyushu Electric has not completed all of the procedures, including evaluation of the quake-resistance of some aging instruments. That sparked criticism that the regulator rushed the approval before the reactor's resumption, which is expected as early as next Monday.
Japanese power companies that want to operate their nuclear plants for more than three decades are required to draw up long-term measures to ensure the safety of aging plant equipment. **The regulator decided to allow Kyushu Electric to put off completing the remaining steps for one year.**
The regulator said the long-term measures can be approved after the 31-year-old No. 1 unit at the plant goes back online. But anti-nuclear activists have intensified criticism of the planned resumption given that **not all of the procedures required by law have been completed.**
Last September, Kyushu Electric's Sendai plant became the first nuclear facility in Japan to meet new safety standards created in the wake of the Fukushima nuclear crisis, a process necessary before a reactor can go back online.
Safety reviews for the resumption of nuclear plants are conducted separately from those required for long-term operations.

Sendai restart delayed one day

August 5, 2015

Kyushu Electric delays scheduled nuclear reactor reactivation

http://mainichi.jp/english/english/newsselect/news/20150805p2a00m0na010000c.html

Kyushu Electric Power Co. has pushed back its scheduled reactivation of the Sendai Nuclear Power Plant's No. 1 reactor by one day to Aug. 11, as it prepares for pre-reactivation tests.
On Aug. 4, Kyushu Electric began raising the temperature and pressure in the reactor to close to its operational levels. On Aug. 10, it will measure the speed at which control rods enter the reactor. Depending on the results, reactivation could be further delayed.
About three days after restarting the reactor, the utility will begin producing and sending electricity from it, with an aim of resuming commercial operations in mid-September.
The utility will soon officially convey its decision to restart the reactor on Aug. 11 to the Nuclear Regulation Authority. The reactor hasn't been active for about four years. If it is restarted, it will become the first nuclear reactor in Japan to operate under new, post-Fukushima disaster regulations.
August 05, 2015 (Mainichi Japan)

Approved till 2024

August 5, 2015

NRA approves Sendai maintenance plan through 2024

http://www3.nhk.or.jp/nhkworld/english/news/20150805_32.html
Aug. 5, 2015 - Updated 20:26 UTC+2
Japan's nuclear regulators have approved a maintenance plan through 2024 for a reactor at the Sendai plant in Kagoshima Prefecture, southwestern Japan.

Sendai's No.1 reactor is set to be put back online this month. It has met new government requirements for nuclear plants introduced after the 2011 Fukushima disaster.

Japanese utilities are obliged to draw up long-term maintenance plans for reactors more than 30 years old. The maintenance plan is good until reactors reach 40, the government-set time limit for operation.

The Sendai No.1 reactor hit 31 in July.

The plant's operator, Kyushu Electric Power Company, has made a 9-year plan to evaluate and regularly check how the reactor and pump equipment are holding up. The utility says it will also increase number of items it will test.

The Nuclear Regulation Authority approved the plan on Wednesday.

The No.1 reactor is undergoing last-minute inspections for a restart as early as next week.

Kyushu Electric made a new list of items to be inspected at the Sendai plant after the regulators discovered some equipment was missing from the original check list.

Regulators discovered the omission during an inspection in June this year. They pointed out that this was a violation of maintenance rules. They reported on Wednesday the result of the June inspection.

But will Fukui court's injunction be respected?

August 6, 2015

Application filed for checking Takahama reactor

http://www3.nhk.or.jp/nhkworld/english/news/20150805_31.html
Aug. 5, 2015 - Updated 14:20 UTC+2
The operator of a nuclear power plant in central Japan has applied to have regulators conduct the final stage of checking of one of its reactors.

Kansai Electric Power Company hopes to restart the Number 3 reactor at the Takahama nuclear plant in Fukui Prefecture this year.

The utility's application on Wednesday came one day after the Nuclear Regulation Authority approved detailed plans of safety measures for the reactor's equipment.

The utility plans to place nuclear fuel in the reactor in mid-October to reactivate it early November. It also aims to resume power generation for commercial purposes in December.

The nuclear authority decided in February that the safety measures for the Number 3 and 4 reactors meet new government requirements for resuming operation.

But in April, a district court in Fukui issued a provisional injunction blocking the 2 reactors' restart.

Kansai Electric Power says it will arrange for the regulator to check the Number 3 reactor so that fuel can be placed inside it. **But it will not reactivate the reactor unless the injunction is repealed. If the injunction stays, the utility would also refrain from putting fuel into the reactor.**

The plant is the second in Japan to file such an application with the authority, following the Sendai plant in Kagoshima Prefecture, southwestern Japan.

Restart planned for Tuesday Aug. 11

August 8, 2015

Kyushu Electric eyes Tuesday restart for Sendai reactor

http://www.japantimes.co.jp/news/2015/08/08/national/kyushu-electric-eyes-tuesday-restart-sendai-reactor/#.VcXgu_nwmot
JIJI

Kyushu Electric Power Co. is planning to restart the No. 1 reactor at its Sendai nuclear plant in Kagoshima Prefecture as early as Tuesday, sources said Friday.
That would make it the first reactor to be brought back online since the country's new safety standards were introduced more than two years ago.
The last nuclear power reactor in operation in Japan was shuttered in September 2013. The new nuclear safety standards, introduced in July of that year, were compiled following the triple-meltdown crisis at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear plant, which was damaged in the March 2011 earthquake and tsunami.
On Monday, Kyushu Electric will conduct a safety check of control rods that will be placed into the Sendai No. 1 reactor.
If no problems are found with the control rods, the utility, which serves Kyushu's southwestern region, will reactivate the reactor, the sources said.
The company had informed the Nuclear Regulation Authority it planned to restart the reactor on Monday or later.
The Sendai No. 1 reactor was shut down in May 2011, shortly after the quake and tsunami that devastated the Tohoku region.
Kyushu Electric filed for the NRA's safety screening of the reactor in July 2013 following the introduction of the new regulatory standards.
The No. 1 unit passed the screening in September 2014, becoming the first to receive the NRA's safety approval among reactors for which checks were sought.
Before the March 2011 disaster, nuclear energy accounted for 39 percent of all power generation at Kyushu Electric. The firm has two nuclear power plants — the Sendai plant and the Genkai plant in Saga Prefecture.
Following the suspension of the plants, Kyushu Electric, like other utilities, increased its thermal power generation.
But the company's fuel costs for thermal power generation ballooned, reaching ¥678.4 billion in fiscal 2014, which ended in March this year. That is up 2.4-fold from fiscal 2010's level. The huge costs have heavily weighed on its earnings.
The company is aiming to shore up its earnings by reactivating idled nuclear power reactors. Kyushu Electric expects that the restart of the Sendai No. 1 reactor will save the company about ¥7.5 billion a month.
August 7, 2015

Sendai reactor restart set for August 11th

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Aug. 7, 2015 - Updated 10:05 UTC+2
The operator of the Sendai nuclear power plant in southern Japan plans to restart one of its reactors next Tuesday. The facility would be the first to operate under regulations introduced after the Fukushima accident.

The plant's No.1 reactor is in the final stage of inspections by Japan's Nuclear Regulation Authority.

A final test of control rod movement is planned for Monday.

Kyushu Electric Power Company plans to restart the reactor the next day and achieve a sustained nuclear

chain reaction in about 12 hours. Power generation is expected to start in about 3 days.

The 2-reactor plant in Kagoshima Prefecture last year became the first nuclear power plant to meet the regulations.

The reactor was halted for regular inspections 2 months after the March 2011 nuclear accident.

The operator says it plans to exercise the utmost caution in restarting the reactor, as it has been offline for more than 4 years. The firm says it will watch for abnormalities in equipment used for the process.

The plant would be the first nuclear facility in Japan to resume operations in almost 2 years.

Level 2 problem at Sendai No.1

August 8, 2015

Cooling system pump at Sendai nuclear plant stopped due to faulty vibration meter

http://mainichi.jp/english/english/newsselect/news/20150808p2a00m0na007000c.html

SATSUMASENDAI, Kagoshima -- One of three cooling system water pumps at the Sendai Nuclear Power Plant's No. 1 reactor, now being prepared for reactivation, was halted after staff noticed an unusual vibration meter reading, Kyushu Electric Power Co. announced on Aug. 7.
According to Kyushu Electric, the pump is inside the No. 1 reactor's containment vessel, and the meter measures the vibration of the pump shaft. At 10:22 a.m. on Aug. 7, a worker in the central control room confirmed that the vibration meter was displaying a lower than usual value. At 6:30 p.m. workers stopped the pump, inspected it and found that the pump's vibration meter was defective. They replaced a part of the vibration meter.
The pump was started at full operation on Aug. 4, to raise the temperature and pressure of cooling water for the reactor. The utility says the incident will not affect its schedule for restarting the No. 1 reactor on Aug. 11.
Since July, Kyushu Electric is classifying problems that occur at the No. 1 reactor on a five-level scale from 0 to 4, and it has decided it will announce problems of level 2 or higher, which could impact the restart schedule. The pump trouble was the first such announcement, and was a level 2 problem.

Ready for restart?

August 10, 2015

Reactor in Kagoshima is readied for Tuesday restart

by Eric Johnston
Staff Writer

SATSUMASENDAI, Kagoshima Pref. – Kyushu Electric Power Co. said Monday it will restart the No. 1 reactor at its Sendai nuclear plant on Tuesday, marking the country's first long-term return to nuclear power since the Fukushima crisis.

The reactor, in Satsumasendai, Kagoshima Prefecture, will be the first to go live under new safety standards that were put in place in 2013. The standards were drawn up after the meltdowns at the Fukushima No. 1 power plant in March 2011.

The restart, strongly pushed by the pro-business administration of Prime Minister Shinzo Abe, will deal a tough blow to anti-nuclear activists and citizens who have been calling for abolition of all nuclear power plants.

Advocates of the restart include the prefectural government as well as residents of Satsumasendai who appreciate the impact of nuclear-power related subsidies on public works projects and the effect the plant has on local service industries.

Meanwhile, the Abe Cabinet risks losing popularity among voters. A poll by the Mainichi Shimbun on Saturday and Sunday found that 57 percent of people are opposed to reactivating the Sendai plant, while 30 percent support it. The survey polled 1,015 respondents nationwide.

Abe has maintained that utility companies, not the central government, should decide whether to restart reactors if the Nuclear Regulation Authority declares them safe under new inspection standards.

But at the same time his administration has been promoting the reactivation of suspended commercial reactors, citing the huge cost of importing fossil fuels for thermal power plants.

Tuesday's restart would come despite local worries that Kyushu Electric Power and local politicians and businesses have been pushing for it without addressing what would happen in the event of an emergency.

A protest rally in front of the plant Monday drew former Prime Minister Naoto Kan, who was in office at the time of the events of March 11, 2011.

With the exception of Kansai Electric Power Co.'s Oi No. 3 and 4 reactors in Fukui Prefecture, which were restarted in summer 2012 under the old safety measures and ran until early autumn 2013, all of Japan's 43 remaining operable nuclear reactors have been shut down since the Great East Japan Earthquake and tsunami, and subsequent meltdowns in Fukushima.

"Like Tepco and Fukushima at that time, Kyushu Electric will not take responsibility for evacuation in case of an emergency," Kan told the rally. "Under current laws, neither Tepco nor Kyushu Electric have responsibility to ensure the safety of residents."

Local governments hosting nuclear plants are required to draw up evacuation plans for those living within 30 km of the site.

But nuclear plants like Sendai are often located in isolated areas along a coast, where access roads are sometimes few and where many local residents are elderly and would require special care and assistance.

"The plans Kagoshima Prefecture has drawn up are unrealistic," said Katsuhiro Inoue, a member of the Satsumasendai Municipal Assembly from the Japan Communist Party.

"They assume the main access road closest to the plant will be usable in the event of accident, and they don't answer basic questions of how long it might take to move those who are elderly outside the 30-km radius of the plant, or what might happen to people who live more than 30 km away and try to evacuate," Inoue said.

In May 2014, the prefecture calculated how long it would take to evacuate the nearly 215,000 people who live in Satsumasendai and nine other towns within 30 km of the plant.
In the best case scenario, officials estimated it would take almost 10 hours to evacuate 90 percent of the population.
In the worst case, the prefecture concluded, it could take almost 29 hours.

Japan to restart 1st reactor under new rules since crisis

http://mainichi.jp/english/english/newsselect/news/20150810p2g00m0dm066000c.html

TOKYO (AP) -- A power plant operator said it will restart a reactor in southern Japan on Tuesday, the first restart under new safety requirements following the Fukushima disaster and a milestone for the nation's return to nuclear power.
Kyushu Electric Power Co. said Monday that it will restart the No. 1 reactor at its Sendai nuclear plant Tuesday morning.
The restart marks Japan's return to nuclear energy, breaking a four-and-half-year nuclear power impasse since the 2011 meltdowns at the Fukushima Dai-ichi nuclear power plant in northeastern Japan following the earthquake and tsunami.
The Nuclear Regulation Authority affirmed the safety of the reactor and another one at the Sendai plant in September under stricter safety rules imposed after the accident, the worst since the 1986 Chernobyl explosion. The plans call for the second reactor to be restarted in October.
The Sendai No. 1 reactor is scheduled to start generating power Friday and reach full capacity next month.
All of Japan's nearly 50 workable reactors have been offline for repairs or safety checks. Abe's government wants as many of them as possible to be put online to sustain the nation's economy, which now relies on imported energy.
"We believe it is important for our energy policy to push forward restarts of reactors that are deemed safe," Chief Cabinet Secretary Yoshihide Suga told reporters.
Under the basic energy plan adopted by the Cabinet last year to sustain nuclear power as a key energy supply for resource-poor Japan, the government earlier this year set a goal to have nuclear power meet more than 20 percent of the country's energy needs by 2030.
Despite the push by the government and utilities for nuclear restarts, a majority of Japanese are opposed to a return to nuclear energy. Residents near the Sendai plant are also wary of the restarts, citing potential dangers from active volcanos in the region.
On Monday, dozens of protesters rallied outside the Sendai plant in a last-ditch effort to stop the restart, shouting "We don't need nuclear plants."
Opponents of the restarts and nuclear experts are also concerned that evacuation plans, in case of a disaster, may not work well.
Experts also are concerned about possible glitches in a mothballed reactor that has not been used for more than four years.
With its nuclear fuel recycling program still stalled and plutonium stockpiles triggering international concerns, Japan is under pressure to use as much of the stockpiles as possible in its reactors.

U.S. Undersecretary of State for Arms Control and International Security Rose Gottemoeller told journalists in a teleconference that Japan should complete its pending fuel recycling program and burn plutonium as fuel called MOX at reactors.
"If there is going to be a plutonium program, reprocessing program, the flip side of it is that there has to be a very vigorous MOX program and that the MOX actually has to be burned in power plants," Gottemoeller said.
Japan has more than 40 tons of weapons-grade plutonium, enough to make 40 to 50 nuclear weapons. The question is whether Japan can restart as many as 18 reactors needed to burn enough plutonium, and whether the problem-plagued Rokkasho reprocessing plant in northern Japan starts up.

Sendai reactor to restart on Tuesday

http://www3.nhk.or.jp/nhkworld/english/news/20150810_80.html

Aug. 10, 2015 - Updated 10:13 UTC+2
The operator of the Sendai nuclear power plant in southwestern Japan will restart one of its reactors on Tuesday morning.

The 2-reactor plant in Kagoshima Prefecture would be the first to operate under new regulations introduced after the Fukushima Daiichi accident in 2011.

Kyushu Electric Power Company on Monday reported to Japan's Nuclear Regulation Authority that it plans to begin removing control rods at 10:30 AM on Tuesday to activate the No.1 reactor.

The utility says it will achieve a sustained nuclear chain reaction in about 12-and-a-half hours. Power generation is expected to start in about 3 days.
Kyushu Electric plans to gradually increase the output of the reactor and start commercial operation in early September.

The operator also says it will carefully watch for abnormalities in equipment used for the process, as the facility has been offline for more than 4 years.

The No.1 reactor has undergone inspections required for the resumption since March.

The Sendai plant would be the first nuclear facility in the country to resume operations in almost 2 years.

Kyushu Electric on Monday issued a statement saying the company will place the highest priority on safety. They will thoroughly comply with government inspections in order to take careful steps in the restarting process.

Civic group members have organized a protest rally in front of the Sendai nuclear plant due to restart on Tuesday.

The group says 350 people from across the country gathered near the facility in southern Japan on Monday.

The head of the group, Mukohara Yoshitaka, said they will not tolerate the plant's restart by Kyushu Electric Power Company. He called on protesters to make their opposition heard.

Locals together with a resident from Fukushima pointed out that there are still people evacuated from their homes in Fukushima where the Daiichi plant failed. They said the Sendai plant restart may result in the same tragedy.

Participants chanted their slogan, “Stop the restart".

A participant said she cannot allow the restart as the plant operator has not sufficiently discussed safety issues with residents.

The group says their members will meet in front of the plant again on Tuesday.

On nukes again: First time in almost 2 years

August 11, 2015

Sendai nuclear plant restarted

http://www3.nhk.or.jp/nhkworld/english/news/20150811_17.html

Aug. 11, 2015 - Updated 04:09 UTC+2
A nuclear reactor has been restarted in Japan for the first time in nearly 2 years.

The No.1 reactor at the Sendai nuclear plant in southwestern Japan is the first to go back online under new regulations introduced after the 2011 Fukushima nuclear accident.

On Tuesday morning, workers at the plant's central control room operated a lever to pull out the reactor's 32 control rods. Plant operator Kyushu Electric Power Company says there's been no trouble so far.

If all goes well, the reactor is due to achieve a sustained nuclear chain reaction in about 12-and-a-half hours and begin generating power on Friday. After gradually raising output, Kyushu Electric plans to begin commercial operations in early September.

The utility says it will watch carefully for any abnormalities in equipment operation, as the reactor has been kept offline for more than 4 years.

The 2-reactor Sendai plant in Kagoshima Prefecture last year cleared the new, rigorous regulations introduced after the 2011 accident at the Fukushima Daiichi nuclear plant. It completed all necessary inspections on Monday.

The reactor is the first to go online since September 2013, when the Ohi nuclear plant in central Japan halted operations.

The Guardian on Sendai restart

Source : The Guardian
http://www.theguardian.com/environment/2015/aug/11/japan-restarts-first-nuclear-reactor-fukushima-disaster

Japan restarts first nuclear reactor since Fukushima disaster

Sendai nuclear plant in southern Japan is first to begin operation since 2011 Fukushima meltdowns, despite anti-nuclear protests
Justin McCurry in Tokyo
Tuesday 11 August 2015 09.40 BST Last modified on Tuesday 11 August 2015 11.44 BST
Kyushu Electric Power, the operator of the Sendai plant, said it had restarted one of the facility's two reactors on Tuesday morning, in defiance of strong local opposition.
The move marks the first time Japan has generated nuclear power since a post-Fukushima shutdown of all its 44 operable reactors two years ago.
While police scuffled with demonstrators outside the plant, public broadcaster NHK showed workers in the control room as the reactor whirred into action for the first time since it was mothballed in May 2011.
Kyushu Electric said the restart had gone without a hitch. The 30-year-old Sendai No 1 reactor is expected to reach full capacity next month. The second Sendai reactor is due to restart in October.
In an attempt to keep Japan's fledgling economic recovery on track, the prime minister, Shinzo Abe, has pushed for a return to nuclear power generation in spite of opinion polls showing that most voters oppose restarts.

Backed by business and industry lobby groups, Abe has warned that Japan cannot afford to continue importing huge quantities of oil and natural gas, while the growing reliance on thermal power generation has stalled Japan's efforts to reduce greenhouse gas emissions.
"There are very strong vested interests to reopen nuclear reactors. Accepting them as permanently closed would have financial implications that would be hard to manage," Tomas Kaberger, chairman of the Japan Renewable Energy Foundation, told Associated Press.
Japan's powerful pro-nuclear lobby is hoping a safe restart at Sendai, about 1,000km south of Tokyo, will help the public overcome the trauma caused by the Fukushima meltdown.
The March 2011 disaster, triggered by a powerful earthquake and tsunami, forced the evacuation of 160,000 people, many of whom might never return home.

“It is important to restart reactors one by one from the perspective of energy security, the economy and measures against global warming, but safety always comes first,” the industry minister, Yoichi Miyazawa, told reporters, adding that the government would “deal responsibly” should another accident occur.
Just ahead of the restart, Abe said Sendai’s reactors had passed “the world’s toughest safety screening”. He added: “I would like Kyushu Electric to put safety first and take utmost precautions for the restart.”
The Sendai plant, where more than £64m has been spent on new safety systems, was the first to meet strict new standards introduced after the Fukushima disaster.
Japan’s revamped Nuclear Regulation Authority (NRA) said the new safety checks meant there would be no repeat of the Fukushima catastrophe. “A disaster like that at … Fukushima Daiichi nuclear plant will not occur,” NRA chairman Shunichi Tanaka said in a recent interview with the Nikkei business paper. He conceded, though, that there was “no such thing as absolute safety”.
The government wants nuclear power to account for as much as 22% of Japan’s energy needs by 2030, despite continuing troubles at Fukushima Daiichi, where the removal of melted fuel from damaged reactors is not due to begin until 2022. Decommissioning the wrecked plant is expected to take 40 years.
Greenpeace said the restart “will not reverse the terminal decline” of Japan’s nuclear industry. “Even though one nuclear reactor has restarted, the nuclear industry is still fighting for its very survival in Japan,” said Mamoru Sekiguchi, energy campaigner at Greenpeace Japan.
Sekiguchi echoed local concerns that authorities in Sendai had not devised a comprehensive evacuation plan for more than 200,000 people living within a 30km radius.
Aside from the risk from earthquakes and tsunami, the Sendai plant is located in a volcanically vulnerable region, with Sakurajima, one of Japan’s most active volcanoes, just 50km away.
“The lengths to which safety issues have been ignored in the Nuclear Regulation Authority’s review process for the Sendai plant restart shows just how desperate the nuclear industry and their government allies are,” Sekiguchi said. “Rather than a nuclear renaissance, much of Japan’s ageing nuclear reactor fleet will never restart. Prime minister Abe and the nuclear regulator are risking Japan’s safety for an energy source that will likely fail to provide the electricity the nation will need in the years ahead.”
Greenpeace predicts nuclear will provide 2%-8% of Japan’s electricity generation by 2013, far lower than the government’s target.
Tobias Harris, a Japan analyst at Teneo Intelligence in Washington, said it was unlikely that Tuesday’s restart would herald a quick return to nuclear as a major source of energy.
“The Sendai restart is unlikely to trigger a cascade of restarts that significantly reduces Japan’s post-2011 dependence on imported fossil fuels,” he said. “Each nuclear power plant faces a unique set of technical, operational, legal, and political challenges, suggesting that the delays that have dogged the first restart will be seen at other locations.”
Japan’s nuclear operators have applied for approval to restart 25 reactors: so far regulators have cleared only five to go back online.

Protests haven't stopped restart

August 11, 2015

Amid protests, Kyushu Electric restarts Sendai nuclear plant in Kagoshima

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201508110066

THE ASAHI SHIMBUN

SATSUMA-SENDAI, Kagoshima Prefecture--Kyushu Electric Power Co. activated the No. 1 reactor of the Sendai nuclear power plant here on Aug. 11, the first to be restarted in Japan under new safety regulations instituted after the Fukushima nuclear disaster.

The reactor is the first of 43 across the nation to be brought back online, ending a period with no nuclear power, which lasted for a year and 11 months.

As anti-nuclear protesters rallied around the Sendai plant, located in Satsuma-Sendai city, work to restart the No. 1 reactor began in the central control room at 10:30 a.m. on Aug. 11.

Kyushu Electric workers pulled a lever to remove the control rods that had curbed nuclear fission in the reactor.

The 32 control rods began to withdraw, reactivating the reactor.

The reactor is expected to reach criticality, in which nuclear fission is self-sustaining, at around 11 p.m. on Aug. 11. Steam produced from the heat generated by the nuclear fission will drive a turbine to produce electricity.

The generation and transmission of electricity is expected to begin on Aug. 14. The output will be raised gradually, reaching full power generation in late August and shifting to a commercial operation in early September.

In a statement, Kyushu Electric Power President Michiaki Uriu said, “The activation of the nuclear reactor is one of the important steps in the process for restart. We will continue to deal sincerely with the government’s inspections and proceed with the subsequent process by putting a top priority on safety.”

In September 2014, the Sendai nuclear power plant passed the new safety regulations for the first time in the nation. In March this year, the Nuclear Regulation Authority started the inspection process that is required before a nuclear reactor can be reactivated. In July, nuclear fuel was brought into the reactor.

As operations of the reactor had been suspended for about four years, Kyushu Electric proceeded cautiously with the preparations.

All nuclear reactors in Japan were taken offline soon after the March 2011 Great East Japan Earthquake and tsunami triggered three meltdowns at the Fukushima No. 1 nuclear power plant. Though Kansai Electric Power Co. temporarily operated the No. 3 and No. 4 reactors of its Oi nuclear power plant in Fukui Prefecture to deal with an electricity shortage, it suspended operations again in September 2013.

The electric power industry is pushing for the restart of idled nuclear reactors. The Abe administration also regards nuclear power as vital to the nation's power needs.

Kyushu Electric plans to restart the No. 2 reactor at its Sendai nuclear power plant in mid-October.

Preparations for a restart are progressing at the No. 3 and the No. 4 reactors of Kansai Electric’s Takahama nuclear power plant in Fukui Prefecture and the No. 3 reactor of Shikoku Electric Power Co.’s Ikata nuclear power plant in Ehime Prefecture.

One stumbling block for the Takahama plant is a temporary injunction the Fukui District Court issued in April this year to prohibit the restart.

Meanwhile, anxieties remain among residents living near nuclear power plants over insufficient emergency measures in the event of a nuclear accident. For example, the formulation of evacuation plans has been delayed for some medical and welfare facilities that house many elderly people.

In the Kyushu region where the Sendai nuclear power plant is situated, volcanic activity poses a threat. Therefore, some opponents argue that it is necessary for nuclear power plants to take safety measures against major eruptions.
The spread of summer power-saving campaigns and solar power generation have reduced concerns over electricity shortages even when no nuclear reactors are operating. A stable electricity supply is continuing across the nation even amid a serious heat wave.
Opposition to the restart of nuclear plants remains strong among the public.
(This article was written by Junichiro Nagasaki and Takeshi Nakashima.)

Who's next?

August 12, 2015

Next reactor to be reactivated following Sendai restart remains unknown

http://mainichi.jp/english/english/newsselect/news/20150812p2a00m0na011000c.html

After the No. 1 reactor at the Sendai Nuclear Power Plant in Kagoshima Prefecture was reactivated on Aug. 11, attention is being focused on which reactor will be brought back online next.
The No. 3 and No. 4 reactors at Kansai Electric Power Co.'s Takahama Nuclear Power Plant in Fukui Prefecture and the No. 3 reactor at Shikoku Electric Power Co.'s Ikata Nuclear Power Plant are deemed viable candidates for reactivation as they have already cleared safety screenings. But it is difficult to predict when they will be reactivated because the two nuclear plants face some challenges.
Of a total of 46 reactors at 17 nuclear plants in Japan, including three reactors that have been under construction, applications for the Nuclear Regulation Authority's safety screenings have been filed for 25 reactors at 15 nuclear plants. Of those reactors under application for safety screenings, 10 reactors at eight nuclear power plants are boiling water reactors (BWRs) -- the same type as that of the crippled reactors at the Fukushima No. 1 Nuclear Power Plant -- and 15 other reactors at seven nuclear plants are pressurized water reactors (PWRs) that are different from the Fukushima reactors.
The No. 3 and No. 4 reactors at the Takahama Nuclear Power Plant and the No. 3 reactor at the Ikata Nuclear Power Plant, all of which have passed the NRA's safety screenings, are PWRs -- the same type as that of the reactors at the Sendai Nuclear Power Plant. The reactors at the two nuclear plants are closest to reactivation, but the Takahama reactors cannot be reactivated for the time being because the Fukui District Court handed down a provisional injunction against their reactivation. The reactor at the Ikata nuclear plant looks difficult to be reactivated by the end of this year as Ehime Gov. Tokihiro Nakamura said he had not decided whether to give the green light for its reactivation.
PWRs are not required to be equipped with filtered vent systems -- which are designed to curb the discharge of radioactive substances in the event of a severe accident -- for now because their containment vessels are larger in capacity than those of BWRs so that pressure cannot build up easily in the vessels. On the other hand, it takes longer to conduct safety screenings on BWRs that are not free of such requirements. The NRA plans to carry out safety screenings intensively on the No. 6 and 7 reactors that are of a new type at Tokyo Electric Power Co.'s Kashiwazaki-Kariwa Nuclear Power Plant in Niigata Prefecture as a model case to make the screening process efficient. But it remains unclear when the NRA

will do so. It is also difficult to reactivate Hokuriku Electric Power Co.'s Shika Nuclear Power Plant in Ishikawa Prefecture because the NRA's experts suggested the possibility of active fault lines running under the premises of the nuclear complex.
The NRA, meanwhile, has set the lifespan of a reactor at 40 years as a general rule after starting to operate. Therefore, the earlier a reactor started its operation, the more difficult it becomes to conduct a safety screening. One of the reasons is that new standards require measures to make electric cables flame-retardant. Seven reactors, including those at the Takahama Nuclear Power Plant, use electric cables made of flammable materials. Therefore, unless fire prevention measures are taken for an electric cable of several hundred kilometers at each reactor, it cannot pass a safety screening.
The government plans to give the green light for reactivation of nuclear reactors that have passed "new regulatory standards," but NRA Chairman Shunichi Tanaka has said, "The requirements under the new standards are considerably high. Utility firms are struggling over screenings, but we can't make them easy."

Ready for full operation

Utility says no abnormalities in reactor restart

Aug. 12, 2015 - Updated 08:59 UTC+2
http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

The operator of the Sendai nuclear plant in southwestern Japan is clearing the steps to start supplying power on a commercial basis next month.

Officials with the Kyushu Electric Power Company say they have found no abnormalities since restarting one of the plant's nuclear reactors this week.

The No.1 reactor at the plant in Kagoshima Prefecture resumed operation on Tuesday. It is the first reactor to be back online under new regulations following the Fukushima Daiichi nuclear accident in 2011.

The reactor achieved a sustained nuclear fission chain reaction during the night.

Plant workers were checking on Wednesday whether the control rods could effectively halt the reactor within a safe margin.

The utility will also be checking a device to stop the power generation turbines in an emergency.

If no problems are found, the company plans to start generating power on a trial basis on Friday. It will gradually increase output while continuing the checks.

The utility plans to resume commercial operation in September after clearing a final government inspection.

Company officials say they will move cautiously toward full operation, as the No.1 reactor has been offline for more than 4 years.

August 11, 2015

Reactor at Sendai plant reaches criticality

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Aug. 11, 2015 - Updated 17:07 UTC+2
A nuclear reactor has been restarted in Japan for the first time in nearly 2 years.

The No.1 reactor at the Sendai nuclear plant in Kagoshima Prefecture, southwestern Japan, is the first to go back online under the new regulations introduced after the 2011 Fukushima nuclear accident.

On Tuesday morning, workers in the plant's central control room operated a lever to pull out the reactor's 32 control rods.

The plant's operator, Kyushu Electric Power Company, says the reactor achieved a sustained nuclear chain reaction later on Tuesday and there's been no trouble so far.

If all goes well, the reactor is due to begin generating power on Friday. After gradually raising its output, Kyushu Electric plans to begin commercial operations in early September.

The utility says it will watch carefully for any abnormalities in the operation of the equipment, as the reactor has been kept offline for more than 4 years.

Last year, the 2 reactors at the Sendai plant cleared the new, rigorous regulations introduced after the 2011 accident at the Fukushima Daiichi nuclear plant. The necessary inspections were completed on Monday.

The reactor is the first to go online since September 2013, when the Ohi nuclear plant in central Japan halted operations.

Turbines started

August 13, 2015

Turbines started at Sendai nuclear plant

Aug. 13, 2015 - Updated 13:14 UTC+2
http://www3.nhk.or.jp/nhkworld/english/news/20150813_29.html

The operator of the Sendai nuclear power plant in southwestern Japan has started power generation turbines for one of its reactors.

The Kyushu Electric Power Company restarted the No. 1 reactor at the plant in Kagoshima Prefecture on Tuesday. The reactor achieved a sustained nuclear fission chain reaction that night.

The reactor is the first to be back online under regulations set after the Fukushima Daiichi nuclear accident in 2011.

The company says steam generated by heat from the reactor started the turbines on Thursday afternoon.

The utility says the speed of the turbines' rotations has gradually increased and is expected to reach 1,800 revolutions per minute -- the rate for normal power generation -- on Thursday night.

The firm plans to check whether a device designed to stop the turbines in case of emergency will work properly.

If no problems are found, the utility plans to start generating power by connecting the turbines to electricity generators on Friday and gradually increase output while continuing checks.

The firm says no problems have occurred so far. It plans to resume commercial operation of the plant in early September after clearing a final government inspection.

Company officials say they will move cautiously toward full operation, as the reactor has been offline for more than 4 years.

Sendai to start generating electricity on Friday 14

August 13, 2015

Sendai nuclear reactor to produce power on Friday

Aug. 13, 2015 - Updated 22:06 UTC+2

http://www3.nhk.or.jp/nhkworld/english/news/20150814_07.html

The operator of the Sendai nuclear power plant in Kagoshima, southwestern Japan, says it will start generating electricity at its No.1 reactor on Friday.

Kyushu Electric Power has been checking the performance of the reactor's control rods and turbines after

it activated the reactor on Tuesday.

The reactor has been maintaining a sustained nuclear fission chain reaction since late that night.

The firm says it has found no problems with the reactor's facilities. It now plans to begin electricity production and transmission at around 9 AM on Friday.

This will be Japan's first power generation at a nuclear station since the Ohi plant in Fukui Prefecture went offline in September 2013.

Kyushu Electric suspended the reactor's operation 4 years and 3 months ago. That was 2 months after the 2011 nuclear accident at the Fukushima Daiichi plant.

The utility replaced some parts of the reactor while it was offline. It will carefully watch for any abnormalities in the reactor and gradually boost output.

The company plans to attain full output about 10 days after the start of power generation. It will then undergo the government's comprehensive inspection of the facility.

If no problem is found, the firm will launch commercial operation early next month.

First time in two years

August 14, 2015

Sendai plant begins producing electricity after nearly 2 years of nuke-free nation

THE ASAHI SHIMBUN
http://ajw.asahi.com/article/0311disaster/fukushima/AJ201508140058
SATSUMA-SENDAI, Kagoshima Prefecture--Marking the end of 23 months of a nuclear power-free Japan, the Sendai nuclear power plant began generating and transmitting electricity on Aug. 14.
Kyushu Electric Power Co. activated the No. 1 reactor at the Sendai plant on Aug. 11, to become the first nuclear reactor brought back online under new safety regulations instituted by the Nuclear Regulation Authority after the 2011 Fukushima nuclear disaster. The nation had been without nuclear power since September 2013.
At 9 a.m. on Aug. 14, utility workers connected an electrical generator with power cables from the plant's central control room. The workers applauded when it was confirmed that the reactor began power generation and transmission for the first time in more than four years.
In a statement released the same day, Yoichi Miyazawa, the minister of trade and industry, said the start of generating and transmitting power at the plant "represents an important step forward to achieving a well-balanced energy mix and a more stable supply of electricity."

The output from the reactor was expected to reach 30 percent of its full capacity of 890,000 kilowatts on Aug. 14, and will be raised gradually to reach full power generation in about 10 days.
The reactor is expected to begin commercial operations in early September unless the NRA detects safety problems during its final inspection.
Michiaki Uriu, Kyushu Electric Power president, said in a statement that the company will continue its efforts to improve safety at the plant with "determination to prevent an accident similar to the one at the Fukushima No. 1 nuclear power plant from occurring."
"We will gradually increase the output while closely monitoring the condition of the plant," he said.
Kyushu Electric officials said the utility will proceed cautiously with operation of the No. 1 reactor as its operations had been suspended for a periodic inspection in May 2011.
It will be the first time that electricity generated at a nuclear plant will be supplied to households and businesses since the No. 4 reactor at Kansai Electric Power Co.'s Oi nuclear power plant in Fukui Prefecture went offline in September 2013.
Kyushu Electric, which relied on nuclear energy for about 40 percent of its power supply before the Fukushima disaster unfurled, plans to restart the No. 2 reactor at the Sendai plant in mid-October.
It has also applied for NRA safety screening to resume operations of the No. 3 and No. 4 reactors at its Genkai plant in Saga Prefecture.
Preparations for restarts are progressing at the No. 3 and No. 4 reactors of Kansai Electric's Takahama nuclear power plant in Fukui Prefecture and the No. 3 reactor of Shikoku Electric Power Co.'s Ikata nuclear power plant in Ehime Prefecture.
The restart of the Sendai plant is likely to give momentum to efforts by the electric power industry and Prime Minister Shinzo Abe's government to restart idle nuclear reactors nationwide.
But municipalities located near nuclear power plants have yet to map out effective evacuation plans for people in local medical and welfare facilities in the event of nuclear accidents.
A shortage of buses and other transportation modes to evacuate residents remains unsolved, while it also is unclear if utility companies can effectively shut down reactors when a Fukushima-level accident takes place at a nuclear plant.
Opinion polls have shown that more Japanese are opposed to the reactor restarts than those who support them.
(This article was written by Junichiro Nagasaki and Masahiro Yuchi.)

August 14, 2015

Restarted Kagoshima reactor churning out power after two-year hiatus

http://www.japantimes.co.jp/news/2015/08/14/national/restarted-kagoshima-reactor-churning-power-two-year-hiatus/#.VdHy1pfwmov

Kyodo, JIJI
KAGOSHIMA – Japan resumed using electricity generated by nuclear power Friday after a two-year hiatus, following the reactivation earlier this week of a reactor upgraded under tough new safety regulations.
The No. 1 reactor at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture began generating and delivering electricity in the utility's service area, despite persistent public concern over the use of nuclear power following the Fukushima disaster triggered by a huge earthquake and tsunami in March 2011.

The reactor, which came back online Tuesday for the first time since May 2011, will gradually increase output and is expected to run at full capacity in late August, according to the utility. The No. 1 reactor, which reached criticality, a self-sustained nuclear fission chain reaction, late Tuesday night, has an output capacity of 890,000 kilowatts and can meet the electricity demand from some 300,000 average households.

The resumption of nuclear electricity generation is “an important step forward” in securing more stable power supply, Economy, Trade and Industry Minister Yoichi Miyazawa said in a statement.

The nuclear crisis, the worst since the 1986 Chernobyl catastrophe, eventually resulted in the shutdown of all of Japan’s commercial reactors by September 2013, cutting off the country’s nuclear power supply. All 43 reactors apart from the Sendai unit remain offline.

The government is seeking to restart the remaining idled nuclear plants that have met what it claims are “the world’s toughest safety standards,” citing the necessity of stable power supply and lower electricity bills that have surged since the Fukushima nuclear crisis began.

With the majority of people opposing nuclear power, however, critics question the government’s rush to restart. So far, power shortages have been avoided thanks to fossil fuel-based power generation and energy-saving efforts.

Still, Kyushu Electric said the Sendai reactor’s reactivation will enable the company to supply electricity without power procurement from other utilities.

The utility expects its business, which has been hurt by the high cost of importing fuel, to improve drastically with the reactivation and return its balance sheet to the black for the first time in five years in the fiscal year to March 2016.

Last September, the two-reactor Sendai complex became the first nuclear facility to pass the Nuclear Regulation Authority’s safety screening based on the new regulations, a prerequisite for being allowed back online.

Kyushu Electric plans to restart the Sendai plant’s No. 2 reactor as early as October.

Separately, three reactors at two plants have also obtained the regulator’s safety clearance.

A reactor at Shikoku Electric Power Co.’s Ikata plant could come back online this winter at the earliest after obtaining local approval.

The outlook is uncertain for two reactors at Kansai Electric Power Co.’s Takahama plant after a court in April banned the utility from restarting the units, citing safety concerns.

NRA begins checks at Takahama plant

August 17, 2015

Pre-restart check for Takahama reactor begins

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Aug. 17, 2015 - Updated 12:42 UTC+2

Inspectors from Japan's nuclear regulator have begun checking a reactor at a nuclear plant facing the Sea of Japan to determine whether it can be restarted.

The Nuclear Regulation Authority began the final stage of inspections on the Number 3 reactor at the plant in Takahama Town in Fukui Prefecture on Monday.

The inspections are in line with tougher regulations introduced after the March 2011 Fukushima nuclear accident. The final inspections cover 400 pieces of equipment installed to improve safety and based on the new requirements. The equipment includes emergency pumps and power-generation vehicles.

The final inspections come after the authority announced in February that safety measures for the Number 3 and 4 reactors at the plant meet the new requirements for resuming operation.

The plant operator, Kansai Electric Power Company, hopes to restart the Number 3 reactor in early November. But in April, a district court in Fukui issued a provisional injunction blocking the restart of both reactors. The operator says it will not reactivate the reactor unless the injunction is repealed.

The plant is the second in Japan to undergo final inspections based on the new requirements. A reactor at the plant in Satsumasendai City in Kagoshima Prefecture, southwestern Japan, became the first to have the inspections earlier this year. It was brought back online last week.

No surprise

August 17, 2015

Industrial Groups Welcome Japan Reactor Restart

http://www.nucnet.org/all-the-news/2015/08/17/industrial-groups-welcome-japan-reactor-restart

Security & Safety
17 Aug (NucNet): The chairmen of three industrial groups in Japan have welcomed the restart of the Sendai-1 nuclear reactor unit, saying it will help the country's economy, the Japan Atomic Industrial Forum (Jaif) said.
Chairman Sadayuki Sakakibara of the Japan Business Federation Keidanren (JBF), Chairman Akio Mimura of the Japan Chamber of Commerce and Industry (JCCI) and Chairman Yoshimitsu Kobayashi of the Japan Association of Corporate Executives (JACE) issued statements after the Sendai-1 nuclear unit restarted on 10 August 2015.

Mr Sakakibara said nuclear power is an important energy source for Japan, "not only from the viewpoints of energy security and economy, but also as a measure to combat global warming".

Mr Mimura said the restart of the reactor will be very helpful to Japan's economy as a whole because rising power costs have become a burden to small- and medium-sized enterprises, as well as to the recovery of local economies. Mr Mimura emphasized that a stable supply of energy at a reasonable price

must be realised throughout Japan by all means.

The expertise accumulated during the examination procedures at Sendai-1 should be shared among Japan's power companies and nuclear power station operators in order to speed up the process for restarting other nuclear units, Mr Mimura also said.

Mr Kobayashi said constant efforts have to be made to improve safety at all nuclear power stations, including such systematic aspects as the issuance of highly practical evacuation plans, and the disclosure of accurate information to the public nationwide.

The government should also formulate realistic measures concerning high-level radioactive waste treatment and disposal, as well as the nuclear fuel cycle, so that the country's nuclear power business can be sustainable, Mr Kobayashi also said.

In May 2015, Japan's government said it will "take the initiative" in identifying scientifically suitable or promising candidate sites for a high-level radioactive waste (HLW) repository, moving away from its previous approach of relying on applications from municipalities.

The Japan Times said around 17,000 tonnes of spent fuel from nuclear plants across the country are stored in pools at the plants themselves and in a storage facility at the reprocessing plant in Rokkasho, Aomori prefecture.

In April 2014, Jaif president Takuya Hattori said fossil fuel plants have had to fill the gap left by nuclear energy when the country's nuclear units were shut down after the March 2011 earthquake, tsunami and the Fukushima Daiichi accident. For utilities, this meant having to buy more oil, coal and natural gas adding a cost of about ¥3.7 trillion (about €28.5 billion) for 2014.

Since the shutdown of nuclear reactors in Japan, utilities have increased rates by about 20 percent for household consumers and about 30 percent for industrial consumers, according to Jaif. This has resulted in energy-intensive industries wanting to move out of Japan to countries like South Korea.

On 10 August 2015, Sendai-1 became the first nuclear unit to restart in Japan after all units had been shut down for safety checks and upgrades following the Fukushima-Daiichi accident. The Sendai-1 unit received approval to restart in May 2015, completing the NRA's three-part screening process and new safety requirements introduced for all nuclear plants in June 2013.

Earlier this year Japan's Institute of Energy Economics said 11 nuclear units could be back online by the end of March 2016.

Equipment trouble at Sendai plant

August 21, 2015

Sendai nuclear plant postpones output increase

Nuclear & Energy
Aug. 21, 2015 - Updated 04:47 UTC+2

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

The operator of the Sendai nuclear power plant in southwestern Japan says work to increase output at its reactor will be postponed due to equipment trouble.
It's the nation's sole online nuclear facility.

Kyushu Electric Power Company restarted the No.1 reactor at its plant in Kagoshima Prefecture on August 11th. It was the first reactor to go back online under new regulations set after the accident in Fukushima in 2011.

The company said on Friday that it will postpone work to increase output planned for the day due to a glitch in equipment that turns steam used to generate power back into water.

The company says the glitch has not affected the other operations of the facility. It says the reactor is continuing to generate and transmit power.

The operator had planned to gradually increase output and resume commercial operation in early September.

Increase of output delayed

August 21, 2015
Kyushu delays increasing output at Sendai nuclear plant after cooling system problems detected

http://www.japantimes.co.jp/news/2015/08/21/national/kyushu-delays-increasing-output-sendai-nuclear-plant-cooling-system-problems-detected/#.VdcIWJfwlLP

JIJI, Kyodo

KAGOSHIMA – Kyushu Electric Power Co. said Friday it will delay planned increases in electrical output from the No. 1 reactor at its Sendai nuclear power plant in Kagoshima Prefecture as seawater is believed to have entered into a reactor cooling system.
The company planned to bring the recently reactivated reactor up to full capacity on Tuesday. But this will now be delayed as it will take about a week to fix the problem, officials from the utility said.

A small amount of seawater is believed to have flowed into one of the three condensers in the reactor's secondary cooling system, the officials said. Condensers turn steam into water by cooling it, after the steam runs power generation turbines.
But there should be no problem in continuing the reactor's operations as the salt can be removed with the aid of desalination equipment, the officials added.
The level of electric conductivity, which is monitored to check water conditions, rose Thursday afternoon at an outlet of a condensate pump used to circulate secondary coolant water.
Kyushu Electric checked the water quality and confirmed an increase in salt content.
Each condenser has some 26,000 tubes inside that are used to pipe seawater around for cooling. Kyushu Electric suspects that holes have opened on such tubes, causing seawater to enter into the condenser.
The company will seal any tubes found to have holes, the officials said.
In Japan, similar problems have occurred about 50 times in the past, but the latest case was the first at the Sendai power plant. In the past, Kyushu Electric experienced two cases at the No. 1 reactor at its Genkai plant in Saga Prefecture in 1997 and 1999.
The output at the Sendai plant's No. 1 reactor, restarted on Aug. 11, reached 50 percent of capacity last Sunday and 75 percent on Wednesday. The company had planned to raise output to 95 percent Friday.
The reactor is the first in Japan to run under strict new safety standards introduced in July 2013 following the meltdown accident at Tokyo Electric Power Co.'s Fukushima No. 1 plant, which was wrecked in the March 2011 earthquake and tsunami.
The reactor's restart also brought to an end the total absence of active reactors in Japan that had become a feature since September 2013, when Kansai Electric Power Co.'s Oi plant in Fukui Prefecture suspended operations for routine safety checks.
Some nuclear experts have said reactors could face severe safety problems because they have been mothballed for such a long period of time.

https://uk.news.yahoo.com/japans-kyushu-electric-slows-sendai-reactor-ramp-due-023222115--finance.html#19RUUTz

Japan's Sendai reactor power ramp-up halted due to pump problem

Reuters – 21-08-2015

TOKYO (Reuters) - Japan's Kyushu Electric Power has halted the ramp-up of power output from its Sendai No. 1 nuclear reactor due to a problem with a pump in the plant's secondary cooling system, a spokesman said on Friday.
Kyushu Electric last week began the restart of the Sendai plant, the first of Japan's reactors to begin operation under new safety standards introduced in the wake of the Fukushima disaster in 2011.
Engineers and regulators have warned that the utility may encounter equipment problems and failures as the Sendai No. 1 reactor has been idled for more than four years.
The utility suspects that seawater has entered one of the pumps in the secondary cooling system, where steam that turns the turbines to produce electricity is cooled, according to the spokesman.
Kyushu Electric had planned to raise output from the reactor to 95 percent by Friday, but delayed the process.

It had planned to achieve full power by Aug. 25 and begin commercial operation in early September after a final check from the atomic regulator.
Prime Minister Shinzo Abe, a strong proponent of nuclear power, is seeking to reassure a nervous public that the industry is now safe.
Abe and much of Japanese industry want reactors to be switched on again to cut fuel bills, but opinion polls show a majority of the public oppose the move after the nuclear crisis triggered by the earthquake and tsunami four years ago.
(Reporting by Kentaro Hamada and Yuka Obayashi; Writing by Aaron Sheldrick; Editing by Edwina Gibbs and Michael Perry)

Sendai: Increase of output delayed (3)

August 21, 2015

Sendai nuclear plant halts output increase

http://www3.nhk.or.jp/nhkworld/english/news/20150821_28.html

Aug. 21, 2015 - Updated 09:59 UTC+2

The operator of Japan's only activated nuclear power plant says it will delay ramping up power output due to reactor equipment trouble.

Kyushu Electric Power Company says an alarm went off on Thursday afternoon indicating trouble with a condenser at the No. 1 reactor of the Sendai power plant in Kagoshima Prefecture. The condenser turns steam from the power turbine back into water. Neither the steam nor the water is radioactive.

The utility says water in one of the reactor's 3 condensers had higher than normal salt concentrations.

Kyushu Electric officials say a small amount of seawater that is used for cooling steam appears to have entered the condenser, possibly through holes in the intake pipes.
They say the salt is being removed while one system within the condenser is halted for inspections. A condenser has 2 systems.

Kyushu Electric says the other condensers are working normally, and that power generation and transmission will continue.

The utility was due to raise power output from 75 percent to 95 percent on Friday, before achieving full capacity on August 25th. It now expects a delay of about one week.

The operator restarted the reactor on August 11th at the Sendai nuclear power plant.

It was the first reactor to go back online under new regulations introduced after the Fukushima nuclear accident in 2011.

Kyushu Electric reactor problem halts plan to increase output

http://mainichi.jp/english/english/newsselect/news/20150821p2g00m0dm075000c.html

TOKYO (Kyodo) -- Kyushu Electric Power Co. said Friday a nuclear reactor at its Sendai station that came back online last week has experienced problems, promoting the utility to stop increasing its output.
The Sendai No. 1 reactor, located in southwestern Japan, became the first unit on Tuesday last week to be reactivated under upgraded safety regulations adopted in the wake of the 2011 Fukushima meltdowns.
Kyushu Electric will push back its plan to run the reactor at full capacity from next Tuesday after beginning generating and delivering electricity last Friday.
According to the utility, an alarm went off at the plant on Thursday afternoon signaling a problem near the water pumps. Shinjiro Yuge, a senior official at Kyushu Electric's Tokyo branch, said seawater may have entered inside condensate pumps -- which circulate cooling water -- through a hole in one or more of the pipes running through equipment called a condenser.
The company will not halt the operation of the reactor itself, but it will conduct equipment checkups for about a week, Yuge said.
The Sendai No. 1 reactor had been offline since May 2011, when the unit was halted for mandatory regular checkups.
Some nuclear experts have said reactors could face severe safety problems after they have been mothballed for a long time.

Seawater leak at Sendai plant

August 21, 2015

Restarted reactor at Sendai nuke plant suffers seawater leak

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201508210063

August 21, 2015
By KANAME KAKUTA/ Staff Writer
A minor glitch occurred at the newly restarted No. 1 reactor of the Sendai nuclear power plant in Kagoshima Prefecture, Kyushu Electric Power Co. said on Aug. 21.
The malfunction forced the postponement of work for raising the output of the reactor, the utility said.
According to the plant operator, a tiny amount of seawater leaked into a condenser in the secondary cooling system of the reactor, which has an output of 890 megawatts, it said.
The utility said at 2:19 p.m. on Aug. 20, an alarm sounded to warn of an abnormality in the water flowing in the condenser, a device that converts steam used in power generation to water by cooling it.

After checking the equipment, Kyushu Electric said an extremely small amount of seawater mixed into the water flowing in the condenser.
The seawater normally flows in a narrow titanium tube adjacent to the condenser to help cool steam in the condenser unit. The utility suspects that a tiny hole in the titanium tube caused the seawater to leak.
Kyushu Electric said the seawater was removed with a desalination device and operations at the No. 1 reactor were not hindered. The utility will continue to operate the reactor to generate and transmit electricity.
The output of the No. 1 reactor was scheduled to be raised from 75 percent to 95 percent on Aug. 21. However, the output will be maintained at 75 percent so the utility can investigate the cause of the seawater leak in detail. The work will take about a week.
Likewise, full operations of the reactor that were scheduled to be made on Aug. 25 are also likely to be pushed back, Kyushu Electric said.
The No. 1 reactor at the Sendai plant in Satsuma-Sendai is the first reactor in Japan to be brought back online under new safety regulations imposed by the Nuclear Regulation Authority.

Sendai nuclear plant halts output increase

http://www3.nhk.or.jp/nhkworld/english/news/20150821_28.html

Aug. 21, 2015 - Updated 09:59 UTC+2

The operator of Japan's only activated nuclear power plant says it will delay ramping up power output due to reactor equipment trouble.

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Kyushu Electric officials say a small amount of seawater that is used for cooling steam appears to have entered the condenser, possibly through holes in the intake pipes.
They say the salt is being removed while one system within the condenser is halted for inspections. A condenser has 2 systems.

Kyushu Electric says the other condensers are working normally, and that power generation and transmission will continue.

The utility was due to raise power output from 75 percent to 95 percent on Friday, before achieving full capacity on August 25th. It now expects a delay of about one week.

The operator restarted the reactor on August 11th at the Sendai nuclear power plant.

It was the first reactor to go back online under new regulations introduced after the Fukushima nuclear accident in 2011.

Cracked pipes in one condenser

August 24, 2015

Seawater leak found at Sendai nuclear plant

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Aug. 24, 2015 - Updated 13:55 UTC+2
The operator of the Sendai nuclear power plant in Kagoshima Prefecture, southwestern Japan, says it found seawater used to cool steam has leaked from some pipes.

The trouble occurred at a condenser for the plant's No.1 reactor last Thursday. Officials at Kyushu Electric Power Company found elevated salt levels in the machine.

The condenser uses seawater to turn the steam from the power turbine back into water. The reactor has 3 condensers, and each one is equipped with 26,000 thin pipes to carry seawater.

Utility officials have been checking these pipes. They say they found cracks in 5 pipes in one condenser and that seawater had leaked from them.

The officials stopped the flow of seawater by putting plugs in the 5 pipes. They are now checking the other tubes. The utility firm says they will keep running the reactor.

The trouble occurred 9 days after the operator restarted the reactor on August 11th. It was the first to go back online under new regulations introduced after the Fukushima nuclear accident in 2011.

The utility was due to raise the reactor's power output to 100 percent on Tuesday. But the problems are expected to delay the scheduled work by about one week.

Sendai: Problem solved?

August 25, 2015

Sendai plant to increase output from Thursday

Aug. 25, 2015 - Updated 14:57 UTC+2

http://www3.nhk.or.jp/nhkworld/english/news/20150825_40.html

The operator of Japan's only activated nuclear plant says it will begin increasing the power output on Thursday after solving a problem with reactor equipment.

Workers found seawater leaking into cooling water at the No.1 reactor of the Sendai nuclear plant in Kagoshima Prefecture last Thursday. The reactor had gone back online 9 days earlier.

Kyushu Electric Power Company had initially planned to increase the reactor's output to the maximum level, but delayed the work to identify the cause of the trouble.

Company officials said they found that 5 of about 26,000 narrow pipes carrying seawater in a condenser were damaged and 470 liters of seawater had been leaked.

The condenser is one of the 3 units that convert steam from the power turbines into water, using seawater to cool it down.

The utility said it suspects the 5 pipes were damaged by heat and high pressure in the condenser.

Officials say the damaged parts have not been checked since 2006. They say they will review the inspection procedures to carry out more frequent checks. But they stress that the problem does not affect the safety of the reactor.

The utility plans to plug the 5 damaged pipes as well as 64 surrounding ones to prevent seawater from leaking into the cooling water. The system will undergo inspection by the Nuclear Regulation Authority Secretariat. If approved, the operator will begin increasing the output on Thursday and raise it to 100 percent on Monday or later.

The reactor was the first to go back online under the new regulations introduced after the Fukushima nuclear accident in 2011.

Sendai: Problem solved? (2)

August 25, 2015

Sendai nuclear plant operator set to plug leaks in 5 cooling system pipes

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201508250046

THE ASAHI SHIMBUN
SATSUMA-SENDAI, Kagoshima Prefecture--The operator of the recently reactivated Sendai nuclear power plant here said it had pinpointed the sites of leaks that forced a postponement of full reactor operations.

Kyushu Electric Power Co. said it detected tiny cracks in five narrow pipes that carry seawater used to cool steam. The pipes are part of the steam condenser at the No. 1 reactor, which resumed operation on Aug. 11.
Output will be maintained at 75 percent of capacity, while the utility carries out checks for further holes.
Kyushu Electric was expected to release a final report on the glitch on Aug. 25. At the same time, it said fully restored reactor operations will be postponed from the scheduled date of Aug. 25.
The regional utility detected a tiny amount of seawater leaked into one of three condensers in the secondary cooling system of the reactor, which has an output of 890 megawatts, on Aug. 20.
The seawater was flowing in the condenser, a device that converts steam used in power generation to water by cooling it, and became mixed with the secondary cooling water that does not contain radioactive materials.
Kyushu Electric suspended operations of one of the two water circulation channels through the condenser at issue and inspected narrow pipes forming the system by passing an electric current through it.
Technicians found miniscule holes in five of 13,000 pipes they had inspected as of 10 a.m. on Aug. 24.
After inspecting all the pipes, the workers will repair the faulty bits.
Kyushu Electric said the seawater was removed with a desalination device and operations at the No. 1 reactor were not hindered.
The reactor was restarted earlier this month for the first time since it was shut down for a periodic inspection in May 2011. Opponents of the plant have voiced safety concerns.

Sendai reaches 95% of power capacity

August 27, 2015

Sendai nuclear plant resumes output increase

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Aug. 27, 2015 - Updated 13:53 UTC+2

The operator of Japan's only restarted nuclear power plant has resumed increasing power output one week after equipment trouble forced it to suspend the ramp-up.

Kyushu Electric Power Company suspended the output increase last Thursday after a problem was found with one of the No. 1 reactor's condensers at the Sendai plant in Kagoshima Prefecture in southwestern Japan.

The utility said seawater leaked from damaged intake pipes into the condenser. The company stopped increasing the output while it inspected the equipment and fixed the problem.

The utility had restarted the reactor just 9 days earlier, on August 11th. It was generating power at 75 percent of capacity at the time of the suspension.

The condenser turns steam that drives the turbine back into water. Neither the steam nor the water is

radioactive.

The utility said on Thursday that it had completed its inspections and fixed the problem by the previous day, and that nothing else amiss had been found. The company started increasing energy output again in the morning, and it had reached 95 percent by the evening.

However, the utility might miss its target to go back into commercial operation by early September.

The reactor was the first to go back online under the new regulations introduced after the Fukushima nuclear accident in 2011.

Sendai: 100% output

August 29, 2015

Sendai nuclear power plant achieves 100% output

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Aug. 29, 2015 - Updated 07:15 UTC+2
The operator of Japan's only online nuclear plant says it has raised turbine output to full capacity.

Kyushu Electric Power Company said on Saturday that engineers at the Sendai plant in Kagoshima Prefecture, southwestern Japan, had raised the turbine output to 100 percent of its capacity of 890,000 kilowatts.

The utility says that on Monday it will also increase the reactor output to full capacity.

The plant resumed work to ramp up output at its No. 1 reactor on Thursday after a 6-day suspension due to a problem with one of the reactor's condensers.

The company plans to restart commercial operations on September 10th as scheduled, if nuclear regulators find no problems in their final inspections on that day.

The plant is likely to become the first nuclear facility in commercial operation since the Ohi plant in Fukui Prefecture on the Sea of Japan coast halted operations in September 2013.

Kyushu Electric Power Company restarted the Sendai plant earlier this month. The plant's No. 1 reactor was the first in Japan to go back online under new regulations introduced after the Fukushima nuclear meltdowns in 2011.

The Nuclear Regulation Authority says it will conduct final inspections carefully.

Sendai to achieve full capacity

August 30, 2015

Sendai reactor output to achieve 100% capacity

http://www3.nhk.or.jp/nhkworld/english/news/20150831_05.html

Aug. 30, 2015 - Updated 21:53 UTC+2

The output of Japan's only online nuclear reactor is scheduled to be raised to full capacity on Monday.

Kyushu Electric Power Company, which operates the Sendai plant in southwestern Japan, says after 100-percent output capacity is achieved at the number-one reactor, it will undergo final inspections by the Nuclear Regulation Authority on September 10th.

The reactor was the first to be confirmed by the Authority to have met new safety guidelines that were introduced following the 2011 accident at the Fukushima Daiichi plant. The utility restarted the reactor on August 11th.

The company continued test operations while gradually increasing its output and checking whether the equipment was working properly.
The company was forced to temporarily stop increasing the output after a problem was found with one of the reactor's condensers. The work resumed last Thursday.

The nuclear authority will now check the water, temperatures and pressures in the reactor while it is in full operation.

The utility says if all goes well, it will resume full commercial operations. The reactor will become the first in the country to resume such operations since the Ohi plant in central Japan went offline in 2013.

The Nuclear Regulation Authority says it will carefully conduct final inspections of the Sendai reactor.

August 29, 2015

Sendai reactor to resume commercial operations Sept. 10

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201508290037

By JUNICHIRO NAGASAKI/ Staff Writer

SATSUMA-SENDAI, Kagoshima Prefecture--Kyushu Electric Power Co. said Aug. 28 it intends to resume full-scale commercial operations at the Sendai nuclear power plant's No. 1 reactor on Sept. 10.
The utility said the reactor, which has an output of 890 megawatts, will run at full capacity on Aug. 31 on a trial basis ahead of a final inspection by the Nuclear Regulation Authority, which introduced tougher safety standards in July 2013 in the aftermath of the Fukushima nuclear disaster two years earlier.
The planned start of commercial operations will herald the end of Kyushu Electric's two-year effort to resume operations at its Sendai plant.
The utility will begin full-capacity operations of the reactor's dynamo on Aug. 29, and then run the reactor at full capacity on Aug. 31 while ensuring that its thermal power remains constant.
Final pre-operation checks by the NRA are scheduled for Sept. 9 and 10.
The Sendai No. 1 reactor was brought online on a trial basis on Aug. 11, and began generating and transmitting electricity three days later.
Although Kyushu Electric initially planned to start full trial operations Aug. 25, the schedule was pushed back after it was revealed on Aug. 20 that a small amount of seawater had leaked into a condenser in the reactor's secondary cooling system.
Kyushu Electric quickly repaired the leak, putting it on track to begin business operations in early September as originally planned.
Kyushu Electric expects to resume operations at the Sendai No. 2 reactor by mid-October.

Sendai reaches full output capacity

August 31, 2015

Kyushu nuclear plant reaches full output capacity, commercial operations expected in Sept.

http://mainichi.jp/english/english/newsselect/news/20150831p2a00m0na013000c.html

Kyushu Electric Power Co. said that the No. 1 reactor at the Sendai Nuclear Power Plant in Kagoshima Prefecture has achieved its full capacity, in which the heat output generated in the reactor is maintained at its maximum level.
The Sendai plant's No. 1 reactor is expected to undergo a final inspection by the Nuclear Regulation Authority on Sept. 9 and 10. If passed, Kyushu Electric will resume commercial operations of the nuclear plant.
The utility decided to postpone raising power output on Aug. 21 following a problem at the reactor, where seawater entered into a condenser, but began boosting output power six days later after blocking holes in pipes.
Kyushu Electric resumed the No. 1 reactor's power generation and transmission on Aug. 14 after restarting the Sendai plant on Aug. 11 as the first nuclear station in Japan to restart its operation under new safety standards. The company has been careful in raising output power since the No. 1 reactor had

been off power for about four years and three months. Now that the reactor is maintaining its maximum output capacity, the utility expects less likelihood of problems in its operations.
The electric company plans to restart the No. 2 reactor at the Sendai plant in mid-October after inserting nuclear fuel in early September.

Sendai reactor output achieves 100% capacity

http://www3.nhk.or.jp/nhkworld/english/news/20150831_16.html

Aug. 31, 2015 - Updated 05:05 UTC+2

The output of Japan's only online nuclear reactor has been raised to full capacity.

Kyushu Electric Power Company, which operates the Sendai plant in southwestern Japan, said that the number-one reactor reached 100-percent output on Monday morning. It says that it will undergo final inspections by the Nuclear Regulation Authority on September 10th.

The reactor was the first to have met new safety guidelines that were introduced following the 2011 accident at the Fukushima Daiichi plant. The utility restarted the reactor on August 11th.

The company continued test operations while gradually increasing its output and checking whether the equipment was working properly.

The company was forced to temporarily stop increasing the output after a problem was found with one of the reactor's condensers. The work resumed last Thursday.

The nuclear authority will now check the water, temperatures and pressures in the reactor while it is in full operation.

The utility says if all goes well, it will resume full commercial operations. The reactor will become the first in the country to resume such operations since the Ohi plant in central Japan went offline in 2013.

The Nuclear Regulation Authority says it will carefully conduct final inspections of the reactor.

Ready for another restart?

September 4, 2015

Plant operator to reactivate another reactor

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Sep. 4, 2015 - Updated 11:24 UTC+2
The operator of Japan's only active nuclear power station plans to prepare to restart a second reactor at the plant.

Kyushu Electric Power Company on Friday told the Nuclear Regulation Authority, or NRA, of its plan to start putting fuel rods into the Number 2 reactor of the Sendai plant in the southwestern prefecture of Kagoshima on September 11th.

The company says loading the 157 units of fuel rods into the facility will take 4 days.

NRA officials are to then inspect emergency equipment and procedures for handling severe accidents. If no problems are found, the utility plans to reactivate the reactor in mid-October, aiming at starting commercial operations in mid-November.

The firm restarted the plant's Number 1 reactor on August 11th. The reactor is to undergo final checks by the NRA next Thursday and, if it passes them, become the first in Japan to supply electricity in 2 years.

The 2 reactors are the first to meet regulations introduced after the nuclear accident at the Fukushima Daiichi power plant in 2011.

Sendai set to resume commercial operation

September 10, 2015

Kyushu Electric reactor No. 1 set to resume full commercial operation

http://www.japantimes.co.jp/news/2015/09/10/national/kyushu-electric-reactor-no-1-set-resume-full-commercial-operation/#.VfEoJpfwmic

Kyodo
Kyushu Electric Power Co. is set to begin full-scale commercial operation of reactor No. 1 at its Sendai plant in Kagoshima Prefecture after the unit cleared a final inspection by the regulator on Thursday.
The plant's No. 1 reactor has been generating and feeding electricity to the grid on a trial basis since it went live on Aug. 11, becoming the nation's first reactor to resume operation under safety regulations adopted after the 2011 nuclear crisis.
Kyushu Electric Power plans to reactivate reactor No. 2 at the two-unit Sendai plant in mid-October.
The utility expects its earnings to improve by ¥15 billion a month when the two units are back online.
It projects posting a group net profit of ¥45 billion in the first half of the current business year through March, due to the restart of the No. 1 unit. It hopes to put its full-year earnings into the black for the first time in five years.

Before reactor No. 1 was reactivated in August, Japan had no nuclear power supply for nearly two years, as all commercial reactors were gradually taken offline in the wake of the Fukushima disaster.
Other power companies are also desperate to bring their reactors back online to reduce their fossil-fuel bills. However, analysts say the outlook remains uncertain as hurdles include the in-depth and lengthy safety screenings required by the regulator.

September 9, 2015

Sendai reactor set to resume commercial operation

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Sep. 9, 2015 - Updated 19:35 UTC+2
Japan's only online nuclear reactor is set to undergo final inspections by regulators on Thursday. If no problems are found, the No.1 reactor at the Sendai nuclear plant in southwestern Japan will resume commercial operation.

The reactor would be the country's first to resume commercial operation since the Ohi plant in central Japan went offline in 2013.

The operator, Kyushu Electric Power Company, restarted the Sendai reactor on August 11th. It became the first to be activated under new regulations introduced after the Fukushima Daiichi nuclear accident in 2011.

The operator gradually increased the reactor's output to 100 percent of its capacity by the end of August.

Inspectors from the Nuclear Regulation Authority plan to conduct final checks of the reactor and other equipment on Thursday morning.

If no abnormalities are found, the regulator will allow Kyushu Electric to resume commercial operation as soon as in the afternoon.

Mihama may not restart

September 9, 2015

Regulator warns Kansai Electric may not win approval for Mihama reactor restart

http://www.japantimes.co.jp/news/2015/09/09/national/regulator-warns-kansai-electric-may-not-win-approval-mihama-reactor-restart/#.VfAPv5fwmic

Kyodo

Nuclear regulators on Wednesday warned that Kansai Electric Power Co. may not be allowed to extend the life span of its aging nuclear reactor at the Mihama plant, saying the utility has been slow to submit information required for a safety review.

A regulation brought in after the 2011 nuclear disaster forbids, in principle, the operation of nuclear reactors for more than 40 years. However, they may be granted a 20-year life span extension if they obtain Nuclear Regulation Authority clearance.

"Under the current situation, it will be extremely difficult to give approval" for the resumption of the Mihama No. 3 reactor in Fukui Prefecture, the regulatory body's Commissioner, Toyoshi Fuketa, told a meeting.

Kansai Electric, which relied heavily on nuclear power before the nuclear crisis, hopes to restart a total of three aging reactors, including the Mihama unit.

The Mihama reactor would need to clear screenings by the regulator of general plant safety and the soundness of its aging equipment. It would need to secure a green light by the end of November next year — or else it will be scrapped.

The screening process made progress in August, when the regulators approved tougher quake-resistance criteria set by Kansai Electric. But there has been no progress since then, as the operator has yet to prepare required materials.

Sendai has resumed commercial operation

September 10, 2015

Sendai reactor resumes commercial operation

Sep. 10, 2015 - Updated 10:18 UTC+2

http://www3.nhk.or.jp/nhkworld/english/news/20150910_24.html

Japan's only active nuclear reactor has resumed commercial operations after approval from regulators.

The No. 1 reactor at the Sendai plant in Kagoshima Prefecture, southwestern Japan, became the country's first to supply electricity on Thursday after the Ohi plant in central Japan went offline 2 years ago.

Four experts from the Secretariat of the Nuclear Regulation Authority conducted final checks in the Sendai plant's central control room on Thursday morning, looking at temperatures of the reactor and

other equipment.

The NRA issued a certificate to the plant operator, Kyushu Electric Power Company, at 4 PM after no abnormalities were found in the final inspection.

The utility restarted the reactor on August 11th. It was the first to be activated under regulations introduced after the Fukushima Daiichi nuclear accident in 2011.

The reactor's output reached full capacity on August 31st.

The firm plans to start putting fuel rods into the plant's Number 2 reactor on Friday and restart it in mid-October if no problems are found in inspections.

First reactor in business again

September 11, 2015

Nuclear reactor resumes business, first in Japan in two years

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201509110047

Activists protest the start of commercial operations at the No. 1 reactor of the Sendai nuclear power plant in Satsuma-Sendai, Kagoshima Prefecture, on Sept. 10. (Shoko Ishizuka)

THE ASAHI SHIMBUN

SATSUMA-SENDAI, Kagoshima Prefecture--For the first time in two years, a nuclear power plant in Japan is officially back in business.

The No. 1 reactor of the Sendai plant, which has an output of 890 megawatts, passed two-day final safety inspections conducted by the Nuclear Regulation Authority and resumed commercial operations on the afternoon of Sept. 10.

A safety screening pass certificate was handed over by Kunihisa Oba, a senior NRA inspector, to Nobuhiko Fujiwara, manager of the Sendai power plant, on Sept. 10.
Kyushu Electric Power Co., operator of the Sendai plant, reactivated the No. 1 reactor on a trial basis Aug. 11 after it became the first facility to pass the tougher safety standards introduced by the NRA after the Fukushima nuclear disaster.
Nuclear fuel was also supplied to the No. 2 reactor of the Sendai plant starting on Sept. 11.
Kyushu Electric plans to bring the second reactor back online in mid-October and resume its commercial operations in mid-November.
After the nuclear crisis at the Fukushima No. 1 power plant caused by the March 2011 Great East Japan Earthquake and tsunami, all reactors in Japan went offline.
Although the No. 3 and No. 4 reactors of Kansai Electric Power Co.'s Oi plant in Fukui Prefecture were temporarily restarted after the disaster due to a shortage of electricity, their operations were soon suspended.
The restart of the Sendai reactor marked the first time for a reactor in Japan to function commercially since the Oi No. 4 reactor was suspended in September 2013.
Kansai Electric is also working to restart the No. 3 and No. 4 reactors of its Takahama plant in Fukui Prefecture, while Shikoku Electric Power Co. is proceeding with its efforts to resume operations at the No. 3 reactor of the Ikata power plant in Ehime Prefecture.
(This article was written by Junichiro Nagasaki and Takeshi Nakashima.)

Moving fuel rods into No.2

September 11, 2015

Fuel rods put into another Sendai reactor

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Sep. 11, 2015 - Updated 09:24 UTC+2
The operator of the Sendai nuclear power plant in Kagoshima Prefecture, southwestern Japan, has begun placing fuel rods into the plant's No.2 reactor.

Kyushu Electric Power Company plans to restart the reactor in the middle of next month.

The utility on Friday afternoon began the 4-day process of moving 157 fuel rod units into the reactor, using a crane and other machinery. It says it will conduct the work while placing top priority on ensuring safety.

The No.2 reactor went offline 6 months after the Fukushima Daiichi plant accident in March 2011. All the fuel rods were removed from the reactor by February 2013.
The reactor will be Japan's second to be restarted under new regulations introduced after the Fukushima Daiichi accident.

The No.1 reactor of the Sendai plant on Thursday became the nation's first to supply electricity since the Ohi nuclear plant in central Japan went offline in September 2013.

September 11, 2015

Kyushu Electric begins putting nuclear fuel in 2nd reactor for restart

http://mainichi.jp/english/english/newsselect/news/20150911p2g00m0dm004000c.html

TOKYO (Kyodo) -- Kyushu Electric Power Co. said Friday it began loading nuclear fuel into the second reactor at its Sendai station in southwestern Japan, moving a step closer to its restart planned for mid-October under upgraded safety regulations adopted following the 2011 Fukushima meltdowns.

The No. 2 reactor at the two-unit plant will become the second to be restarted in Japan since the post-Fukushima safety requirements came into force. Kyushu Electric reactivated the No. 1 unit at the complex on Aug. 11, which marked the revival of nuclear power generation in the country after a two-year hiatus.

On Friday, the utility launched operations to insert a total of 157 fuel rod assemblies into the No. 2 reactor. The work is expected to take about four days.

The government identifies nuclear power as a key electricity source and is promoting the restart of idled reactors even though antinuclear sentiment remains strong among the Japanese public.

However, the outlook for the resumption of other nuclear reactors remains uncertain due to prolonged safety screenings undertaken by the regulator and other hurdles.

Kyushu Electric expects its earnings to improve by 15 billion yen ($125 million) a month by bringing the two units back online, which may put its earnings into the black for the first time in five years in the current business year through next March.

Fuel rods inserted in No.2 reactor

September 14, 2015

Fuel rods placed into 2nd Sendai reactor

Sep. 14, 2015 - Updated 04:21 UTC+2

http://www3.nhk.or.jp/nhkworld/english/news/20150914_12.html

The operator of the Sendai nuclear power plant in southwestern Japan has finished placing fuel rods into the plant's No.2 reactor.

Kyushu Electric Power Company says workers completed the process of loading 157 fuel rod units into the reactor on Sunday night.

It plans to restart the reactor in the middle of next month.

The No.1 reactor at the plant resumed commercial operation on Thursday of last week.

It was the first reactor to be restarted under new regulations introduced after the Fukushima Daiichi accident in March of 2011.

The 2 reactors went offline after the accident. All the fuel rods were removed by February of 2013.

Kyushu Electric says no problems have been reported during the work to load the fuel rods. The operator will now check whether the units are properly positioned.

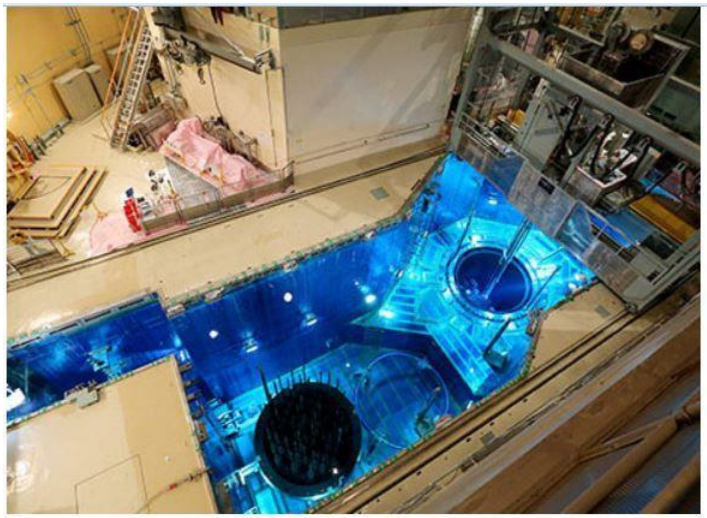
The operator plans to hold accident-response drills and inspect emergency facilities before restarting the No.2 reactor.

Fuel rods inserted in No.2 reactor (2)

September 15, 2015

Kyushu Electric finishes installation of fuel rods at second reactor

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201509150031



Nuclear fuel assemblies are transferred to the No. 2 reactor of the Sendai nuclear power plant in Satsuma-Sendai, Kagoshima Prefecture, on Sept. 12. (Masaru Komiyaji)

By JUNICHIRO NAGASAKI/ Staff Writer

SATSUMA-SENDAI, Kagoshima Prefecture--Kyushu Electric Power Co. said it has finished installing nuclear fuel rods at the No. 2 reactor of its Sendai power plant in preparation for a resumption of commercial operations.

The fuel rods, bundled together in 157 assemblies, began being loaded in the No. 2 reactor during the afternoon of Sept. 11. The work was completed one day ahead of schedule on the evening of Sept. 13.
The 157 fuel assemblies were initially stored in a pool in a building adjacent to the reactor building, and then transferred to the reactor one by one around the clock.
The utility intends to reactivate the reactor in mid-October and start commercial operations in mid-November. The reactor has an output of 890 megawatts.
“We will continue to engage in government-led safety screenings with the utmost sincerity,” said a Kyushu Electric official in a statement.
The Nuclear Regulation Authority’s safety examination is still under way at the Sendai plant, and Kyushu Electric plans to shortly initiate training procedures in the event of an emergency in the presence of NRA officials.
The Sendai plant’s No. 1 reactor was brought back online on Aug. 11 and became the first to resume operations on Sept. 10 under new safety standards put in place after the 2011 Fukushima nuclear disaster.
However, equipment for the No. 1 reactor has experienced mechanical problems since its restart. The No. 2 reactor, like the No. 1 reactor, remained offline for four years.
Kyushu Electric said it will proceed carefully with work to resume operations at the second reactor to prevent a recurrence of problems.

Japan briefs IAEA

September 15, 2015

Japan briefs IAEA about reactor restart plans

http://www3.nhk.or.jp/nhkworld/english/news/20150915_12.html

Nuclear & Energy
Sep. 15, 2015 - Updated 02:47 UTC+2
Japan has laid out its case to the international community for its plan to restart the country's nuclear reactors.

The chairman of Japan's Atomic Energy Commission, Yoshiaki Oka, addressed the annual General Conference of the International Atomic Energy Agency in Vienna on Monday.

Oka told the attendees that Japan takes seriously the IAEA's findings in its final report on the 2011 nuclear accident at the Fukushima Daiichi plant.

The report says Japan was insufficiently prepared for a severe nuclear accident due to its assumption that nuclear plants were safe.

He said Japan will fully and forthrightly provide the international community with information about the

work to deal with contaminated water and to decommission the plant.

Oka briefed the conference about the restart of the Sendai nuclear power plant in southwestern Japan in August. The plant was reopened under tighter regulations introduced after the Fukushima accident.

He said it took more than 2 years of screenings before the Sendai reactor restart got the go-ahead. He added that new criteria for the screenings were based on experience gained and lessons learned from the accident.

Oka asked the participants to understand Japan's reasons for restarting other reactors in the days ahead.

Prior to the conference, the Japanese government hosted a meeting to showcase current conditions at the Fukushima plant. Participants were served sake and other Fukushima specialties to demonstrate how thoroughly the region has recovered.

A briefing on the IAEA's final report on the accident is scheduled for Wednesday. Conference participants wrap up their discussions on Friday.

Tomari plant not ready to restart by March

September 24, 2015

Hokkaido Electric abandons plan for reactor restart by March end

http://www.japantimes.co.jp/news/2015/09/24/national/hokkaido-electric-abandons-plan-reactor-restart-march-end/#.VgUKlpfwmic

JIJI
SAPPORO – Hokkaido Electric Power Co. President Akihiko Mayumi on Thursday signaled the company's plan to give up the restart of the three reactors at its Tomari nuclear power plant in Hokkaido by the end of March.
At a news conference, Mayumi said, "I have to say that realistically, it would be difficult to bring (any of) the reactors back into operation by the end of fiscal 2015."
The company initially planned to reactivate the No. 3 reactor at the Tomari plant in November this year and the No. 1 and No. 2 reactors between January and March 2016.
Mayumi stopped short of mentioning whether Hokkaido Electric will implement a third full-scale hike in its electricity rates following the expected postponement of the restart of the three reactors.
"We hope to reduce our rates as soon as possible," he added.
Mayumi indicated that a timeline for bringing the Tomari reactors back online is likely to be known by the end of March.
The three reactors have been undergoing safety checks by the Nuclear Regulation Authority under new criteria introduced in July 2013 in the wake of the March 2011 Fukushima nuclear disaster.

All reactors in Japan have to clear NRA checks under the new safety standards before being reactivated. The No. 1 unit at Kyushu Electric Power Co.'s Sendai nuclear plant in Kagoshima Prefecture was reactivated last month, becoming the first reactor in Japan to come online under the new standards and putting an end to the total absence of active nuclear reactors in the country that had lasted since September 2013.
The reactor went into commercial operations earlier this month.

Sendai: No.2 reactor ready for restart

October 03, 2015

Kyushu Electric eyes Oct. 15 restart of another reactor at Sendai plant

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201510030034

THE ASAHI SHIMBUN
Kyushu Electric Power Co. plans to restart another nuclear reactor in Kagoshima Prefecture on Oct. 15, which would make it the second reactor to go online in Japan under new safety regulations.
The utility on Oct. 2 notified the Nuclear Regulation Authority of its decision to conduct a test on Oct. 14 to confirm the proper functioning of control rods in the No. 2 reactor at its nuclear plant in Satsuma-Sendai.
The test involving the control rods, used to control nuclear fission, is one of the final checks required before a nuclear reactor restart.
Despite anti-nuclear protests, the No. 1 reactor at the same plant in August became the first to resume operations under the new safety regulations that went into force in July 2013.
The No. 1 and No. 2 reactors each have an output of 890 megawatts. The No. 2 reactor has been out of service for more than four years since all of Japan's nuclear power plants were ordered to shut down following the 2011 Fukushima nuclear disaster.
Japan has 43 commercial nuclear reactors.
Fukuoka-based Kyushu Electric on Oct. 1 began a four-day drill at the Sendai plant on dealing with a severe accident, such as the loss of power sources. The tsunami on March 11, 2011, knocked out all power at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant, leading to the triple meltdown there.
NRA inspectors will oversee the drill to ensure the plant operator follows proper procedures.
If all goes well, the company will conduct a check of equipment in the reactor building from Oct. 9 by raising the temperature and pressure in the reactor to levels similar to those at the time of a restart.
(This article was written by Junichiro Nagasaki and Shuhei Shibata.)

October 2, 2015

Japan to restart 2nd nuclear reactor under post-Fukushima rules

http://mainichi.jp/english/english/newsselect/news/20151002p2g00m0dm062000c.html

TOKYO (Kyodo) -- Japan will restart a nuclear reactor in southwestern Japan as early as Oct. 14, making it the second to return to operation after the government introduced stricter safety regulations following the 2011 triple reactor meltdowns at a power plant in Fukushima.

Kyushu Electric Power Co. reported to the Nuclear Regulation Authority on Friday about its plan to reactivate the No. 2 reactor at its Sendai complex.

The No. 1 unit at the two-reactor plant resumed operations in August, becoming the first reactor to restart under what the government of Prime Minister Shinzo Abe calls "the world's toughest" safety rules implemented after the Fukushima disaster. The restart ended a nearly two-year hiatus in the country's nuclear power generation.

The government plans to have nuclear power account for 20 percent to 22 percent of Japan's total electricity supply in 2030, compared with roughly 30 percent before the disaster at the Fukushima Daiichi complex, despite the majority of the public opposing nuclear plant restarts. The government sees nuclear power as necessary for the country to reduce its greenhouse gas emissions in combating climate change.

Kyushu Electric finished inserting a total of 157 fuel rod assemblies into the No. 2 reactor last month and will begin final inspections from next Friday.

The huge earthquake and tsunami on March 11, 2011, that triggered the Fukushima nuclear crisis, led to the shutdown of all of the country's commercial reactors by May 2012. Two reactors were temporarily brought back online about two months later amid power shortage concerns, but they went offline for regular checks in September 2013, leaving Japan without nuclear power supply again.

See also:

Japan to restart second reactor on Oct. 15 under post-Fukushima rules

http://www.japantimes.co.jp/news/2015/10/02/national/japan-to-restart-second-reactor-on-october-15-under-post-fukushima-rules/#.Vg_IuZfwmic

Kyodo

Kyushu Electric Power Co. will restart one of its nuclear reactors on Oct. 15, making it the second to return to operation after the government introduced stricter safety regulations following the 2011 meltdowns in Fukushima Prefecture, a source familiar with the restart plan said. […]

Ikata next?

October 7, 2015

Ehime nuclear plant likely to restart soon after committee gives green light

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201510070038

THE ASAHI SHIMBUN

The Ikata nuclear power plant moved a step closer to restarting after a special committee of the Ehime prefectural assembly gave the go-ahead Oct. 6.

The panel approved a petition submitted by business and other organizations in the prefecture calling for the No. 3 reactor of the Ikata plant to be reactivated as early as possible.

The Liberal Democratic Party, which has a majority in the assembly, supports the push, so the petition is expected to be adopted at a plenary session Oct. 9.

The LDP also intends to urge the prefectural assembly to approve the planned restart of the reactor. That will likely receive approval, too.

As Shikoku Electric Power Co., operator of the Ikata plant, has concluded a safety agreement with Ehime Prefecture and the town of Ikata, the next step is to obtain consent from local authorities to restart the reactor.

The utility's operator will hammer out the finer details of resuming operations with Ehime Governor Tokihiro Nakamura and Ikata Mayor Kazuhiko Yamashita.

The latest move is in line with Prime Minister Shinzo Abe's efforts to promote nuclear energy.

"It is a grave duty for the government to protect the health, life and property of the nation's citizens, and we will responsibly handle situations with that in mind," said Abe while heading a government meeting on nuclear disaster management at the prime minister's office Oct. 6.

Nakamura, who attended the meeting as an observer, appeared satisfied with the prime minister's remarks.

"He has taken matters one step forward," Nakamura told reporters, indicating that he believed Abe's pledge of assistance provided strong support as the prefectural government worked on deciding whether to restart the reactor.

The Nuclear Regulation Authority gave the green light to Shikoku Electric's basic safety plans for the Ikata plant in July, saying the company's suggested measures met the new regulations introduced after the Fukushima nuclear crisis was set off by the March 2011 earthquake and tsunami disaster.

The NRA is now screening the safety plan before granting final approval.

October 6, 2015

Town assembly OKs plan to restart another nuclear plant in Japan

http://mainichi.jp/english/english/newsselect/news/20151006p2g00m0dm059000c.html

MATSUYAMA, Japan (Kyodo) -- The assembly of a small town in western Japan agreed Tuesday to the possible restart of a nuclear power plant it hosts, the latest such move despite public opposition in the wake of the 2011 Fukushima meltdowns.
The assembly of Ikata in Ehime Prefecture unanimously approved plans to request the restart of the No. 3 reactor at Shikoku Electric Power Co.'s Ikata plant.
The reactor could possibly come back online as early as next year after necessary checkups.
Also Tuesday, the central government approved evacuation plans in the event of severe accidents at the Ikata plant, another step toward its potential reactivation.
"Now we have all the criteria (to decide)," said Kazuhiko Yamashita, mayor of Ikata, following the approval by 15 assembly members.
Yamashita indicated he will decide whether to agree to restart the reactor after meeting with the industry minister on Wednesday or later.
A handful of protesters gathered outside the town office to express opposition to plans for the plant's reactivation.
The government aims to restart idled nuclear reactors in Japan that meet what it claims are "the world's toughest safety standards," citing the necessity of stable power supply and lower electricity bills that have surged since the Fukushima disaster.
The Ikata plant obtained safety clearance from the Nuclear Regulation Authority in July.
In a similar move, Kyushu Electric Power Co. restarted the No. 1 reactor of its Sendai plant in the southwestern prefecture of Kagoshima in August, becoming the nation's first utility to do so after the Fukushima disaster, which was triggered by the March 2011 earthquake and tsunami in northeastern Japan.
Kyushu Electric is also set to reactivate the plant's No. 2 reactor in mid-November.
October 06, 2015 (Mainichi Japan)

Ehime Gov. mulls restart of nuclear reactor

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Oct. 6, 2015 - Updated 07:14 UTC+2
The governor of Ehime Prefecture in western Japan says he is closer to getting the information he needs to decide whether to restart a nuclear reactor in his prefecture.

He says he will make a final decision after considering the views of local residents and other factors.

Tokihiro Nakamura spoke to reporters on Tuesday after attending a government's nuclear disaster prevention council meeting headed by Prime Minister Shinzo Abe.

The Prime Minister said during the meeting that it is the government's duty to protect peoples' lives and assets if a nuclear accident and ensuing disaster were to occur. He said the government would deal with the situation responsibly.

Abe's announcement had been requested by Governor Nakamura as a condition for restarting the No. 3

reactor at the Ikata plant. The plant had passed the regulator's requirements for a restart in July.

Despite Abe's statement, Nakamura said there are other factors which must be considered that are preventing him from agreeing to a restart.

He said he will make a decision after everything is in place. Nakamura indicated that he will also continue to request a visit by the industry minister.

In the meeting, the panel approved the prefecture's evacuation plan for the residents near the plant.

Ikata plant seems to be next

October 9, 2015

Ehime assembly agrees to restart another nuclear plant in Japan

http://mainichi.jp/english/english/newsselect/news/20151009p2g00m0dm056000c.html

MATSUYAMA, Japan (Kyodo) -- The Ehime prefectural assembly in western Japan gave its consent Friday to a plan to restart a nuclear power plant despite lingering safety concerns in the wake of the 2011 Fukushima meltdowns.

The acceptance of a petition for reactivating the No. 3 reactor at Shikoku Electric Power Co.'s Ikata plant and adoption of a resolution stating the necessity of doing so brought the plant a step closer to becoming the country's second nuclear facility to restart under stricter safety regulations. The first was Kyushu Electric Power Co.'s Sendai complex in southwestern Japan.

The move came after the assembly of Ikata town approved earlier this week a request for restarting the plant, which obtained safety clearance from the Nuclear Regulation Authority in July.

Ikata Mayor Kazuhiko Yamashita is set to meet with new industry minister Motoo Hayashi before conveying his support for the restart to Ehime Gov. Tokihiro Nakamura.

Nakamura is expected to separately meet with Hayashi and make the final decision on the restart. Even if the governor consents, the plant may not be reactivated until next year as further checkups will be required.

About 100 demonstrators gathered in front of the Ehime prefectural office in Matsuyama to protest against reactivation even before the assembly session began.

The government seeks to restart idled nuclear reactors in Japan that meet what it claims are "the world's toughest safety standards," citing the necessity of stable power supply and lower electricity bills that have surged since the Fukushima disaster.

Kyushu Electric restarted the No. 1 reactor at the Sendai plant in the southwestern prefecture of Kagoshima in August, becoming the nation's first utility to do so under the stricter safety regulations introduced after the Fukushima disaster triggered by the March 2011 earthquake and tsunami in northeastern Japan.

Kyushu Electric is also set to reactivate the plant's No. 2 reactor as early as next week.

Second reactor heads for restart after nod from Ehime assembly

http://www.japantimes.co.jp/news/2015/10/09/national/second-reactor-heads-for-restart-after-nod-from-ehime-assembly/#.VhfodSvwmos

Kyodo
MATSUYAMA – The Ehime Prefectural Assembly consented Friday to a plan to restart a nuclear power plant despite lingering safety concerns from the 2011 Fukushima core meltdowns.
The acceptance of a petition for reactivating the No. 3 reactor at Shikoku Electric Power Co.'s Ikata plant and the adoption of a resolution stating that is necessary brought the plant a step closer to becoming the country's second nuclear facility to restart under stricter safety regulations. The first was Kyushu Electric Power Co.'s Sendai complex.
The move came after the assembly of the town of Ikata approved earlier this week a request for restarting the plant, which was cleared by the Nuclear Regulation Authority in July.
Ikata Mayor Kazuhiko Yamashita is set to meet with new industry minister Motoo Hayashi before conveying his support for the restart to Ehime Gov. Tokihiro Nakamura.
Nakamura is expected to separately meet with Hayashi and make the final decision. Even if the governor consents, the plant may not be reactivated until next year, as further checkups will be required.
About 100 demonstrators gathered in front of the Ehime prefectural office in Matsuyama to protest the reactivation even before the assembly session began.
The government seeks to restart idled nuclear reactors around the country that meet what it claims are "the world's toughest safety standards," citing the necessity of a stable power supply and lower electricity bills that have surged since the Fukushima disaster.
Kyushu Electric restarted the No. 1 reactor at the Sendai plant in Kagoshima Prefecture in August, becoming the nation's first utility to do so under the stricter safety regulations introduced since the Fukushima crisis began.
Kyushu Electric is also set to reactivate the plant's No. 2 reactor as early as next week.

Takahama's injunction

October 9, 2015

Takahama reactors may not restart next month

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Oct. 8, 2015 - Updated 22:47 UTC+2

A district court in Japan has decided to hold another hearing on whether to repeal a provisional injunction banning the restart of reactors at a nuclear plant.

The injunction was issued in April following a request from 9 residents to block the reactivation of the No.3 and No.4 reactors at the Takahama plant in Fukui Prefecture, central Japan.

However, plant operator Kansai Electric Power Company asked for the nullification of the order, leading the court to open a series of hearings with a different presiding judge.

The court held its third hearing on the matter on Thursday. It decided to hold the fourth session as early as on November 13th to listen to more explanations from both sides.

The injunction remains in place at least until the court makes its decision on Kansai Electric's request.

Even if the court overturns its injunction, it will be difficult for the utility to put the reactors back online next month as it had hoped.

This is because the firm needs to gain consent from local governments and move nuclear fuel back into the reactors.

Sendai No.2 reactor to go back online...Oct.15

October 14, 2015

Sendai No.2 reactor to be restarted on Thursday

http://www3.nhk.or.jp/nhkworld/english/news/20151014_20.html

Oct. 14, 2015 - Updated 08:56 UTC+2

Kyushu Electric Power Company says the No.2 reactor at its Sendai nuclear plant in Kagoshima Prefecture, southwestern Japan, will be put back online on Thursday.

The Sendai plant was the first in Japan to clear the government's new regulations for nuclear plants introduced after the Fukushima disaster in March 2011.

The plant has 2 reactors. Its No.1 reactor resumed operation in August this year.

The No.2 reactor has been shut down since it underwent regular inspections 6 months after the nuclear disaster.

On Wednesday, Kyushu Electric announced that the reactor's control rods will be removed starting at 10:30 Thursday morning, Japan time.

The reactor is expected to reach criticality about 12 hours after going back online.

Its operator plans to start generating and transmitting power next Wednesday, and resume commercial operation in mid-November.

The Sendai No.2 reactor will be the second in Japan to be restarted under post-Fukushima requirements.

Second reactor back online

October 15, 2015

2nd reactor at Sendai plant brought back online

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201510150020

By JUNICHIRO NAGASAKI/ Staff Writer

Kyushu Electric Power Co. restarted a second reactor at its Sendai nuclear power plant in Kagoshima Prefecture on Oct. 15, overriding persistent safety concerns among local residents.

At 10:30 a.m., Kyushu Electric Power workers lowered a lever in the plant's central control room to remove control rods in the No. 2 reactor to start the process of nuclear fission.

Kagoshima Governor Yuichiro Ito exhorted the utility to pay utmost attention to ensuring safety at the plant after the No. 2 reactor was restarted.

"Japan's nuclear policy will end should local residents be forced to evacuate in a grave accident," Ito said. "I think the Nuclear Regulation Authority screened the facility, fully aware of such a scenario, and the utility should share the same recognition in proceeding with reactivation."

Utility officials said the reactor is expected to reach a state of criticality, at which nuclear fission is self-sustaining, around 11 p.m.

The No. 2 reactor became the second to come back online in Japan under more rigid safety regulations implemented after the Fukushima nuclear crisis triggered by the March 2011 earthquake and tsunami disaster.

Despite protests by opponents of nuclear energy, the No. 1 reactor at the plant in Satsuma-Sendai city became the first to resume operations in August under the new regulations.

The No. 2 reactor was shut down for a periodic inspection in September 2011 and had remained idle ever since.

“We will continue to cooperate with the central government’s inspection procedures and proceed with operational procedures at the plant by putting utmost priority on securing its safety,” said Kyushu Electric Power President Michiaki Uriu in a statement released on Oct. 15.

Steam produced from the heat generated by the nuclear fission will drive a turbine to produce electricity.

The generation and transmission of electricity is expected to begin on Oct. 21 after the utility completes an inspection of the turbine and other equipment.

The output will be raised gradually to start commercial operations in mid-November, the officials said.

The Sendai nuclear plant became the first nuclear facility in Japan in September last year to meet the new safety standards imposed by the NRA in July 2013.

Preparations for a restart are progressing at the No. 3 reactor of Shikoku Electric Power Co.'s Ikata nuclear power plant in Ehime Prefecture and at the No. 3 and No. 4 reactors of Kansai Electric Power Co.'s Takahama nuclear power plant in Fukui Prefecture.
Kyushu Electric Power is also seeking to reactivate the No. 3 and No. 4 reactors at its Genkai nuclear power plant in Saga Prefecture.

Sendai No.2 reactor is back online

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Oct. 15, 2015 - Updated 05:11 UTC+2
A nuclear reactor in Kagoshima Prefecture, southwestern Japan, has gone back online, the second such restart under tougher post-Fukushima regulations.

Kyushu Electric Power Company turned on the No.2 reactor at its Sendai plant on Thursday morning. Reactor 1 at the same plant went back online in August.

Plant workers began removing the reactor's 32 control rods at 10:30 AM. It is expected to take about 12 hours to achieve a sustained nuclear chain reaction.

The operator plans to start generating and transmitting electricity on Wednesday next week and resume commercial operation in mid-November.

The No.2 reactor has been offline for 4 years. It was shut down for regular inspections 6 months after the Fukushima nuclear accident in March 2011.

In September last year, the Sendai nuclear plant became the first plant in Japan to clear the government's stricter safety regulations, introduced after Fukushima.

Kyushu Electric President Michiaki Uriu said his company will place top priority on safety as it carefully proceeds with the restart.

He said it will also strive to improve the safety of nuclear power plants and actively disclose information with a strong determination never to repeat Fukushima.

Second reactor restarted in Kyushu under tighter Fukushima-inspired rules

http://www.japantimes.co.jp/news/2015/10/15/national/second-reactor-restarted-kyushu-tighter-fukushima-inspired-rules/#.Vh9emyvwmos

Kyodo

KAGOSHIMA – A nuclear reactor in Kagoshima Prefecture resumed operation Thursday, becoming the second unit to restart after the government tightened safety regulations following the 2011 triple reactor meltdowns at the Fukushima No. 1 complex.
Kyushu Electric Power Co. said it reactivated reactor 2 at its Sendai complex in Kagoshima, about two months after unit 1 at the two-reactor plant began operating under what Prime Minister Shinzo Abe's government calls "the world's toughest" safety rules implemented after the Fukushima disaster started.
The first restart in August ended a nearly two-year hiatus in the country's nuclear power generation, marking Japan's return to nuclear energy production.
The government plans to have nuclear power account for 20 to 22 percent of the country's total electricity supply in 2030, compared with roughly 30 percent before the disaster at the Fukushima complex, despite the majority of the public opposing the restart of nuclear plants.
The government sees nuclear power as necessary for the country to reduce its greenhouse gas emissions in an effort to reduce climate change and wants to benefit from the relatively low production costs of nuclear power.
Kyushu Electric finished inserting a total of 157 fuel rod assemblies into reactor 2 last month and had been working on final inspections since last Friday.
The huge earthquake and tsunami on March 11, 2011, triggered the worst nuclear crisis since the 1986 Chernobyl disaster and led to the eventual shutdown of all of Japan's commercial reactors by May 2012.
Two reactors were temporarily brought back online about two months later amid power shortage concerns, but they went offline for regular checks in September 2013, leaving Japan without nuclear power supply again.
See also :

Japan restarts 2nd reactor under post-Fukushima rules

http://mainichi.jp/english/english/newsselect/news/20151015p2g00m0dm033000c.html

KAGOSHIMA, Japan (Kyodo) -- A nuclear reactor in southwestern Japan resumed operation Thursday, becoming the second unit to restart after the government tightened safety regulations following the 2011 triple reactor meltdowns at the Fukushima Daiichi complex. […]

Sendai No.2 achieves fission chain reaction

October 15, 2015

Sendai No.2 reactor achieves criticality

Nuclear & Energy
Oct. 15, 2015 - Updated 18:33 UTC+2

A second reactor at a nuclear power plant in southwestern Japan has achieved a sustained nuclear fission chain reaction.

Officials of the plant's operator, Kyushu Electric Power Company, made the announcement at 11 PM on Thursday, Japan time.

Workers at the Sendai plant in Kagoshima Prefecture began removing control rods to restart the No.2 reactor at 10:30 AM on the same day. They say they have detected no abnormalities so far.

This is the second reactor to come back online and reach criticality under the new regulations introduced after the 2011 accident at the Fukushima Daiichi nuclear plant. The first reactor to do so is the No.1 reactor at the same plant.
Kyushu Electric plans to start producing and supplying electricity from the No.2 reactor on Wednesday. But its officials say they may change the timing depending on work to adjust generation turbines.

The company plans to gradually increase the reactor's output and start its commercial operation in the middle of next month.

The firm had not operated the No.2 reactor since it suspended its operation for regular inspections 4 years and one month earlier.

Sendai No.2 achieves fission chain reaction (2)

Sendai No.2 reactor achieves criticality (2)

Nuclear & Energy
Oct. 15, 2015 - Updated 22:16 UTC+2
A second reactor at a nuclear power plant in southwestern Japan has achieved a sustained nuclear fission chain reaction.

Officials of the plant's operator, Kyushu Electric Power Company, made the announcement at 11 PM on Thursday, Japan time.

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years and one month earlier.

Operators of nuclear power plants in Japan want to restart more suspended reactors now that the 2 reactors at the Sendai plant are back online. But things will not go as smoothly as they plan.

3 more reactors have already met new regulations introduced after the 2011 accident at the Fukushima Daiichi nuclear plant.

They are the No.3 and No.4 reactors at the Takahama plant in Fukui Prefecture and the No.3 reactor at the Ikata plant in Ehime Prefecture.

The Takahama plant's operator, Kansai Electric Power Company, hopes to resume operation of its No.3 reactor in late December and the No.4 reactor in mid-January.

However, the utility needs to coordinate with local governments in Fukui and neighboring Kyoto Prefecture to create an emergency evacuation plan for communities around the plant. The Cabinet Office is helping Kansai Electric to formulate the plan.

Also, the 2 reactors must remain offline unless a court injunction to block their restart is overturned.

Regarding the Ikata reactor, the local prefectural assembly passed a resolution to allow its restart. But its restart will only come next spring or later as the reactor is undergoing detailed equipment checks by experts from the Nuclear Regulation Authority.

Moreover, it remains unclear when regulatory screenings will end for 20 other reactors at 13 plants nationwide.

Opinion polls run by NHK this month show that 18 percent of respondents support reactor restarts while 43 percent are opposed. 33 percent remain undecided.

Observers say the central government and plant operators should provide sufficient explanation and enhance their safety and disaster preparedness measures.

Not so easy to restart

October 16, 2015

Reactor restarts face hurdles

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Oct. 16, 2015 - Updated 01:08 UTC+2

Operators of nuclear power plants in Japan want to restart more suspended reactors now that 2 reactors at the Sendai plant are back online. But things will not go as smoothly as they plan.

The No.1 and No.2 reactors at the Sendai plant in Kagoshima Prefecture came back online in August and on Thursday, respectively.

3 more reactors have already met new regulations introduced after the 2011 accident at the Fukushima Daiichi nuclear plant.

They are the No.3 and No.4 reactors at the Takahama plant in Fukui Prefecture and the No.3 reactor at the Ikata plant in Ehime Prefecture.

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Ikata ready to restart?

October 22, 2015

Town mayor gives nod to restarting reactor in western Japan

http://www.japantimes.co.jp/news/2015/10/22/national/town-mayor-gives-nod-restarting-reactor-western-japan/#.Vij3LSvwmov

Kyodo
MATSUYAMA, EHIME PREF. – A town mayor in western Japan gave approval Thursday to restart a nuclear reactor in the area, bringing closer the resumption of the third reactor in Japan under tougher safety rules introduced after the 2011 Fukushima disaster.
"I will accept the resumption," Ikata Mayor Kazuhiko Yamashita told Ehime Gov. Tokihiro Nakamura at the prefectural office building in Matsuyama, referring to the No. 3 unit at Shikoku Electric Power Co.'s Ikata plant that cleared the Nuclear Regulation Authority's safety screening process in July.
The process to secure local approval is expected to effectively wrap up with the decision of the local governor, possibly to be announced next week. The prefectural and Ikata town assemblies have already approved the restart.
"I want to think well, including through the weekend," Nakamura told reporters after meeting the town mayor.
The No. 3 reactor is the fifth reactor acknowledged by regulators as safe enough to restart in line with a set of tougher safety requirements introduced in the wake of Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant disaster.
Of the five, Kyushu Electric Power Co.'s No. 1 and No. 2 reactors at the Sendai complex in Kagoshima Prefecture resumed operations on Aug. 11 and Oct. 15, respectively.
While community concerns persist about the use of nuclear reactors, Japan ended a nearly two-year period without nuclear power in August by rebooting one of the Sendai reactors and is moving to revive its reliance on nuclear power under the government's energy policy.

Ikata: Evacuation plans remain insufficient

October 22, 2015

Editorial: Evacuation measures insufficient to approve restart of Ikata nuclear plant

http://mainichi.jp/english/english/perspectives/news/20151022p2a00m0na026000c.html

Economy, Trade and Industry Minister Motoo Hayashi recently toured the No. 3 reactor at Shikoku Electric Power Co.'s Ikata Nuclear Power Plant in Ehime Prefecture, which has passed safety screenings by the Nuclear Regulation Authority (NRA). The minister then met with Ehime Gov. Tokihiro Nakamura and Mayor Kazuhiko Yamashita of the town of Ikata, which hosts the nuclear plant, and sought their understanding on reactivation of the reactor. The mayor is expected to agree to the central government's plan at an early date and the governor is to make a final judgment on the matter.
The Ikata Municipal Assembly and Ehime Prefectural Assembly have already agreed to restart the reactor. If the governor gives the green light, procedures for gaining consensus on the resumption of nuclear power generation at the local level will come to a close.

Nevertheless, evacuation plans for a nuclear accident remain insufficient. There is growing concern among many local residents about safety measures, and many oppose restarting the reactor. In addition, the NRA's procedures for restarting the reactor are yet to be completed. The steps include approval of a construction plan based on safety inspection results. Given the lack of preparation, Gov. Nakamura should not agree to the reactivation plan.

Inadequacy in evacuation measures is a common challenge faced by Kyushu Electric Power Co.'s No. 1 and 2 reactors at the Sendai nuclear plant in Kagoshima Prefecture, which were reactivated recently.

The national government has failed to draw a road map to lower dependence on nuclear power despite promising to do all it can in this respect. Serious questions must be raised over the clear move by the government of Prime Minister Shinzo Abe to return to nuclear power by reactivating idled reactors when the safety of local residents has yet to be fully ensured.

The Ikata plant is located at the base of the Sadamisaki Peninsula, which stretches from the island of Shikoku toward Kyushu, and about 5,000 people live in the western part of the peninsula. According to the evacuation plan drawn up by the Ehime Prefectural Government and other entities, in the event of a nuclear accident at the Ikata plant, those who live on the west side of the peninsula would evacuate east of the plant before radioactive materials were discharged into the air. If evacuation routes over land could not be secured due to an earthquake or other disasters, the residents would instead flee to Oita Prefecture in Kyushu by sea. And if evacuation routes by land or air fail due to weather conditions such as a storm, the residents would be ordered to stay indoors.

The government's nuclear accident prevention committee approved of this evacuation plan earlier this month, stating that it is "concrete and reasonable." However, there are just four shelters for radiation protection in the area, and together they can accommodate only about 470 people. It is also questionable whether transportation by sea and other routes can be secured smoothly.

It's not just locals on the Sadamisaki Peninsula who are worried about evacuation plans in the event of a nuclear disaster. When the cities of Seiyo and Uwajima in Ehime Prefecture, both located within 30 kilometers of the Ikata plant, surveyed the heads of neighborhood associations and city assembly members who attended information sessions for local residents on the restart of the nuclear plant, a majority of respondents were against the plan to reactivate the plant's reactors.

Ehime Gov. Nakamura has repeatedly asked the national government to take final responsibility if a severe nuclear accident such as the one at the Fukushima No. 1 Nuclear Power Plant occurs. Nakamura appreciated comments made during a nuclear accident prevention panel meeting by Prime Minister Abe, who said that it is the national government's important duty to protect the lives of people and their properties in the event of a nuclear accident, and that the government will act responsibly to handle the situation in such a case.

It is only natural for the national government to be held accountable for a nuclear disaster, however, and a prime minister acknowledging such responsibility does not change the fact that the local governments hosting and surrounding nuclear stations would be the ones to stand at the forefront when an accident occurs.

The central government plans to hold a comprehensive nuclear disaster drill at the Ikata plant in November. The Yamaguchi and Oita prefectural governments will join the exercise since some parts of Yamaguchi Prefecture fall within the 30-kilometer zone around the plant, and Oita Prefecture will accommodate nuclear evacuees. Gov. Nakamura should take the outcome of the exercise into consideration when deciding to restart the reactor.

We shall never forget the lesson from the Fukushima meltdowns -- that a severe nuclear accident that puts local residents in danger could occur at any time.

Shikoku Electric satisfied

October 26, 2015

Shikoku Electric welcomes governor's consent

http://www3.nhk.or.jp/nhkworld/english/news/20151026_24.html

Oct. 26, 2015 - Updated 05:15 UTC+1

The president of Shikoku Electric Power Company has told reporters that the governor's agreement to the restart of the No. 3 reactor at the Ikata nuclear power plant was a big step forward.

Hayato Saeki said he will continue to make efforts to further improve the safety and reliability of the plant.

He said he will seek the restart of the reactor as early as possible.

But he refrained from commenting on the specific timing of the restart, saying that screening is still underway.

Ehime Governor approves restart

October 26, 2015

Ehime governor approves restart of Ikata nuclear plant

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201510260036

THE ASAHI SHIMBUN
MATSUYAMA--Ehime Governor Tokihiro Nakamura gave the go-ahead on Oct. 26 to resume operations at the Ikata nuclear power plant, becoming the second prefectural government to approve the restart of idle reactors under stricter safety guidelines.
"This is a decision made with an extremely large responsibility attached," Nakamura told Hayato Saeki, Shikoku Electric Power Co. president, at the Ehime prefectural government building. "I made the decision after comprehensively considering the thinking of the central government, the posture of Shikoku Electric in working toward resumption of operations and discussions at the local level."

The No. 1 and No. 2 reactors of the Sendai nuclear power plant in Kagoshima Prefecture were the first to go back online under the tighter safety regulations implemented by the Nuclear Regulation Authority following the 2011 accident at the Fukushima No. 1 nuclear power plant.
Shikoku Electric, the operator of the Ikata No. 3 reactor, could resume operations as early as this winter after it finalizes approval paperwork with the NRA and completes inspections before the resumption of operations.
The governor also presented to Saeki nine points on which he wants cooperation from Shikoku Electric, which include a thorough system of notification during emergencies; continued briefings to local residents; and support for disaster prevention measures to be taken by the prefectural and municipal governments.
Nakamura later held a news conference where he explained the reasoning behind his approval, as well as the measures he asked Shikoku Electric to take.
Ikata Mayor Kazuhiko Yamashita met with Nakamura on Oct. 22 and conveyed the town government's consent to resume operations at the Ikata plant. Nakamura was expected to meet with Motoo Hayashi, the economy minister, in Tokyo on Oct. 26 and pass on his approval for the resumption of operations.
No local government in Ehime Prefecture that lies within the 30-kilometer radius from the Ikata nuclear plant expressed opposition to the restart. The radius denotes the area for concentrated disaster prevention measures.
The approval from the Ehime prefectural and Ikata town governments comes about three months after the NRA approved in July the basic policy for safety measures laid out by Shikoku Electric.
The No. 3 reactor at the Ikata plant began commercial generation of electricity in December 1994. It is a pressurized-water type reactor, which is different from those at the Fukushima No. 1 plant. The two reactors that have resumed operations at the Sendai plant are also pressurized-water types, as are the No. 3 and No. 4 reactors at the Takahama nuclear plant in Fukui Prefecture, which is also pushing for the resumption of operations.
The Ikata reactor was converted in March 2010 to plutonium-thermal (pluthermal) power generation, which burns mixed oxide (MOX) fuel that contains plutonium extracted from spent nuclear fuel. Operations were halted in April 2011 for normal safety inspections.
Nakamura's consent is the first granted for a pluthermal power plant since the Fukushima nuclear accident.

Local gov. approves 3rd reactor restart under tougher rules

http://mainichi.jp/english/english/newsselect/news/20151026p2a00m0na014000c.html

MATSUYAMA, Japan (Kyodo) -- The governor of Ehime Prefecture in western Japan gave approval Monday for the restart of a nuclear reactor that will be the third in the country to resume operations under tougher safety rules introduced after the 2011 Fukushima disaster.
Ehime Gov. Tokihiro Nakamura conveyed his approval to restart the No. 3 unit at Shikoku Electric Power Co.'s Ikata plant in a meeting with the utility's President Hayato Saeki at the prefectural office building.
"It would be better not to have (a nuclear plant). Still, we have no choice but to implement the most advanced safety measures and live with it until we find alternative energy to nuclear power," Nakamura said at a press conference after the meeting.

The No. 3 unit at Ikata is one of five reactors acknowledged by regulators as safe enough to restart in line with a set of tougher safety requirements introduced in the wake of the disaster at Tokyo Electric Power Co.'s Fukushima Daiichi nuclear power plant.
Japan ended a nearly two-year period without nuclear power in August when one of the Sendai reactors run by Kyushu Electric Power Co.in southwestern Japan was brought back online amid continuing public concerns about nuclear energy.
The Japanese government welcomed the decision by the Ehime governor, as it looks to generate about a fifth of the nation's overall electricity with nuclear power plants in 2030, compared with roughly 30 percent before the Fukushima disaster, in an effort to cut greenhouse gas emissions and lower fuel costs.
"There is no change in the government's policy of proceeding with the restart of reactors that meet the Nuclear Regulation Authority's stringent regulations by gaining local understanding" of restarts, Chief Cabinet Secretary Yoshihide Suga said at a regular press conference.
About 30 protesters gathered in front of the prefectural office building, demanding the utility stop the resumption.
"This is an important issue that affects the lives of (local) residents but the governor is not considering it seriously," said Tsukasa Wada, 63, a member of a local group aiming to prevent the restart of the reactor.
The reactor had cleared the Nuclear Regulation Authority's safety screening process in July. But the timing of the restart is expected to be January or later because some necessary procedures remain, including obtaining the authority's approval for detailed designs of equipment at the facility.
The governor's nod came as the final step in the process of securing local approval. The mayor of Ikata town as well as the prefectural and Ikata assemblies have already given their consent.
Kyushu Electric's Nos. 1 and 2 reactors at the Sendai complex in Kagoshima Prefecture resumed operations on Aug. 11 and Oct. 15, respectively, becoming the first two reactors to return to operation among 26 reactors for which Japanese utilities have applied for regulatory safety reviews to restart.
October 26, 2015 (Mainichi Japan)

Ehime governor agrees to restart nuclear plant

http://www3.nhk.or.jp/nhkworld/english/news/20151026_14.html

Oct. 26, 2015 - Updated 02:18 UTC+1
The governor of Ehime Prefecture in western Japan has decided to approve the restart of a nuclear reactor in his prefecture.

In a meeting on Monday, Tokihiro Nakamura informed the president of Shikoku Electric Power Company that he agrees to the restart of the No. 3 reactor at the Ikata nuclear power plant.

The plant is the 2nd to obtain approval for a restart from the local prefecture and municipality under new regulations introduced after the 2011 accident in Fukushima. The town of Ikata has already agreed to restart the reactor.

The reactor passed a screening by the Nuclear Regulation Authority in July. But the regulators have yet to

approve its restart and inspect new equipment.

Shikoku Electric is expected to restart the reactor next spring or later.

Explanations...

October 26, 2015

Governor explains approval of restart

http://www3.nhk.or.jp/nhkworld/english/news/20151026_22.html

Oct. 26, 2015 - Updated 04:43 UTC+1
The governor of Ehime Prefecture says he decided to approve the restart of a reactor at the Ikata nuclear power plant only after thorough study.

Tokihiro Nakamura was speaking to reporters after informing Shikoku Electric Power Company that he approves of the restart of the No. 3 reactor at the plant.

He said the matter has been a very sensitive one for the prefecture in the wake of the accident at the Fukushima Daiichi nuclear power plant in 2011.

The governor said he concluded that even if a tsunami hit the area, the Ikata plant would not be seriously affected like the Fukushima Daiichi plant was.

Nakamura said there is currently no alternative energy source that meets the 3 requirements -- power output, cost, and stable supply. He said that for now nuclear power generation should be accepted with appropriate safety measures.

The governor explained his prefecture's requests to the central government and the power plant operator regarding safety measures against earthquakes and accidents.

He said the prefectural government has received satisfactory responses over the past 4 years. The governor said he decided to approve the restart based on the government's policy, the attitude of the power company, and the consent of the town of Ikata.

Priority on safety?

October 26, 2015

Suga: Safety important in restart of plant

http://www3.nhk.or.jp/nhkworld/english/news/20151026_26.html
Oct. 26, 2015 - Updated 05:33 UTC+1
Chief Cabinet Secretary Yoshihide Suga says it is significant that the Governor of Ehime Prefecture has agreed to the restart of the No. 3 reactor at the Ikata nuclear power plant in his prefecture.

Suga said it is very important that the operator of the plant, Shikoku Electric Power Company, place top priority on safety in accordance with legal procedures such as the government's approval and inspections.

He added the government expects the Nuclear Regulation Authority will carry out its procedures rigorously and smoothly.

Sendai No.2 reaches full capacity

Sendai No.2 reactor reaches 100% capacity

Nov. 1, 2015 - Updated 08:08 UTC+1

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

The operator of the Sendai nuclear plant in southwestern Japan has raised the output of its second reactor to full capacity.

Officials with the Nuclear Regulation Authority will conduct final inspections of the No.2 reactor in mid-November. If it passes, it will resume full commercial operations.

The Sendai nuclear plant became the first in Japan to meet the new regulations introduced after the 2011 accident at the Fukushima Daiichi plant.

The No.1 reactor restarted in August, and the No.2 reactor on October 15th.

The operator, Kyushu Electric Power Company, continued test operations at the No.2 reactor while gradually increasing its output and checking whether the equipment functioned properly.

The reactor achieved 100-percent output on Sunday morning. Checks will now be conducted on the water quality, temperatures and pressures in the reactor.

If there are no problems, the reactor will undergo final inspections by the nuclear authority.

It stands to become the second reactor to resume commercial operations under the new regulations following the No.1 reactor at the plant.

Tsuruga: Safe to restart?

November 5, 2015

Japan Atomic Power pushes for Tsuruga reactor restart despite fault warning

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201511050054

THE ASAHI SHIMBUN

Japan Atomic Power Co. on Nov. 5 applied for a screening of whether its Tsuruga plant reactor meets safety regulations put in place after the Fukushima nuclear disaster.

But getting the green light from the Nuclear Regulation Authority will prove a difficult process.

The company must present evidence to the NRA that will invalidate the findings of two panels of experts. Their separate reports concluded that a seismic fault line running beneath the power station's No. 2 reactor building in Fukui Prefecture is probably active.

Japan Atomic Power has pledged to provide evidence to the contrary during the screening process.

The NRA has said that it will pay attention to the panels' reports as "significant findings" when it examines the condition of the reactor.

The regulations, which came into force in 2013, prohibit key facilities such as reactor buildings from being located directly above an active fault line.

But current arrangements allow electric power companies to apply for an NRA screening regardless of the panels' assessments.

Japan Atomic Power was established in 1957 to lead the nuclear power development in Japan, with regional electric utilities forming the bulk of its shareholders.

The No. 2 reactor, with an output of 1.16 gigawatts, began commercial operations in 1987.

Of Japan's fleet of 43 reactors, two at Kyushu Electric Power Co.'s Sendai nuclear power plant in Kagoshima Prefecture have gone back online after clearing the new regulation.

Tsuruga screening

November 5, 2015

Tsuruga reactor to undergo screening

http://www3.nhk.or.jp/nhkworld/english/news/20151105_30.html

Nuclear & Energy

Nov. 5, 2015 - Updated 10:46 UTC+1

The operator of the Tsuruga nuclear power plant in central Japan has applied for a safety screening of its reactor. But some experts say an active fault lies beneath the unit.

The Japan Atomic Power Company submitted the request to nuclear regulators on Thursday. The power company wants to restart the No. 2 reactor at the plant in Fukui Prefecture on the Sea of Japan coast.

The screening is a prerequisite for bringing reactors back online under stricter safety regulations

introduced after the 2011 nuclear accident in Fukushima.

The new regulations ban the construction of reactor buildings and other key structures above a fault that could move in the future.

An expert panel from the Nuclear Regulation Authority assessed the Tsuruga plant in May 2013 and in March of this year. It concluded that the No. 2 reactor stands directly above a fault that could shift in the future.

But the Japan Atomic Power Company is challenging the panel's conclusions. The company maintains that there are no faults that could move within the premises of the plant.

The company compiled reports on its new findings from fresh drilling surveys and other on-site studies it has carried out over the past year. And the utilities submitted them to the nuclear regulator.

Nobutaka Wachi, a managing director at the company, said he believes its argument will prove to be correct.

He also said the company wants the regulator to confirm the safety of the reactor and allow it to restart.

Attention is focused on whether the regulator will overturn the expert panel's conclusion.

Tsuraga 2

09.11.2015_No221 / News in Brief

JAPC Files Application For Examination Of Tsuruga-2

http://www.nucnet.org/all-the-news/2015/11/09/japc-files-application-for-examination-of-tsuruga-2

9 Nov (NucNet): Japan Atomic Power Company (JAPC) has filed an application with the Nuclear Regulation Authority (NRA) for an examination of the compatibility with new regulatory standards of its Tsuruga-2 nuclear reactor unit in Fukui Prefecture, southwest Japan. Earlier, the NRA approved an evaluation report by its expert panel concluding that a fault zone beneath the Tsuruga-2 unit was active. The Japan Atomic Industrial Forum said given that JAPC will have to convince the NRA to overturn the evaluation if the unit is to pass the compatibility examination, an early restart of the 1,108-megawatt pressurised water reactor is unlikely. Applications have been filed by various power companies to restart 26 units, of which five have already cleared examinations to show they comply with the new standards, introduced following the March 2011 Fukushima-Daiichi accident.

Sendai No.1 rector resumes commercial operations

November 17, 2015

Second reactor brought back fully online in Japan

Nov. 17, 2015 - Updated 12:53 UTC+1

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

The number 2 reactor at Kyushu Electric Power Company's Sendai nuclear plant in southwestern Japan has resumed commercial operations.

It is the second one in the country to restart under new regulations that took effect following the 2011 Fukushima Daiichi nuclear crisis. The first reactor to go online was the number 1 unit at the same plant.

On Tuesday, inspectors from the nuclear regulator's secretariat conducted final pre-service checkups in the plant's control room. They looked at the reactor's temperatures, as well as the condition of a steam generator and other equipment.

The officials later issued a certificate to prove the completion of the inspection saying no abnormalities had been found.

The reactor returned to commercial operation at 4 PM after more than 4 years.

It had been offline following a routine inspection 6 months after the Fukushima nuclear disaster. It was turned on last month, and was undergoing a check by the regulator.

Second reactor in Japan brought back fully online after Fukushima nuclear crisis

http://www.japantimes.co.jp/news/2015/11/17/national/second-reactor-japan-brought-back-fully-online-fukushima-nuclear-crisis/#.VktFWb8R-ot

Kyodo
FUKUOKA – Kyushu Electric Power Co. began full-scale commercial operations Tuesday of the second reactor at its two-unit nuclear plant in Kagoshima Prefecture after clearing final inspections by the Nuclear Regulation Authority.
The No. 1 unit at the Sendai plant returned to commercial service Sept. 10, the first under safety regulations adopted in the wake of the 2011 Fukushima disaster. Reactor 2 at the plant is the second.
The NRA's final inspection lasted two days. The No. 2 reactor was restarted Oct. 15 and began power generation and transmission Oct. 21. Output was raised gradually until the reactor reached full capacity Nov. 1.
Before the two units were reactivated, no electricity was generated in Japan with nuclear power for nearly two years as all commercial reactors were gradually taken offline amid safety concerns in the wake of the March 2011 Fukushima meltdowns.

The Abe administration is pushing nuclear power as a key electricity source and is promoting the restart of idled reactors across the country even though public sentiment remains strongly negative.
Besides the two-unit Sendai plant, two reactors at Kansai Electric Power Co.'s Takahama plant in Fukui Prefecture and one reactor at Shikoku Electric Power Co.'s Ikata plant in Ehime Prefecture have obtained the necessary safety clearance.
The reactor at the Ikata plant is expected to be reactivated next year after local authorities agreed last month to the restart.
Stricter safety regulations for nuclear reactors were adopted after they were brought to a standstill in the wake of the catastrophe at Tokyo Electric Power Co.'s Fukushima No. 1 plant in 2011.

Takahama: One court injunction to overturn and public opinion to consider

November 25, 2015

Takahama reactors unlikely to restart this year

http://www3.nhk.or.jp/nhkworld/english/news/20151125_34.html
Nov. 25, 2015 - Updated 11:23 UTC+1
Japan's Kansai Electric Power Company, or KEPCO, says it will delay the restart of 2 nuclear reactors in central Japan.

The company was aiming to reactivate the Number 3 reactor at the Takahama nuclear plant in Fukui Prefecture in late December and the Number 4 reactor in mid-January.

On Wednesday the company submitted to regulators a new schedule, restarting Number 3 in late January and Number 4 in late February.

The utility also plans to move nuclear fuel back into Number 3 in late December and Number 4 in late January.

In February, the 2 reactors cleared new regulations introduced after the March 2011 Fukushima nuclear accident. In August, nuclear regulators began the final stage of inspections, but the process has fallen behind schedule.

The new schedule could also see delays. In April, a district court in Fukui issued a provisional injunction blocking restarting the reactors. They cannot operate until the court overturns the injunction.

Fukui Governor Issei Nishikawa has also said local consent is necessary to restart the reactors.

Takahama mayor OK with restart (despite injunction)

December 2, 2015

Takahama mayor to approve nuclear plant restart

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Dec. 2, 2015 - Updated 03:34 UTC+1
The mayor of Takahama Town in Fukui Prefecture on the Sea of Japan coast has decided to agree to the restarts of 2 nuclear reactors at a power plant in his town.

In February, the numbers 3 and 4 reactors at the Takahama nuclear plant met the requirements introduced by the Nuclear Regulation Authority after the 2011 Fukushima Daiichi accident.

The operator, Kansai Electric Power Company, has sought agreements from the host municipality and prefecture for the restarts. The company hopes to have the reactors back online early next year.

Takahama Mayor Yutaka Nose is expected to officially announce his decision on Thursday. He said that what he believes to be the conditions for the restarts have now been met.

One of the conditions is the securing of public understanding of the need for nuclear power plants. He said he confirmed at a meeting with the industry minister last month that the government will take responsibility for this.

Mayor Nose referred to how to effectively evacuate residents beyond administrative boundaries in the case of a nuclear accident. He said the evacuation issue will also be taken up at a meeting hosted by the Cabinet Office.

The Takahama town assembly has already agreed to the restarts, but the Fukui prefectural assembly and the Fukui governor have yet to reveal their intentions.

Meanwhile, the reactors cannot be restarted until a provisional court injunction is lifted. The Fukui District Court issued the injunction in April.

Takahama: What about evacuation?

December 4, 2015

Mayor OKs reactor restarts at Takahama nuke plant; questions remain on evacuation plan

http://mainichi.jp/english/english/newsselect/news/20151204p2a00m0na014000c.html

TAKAHAMA, Fukui -- The mayor of this coastal town gave consent to reactivating the No. 3 and No. 4 reactors at the Takahama nuclear plant on Dec. 3, in defiance of a landmark district court decision that

barred the reactors from being restarted as well as lingering skepticism over the town's nuclear accident evacuation plan.

Mayor Yutaka Nose gave the green-light during a town assembly meeting, with the aim of reinvigorating the local economy, which depends heavily on the nuclear complex.

"After the Fukushima nuclear disaster, measures required (for nuclear facilities) changed drastically," Nose remarked at the outset of the meeting, adding, "We will respond to the matter from a comprehensive perspective while placing top priority on safety."

The town is home to the No. 3 and No. 4 reactors of Kansai Electric Power Co.'s Takahama nuclear plant. In April this year, the Fukui District Court issued a provisional injunction ordering the reactors remain suspended, and legal judgment on the case has yet to be finalized. The town's resident evacuation plan in the event of a nuclear accident is also called into question in terms of its viability.

After the town assembly meeting on Dec. 3, Nose told reporters, "The judicial branch made its decision based on the law, while I made my decision as an administrator in consideration of residents' safety and disaster prevention schemes."

All 14 town assembly members were present at the meeting, while only 15 people occupied the gallery seats. The mayor's declaration to approve the reactor restarts caused a mixed reaction among the observers, with anti-reactivation residents sighing audibly, while a pro-restart resident questioning why it took so long for the mayor to give the go-ahead.

It's been almost three years and nine months since all four reactors at the Takahama plant were suspended.

"I haven't heard of any cases of local businesses going under due to the suspension of the plant, but its repercussions vary depending on the type of business," said a town official.

The town has financially benefited from the nuclear complex, hosting some 1,000 workers during regular inspections of the facility -- a far greater figure than usual. A man in his 80s in the construction business said, "We have a lot of civil engineering work to do thanks to the implementation of new regulatory standards (for nuclear reactors), but stores and inns that had anticipated demand from regular inspections are having a tough time."

In the meantime, anti-nuclear disaster measures are not fully in place yet. Under the town's evacuation plan, residents are supposed to flee in family cars or buses prepared by the municipal and prefectural governments to the Fukui Prefecture city of Tsuruga -- some 50 kilometers east of Takahama -- or to the Hyogo Prefecture city of Takarazuka, among other areas. Residents will be screened for radioactive materials en route to their evacuation destinations. If necessary, residents will undergo a decontamination process.

According to an estimate by the Fukui Prefectural Government, most of the approximately 55,000 residents within a 30-kilometer radius of the Takahama plant will be able to get outside that radius within 11 hours of an evacuation order. However, the escape routes include the two-lane Maizuru-Wakasa Expressway and National Route 27.

"If the news of a nuclear accident breaks, residents would panic," said Yukihiro Higashiyama, 69, head of the citizens group "Furusato o mamoru Takahama Oi no kai" (Association of Takahama and Oi for protecting our hometowns). "Because there are many narrow roads, car accidents may also happen. The evacuation plan is an armchair theory only."

Kaoru Takamura on restarts

December 5, 2015

INTERVIEW/ Kaoru Takamura: No one willing to take responsibility for restarting nuclear reactors

http://ajw.asahi.com/article/views/opinion/AJ201512050005

By SATOSHI DAIGUJI/ Staff Writer

OSAKA--An author who wrote a novel themed on a terrorist attack on a nuclear plant 20 years before the Fukushima disaster unfolded criticized the government for seeking to restart idled reactors as if on cruise control.

"In Japan, there is no stopping something once it has been set in motion," Kaoru Takamura, the 62-year-old author of "Kami no Hi" (Divine fire), told The Asahi Shimbun in a recent interview. "They just go on for no particular reason (continuing policies of the past). This is true not just of nuclear power policy, but of everything.

The Naoki Prize-winning author said only a minimal number of reactors should be allowed to be brought back online to maintain the necessary nuclear technology for decommissioning others and that all other reactors should be scrapped.

Kyushu Electric Power Co. restarted the No. 1 reactor of the Sendai nuclear power plant in Kagoshima Prefecture in August, the first among the nation's 43 reactors to be brought back online under new safety regulations introduced after the Fukushima disaster.

The reactivation put an end to a period without nuclear power, which lasted for a year and 11 months. The utility restarted the No. 2 reactor of the Sendai plant in October.

The Abe administration has said the government will seek to restart nuclear reactors once they meet the new safety standards.

Excerpts from the interview follow:

* * *

Question: The No. 3 and No. 4 reactors of the Takahama nuclear power plant in Fukui Prefecture, operated by Kansai Electric Power Co., are being prepared for restarts, whereas the governor of Ehime Prefecture has given his approval to restarting the No. 3 reactor of Shikoku Electric Power Co.'s Ikata nuclear power plant. How do you assess the situation?

Takamura: I don't see why the utilities are moving to reactivate their nuclear reactors. Oil prices have fallen, and I don't think thermal power generation is as expensive as it once was. I would say there is no rational reason for rushing to restart reactors, much less at the cost of drawing public criticism.

Q: Kansai Electric and all other regional utilities have returned to the black by the April-September 2015 fiscal period. What is your response to that?

A: That is another reason I don't understand why they are moving to reactivate their reactors. It will be impossible, at any rate, to construct new reactors, and you will have to decide to significantly cut the number of nuclear reactors somewhere along the way at a time when more and more reactors reach a 40-year statutory limit of operations.

After all, nobody in the central government probably wants its pro-nuclear policy to be modified. Japan has relied on the peaceful use of nuclear power as a pillar of its economic policy, and nobody wants to have that course changed.

Q: Japan's nuclear power policy could have been altered, given the 2011 triple meltdown at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant. What do you think?

A: In Japan, there is no stopping something once it has been set in motion. I think everything boils down to that. They just go on for no particular reason. This is true not just of nuclear power policy, but of everything. Nobody takes responsibility. Nobody makes a decision. Nobody thinks about the future.

The way the Fukushima nuclear disaster was dealt with has left an enormous problem. I think TEPCO should have been made to take the responsibility through and through.

Q: Do you think Japanese society is not able to clearly assign responsibility to a party accountable before going on to the next step?

A: No, it isn't. And that was also the case with the war (World War II). Now, the Fukushima nuclear disaster is being left to fade into oblivion without anyone taking responsibility for the catastrophe. But nothing has ever been settled--such as the issue of radioactive water and the ways to remove debris (melted nuclear fuel).

I visited areas seriously affected by the nuclear disaster on March 11 last year (the third anniversary of the Great East Japan Earthquake and tsunami, which triggered the nuclear accident). I wonder if politicians are seeing what things are like on the ground there. Once you have seen that, I don't believe you will ever want to bring nuclear reactors back online. The areas were deserted and dosimeters kept beeping.

Q: What motivated you to write "Kami no Hi," a work of fiction, in 1991?

A: It's very simple. The Persian Gulf War was going on at the time, and a bunker-busting bomb of the United States was destroying an underground facility built beneath the desert. And the facility had a concrete barrier that was 5 meters thick. I saw that on the news, and I said to myself, "Oh, my God."

The concrete barrier that shields a nuclear reactor containment vessel is only about 1 meter thick at its thinnest. That could be penetrated by a single bomb. I thought something terrible could happen if a contingency were to take place on the Korean Peninsula. In addition, no proper security was in place at nuclear power plants in Japan, so terrorists could easily infiltrate them and blow up a control room. That's so scary, I said to myself, though the possibility of an earthquake like the one in 2011 hitting a nuclear plant never crossed my mind at the time.

Q: Do you feel nuclear plants also pose a risk in the Kansai region?

A: All of western Japan would be destroyed if a major disaster were to hit the Ikata nuclear plant. The same can be said of the Takahama nuclear plant. The Kansai region would become uninhabitable if the waters of Lake Biwako were to be contaminated. I suppose management people in Kansai Electric and Shikoku Electric are probably thinking hopefully that no disaster will occur in their own lifetime, or something like that.

The Kansai region has long had nuclear reactors sited nearby, beginning with the Mihama plant's No. 1 reactor (which began operations in 1970). They were already there when you realized it. Like many in the region, I would go, in my childhood, to Fukui Prefecture to swim in the sea, while sighting nuclear reactors. Kansai residents are half-resigned to the prospect that everything would be finished if a nuclear disaster were to hit.

Q: There is a deep-rooted view that Japan, with its scarce natural resources, has to rely on nuclear power. What do you say to that?

A: I am of the generation of people who believed, around the time nuclear fuel was "lit" for the first time in Japan (in 1957) in Tokai, Ibaraki Prefecture, that science and technology will open up the future. So we don't feel put off by the use of nuclear power as one of the leading-edge technologies. But there are other factors--wars, earthquakes and humans. Humans always commit errors. I have concluded that, because of various circumstances outside the scope of science and technology, we should not be using nuclear power in the world today.
Q: So do you believe that no nuclear reactor should be restarted?
A: Well, I wouldn't say we should go nuclear-free no matter what because you cannot just let nuclear technology die out at a time when the decommissioning of reactors will absolutely be unavoidable in the years to come. We need to define a clear-cut policy, whereby we pick out a clutch of nuclear reactors and bring them back online for the specific purpose of decommissioning others, and scrap all the other reactors.
If utilities are to incur any major losses by writing off impairment from the formal decommissioning of their nuclear reactors, we should help redress their account books somehow, such as by ensuring the central government will temporarily cover those losses. I suppose such a measure would prompt utilities to take steps toward scrapping their reactors.
I think the costs for decommissioning the reactors will be much cheaper than the expenses for dealing with the aftermath of the Fukushima nuclear disaster. I would say that's what rationality is all about. If we were to proceed pointlessly with restarting reactors and if another disaster were to occur elsewhere, we could no longer afford to spend as much money as we did for the Fukushima accident.
* * *
Born in Osaka, Kaoru Takamura, who debuted as a writer with her novel "Ogon wo Daite Tobe" (Fly with the gold) in 1990, won the Naoki Prize, a prestigious literary award, for "Makusu no Yama" (MARKS) in 1993. Her latest work is "Kukai," which partly touches on areas of Fukushima Prefecture that were affected by the nuclear disaster.

Miyazu: "We can in no way accept it"

December 10, 2015

Miyazu mayor in Kyoto Pref. opposes restart of Takahama nuclear reactors

http://mainichi.jp/english/articles/20151210/p2a/00m/0na/016000c
KYOTO -- Miyazu Mayor Shoji Inoue in Kyoto Prefecture has voiced his opposition to the planned reactivation of the No. 3 and 4 reactors at the Takahama Nuclear Power Plant in the Fukui Prefecture town of Takahama.
"In the present circumstances, we can in no way accept it," Inoue told the city assembly on Dec. 8. Miyazu city is not granted the right to say "yes" or "no" to any plan to restart the Takahama nuclear plant although it is located within 30 kilometers from the atomic complex. It is the first time for a local chief executive of such a municipality to declare their opposition to reactivating the reactors.
Asked by a city assembly member about his view on the planned reactivation of the Takahama reactors during a question-and-answer session, Inoue said, "In light of the intentions of the city assembly and citizens, we can in no way accept it."

There are three prefectures and 12 municipalities that are located within 30 kilometers from the Takahama plant, and most of Miyazu city falls within the 30-kilometer zone. **Plant operator Kansai Electric Power Co., however, singled out the Fukui Prefecture town of Tahakama that hosts the nuclear plant and Fukui Prefecture as the only local bodies that can agree or disagree to reactivation of the Takahama reactors.**

Fukui Pref. approves restart of Nos. 3 and 4

December 17, 2015
Fukui prefecture approves restart of 2 reactors
http://www3.nhk.or.jp/nhkworld/english/news/20151217_35.html

Dec. 17, 2015 - Updated 13:52 UTC+1

The Fukui Prefectural Assembly has approved the restart of two reactors at the Takahama nuclear power plant on the Sea of Japan coast.

The No. 3 and No. 4 reactors obtained safety clearance in February from Japan's nuclear watchdog, under stricter regulations introduced after the 2011 nuclear accident in Fukushima.

The plant's operator, Kansai Electric Power Company, has been seeking the permission of the host town and the prefecture to restart the reactors.

A draft resolution supporting of the move was submitted on Thursday to the plenary session of the prefectural assembly.

It met opposition from some members who said it's too early to make a decision on the matter. They said the local nuclear disaster evacuation plan has defects that need to be addressed first.

But the resolution was adopted by a majority vote.

Attention is now focused on Fukui Governor Issei Nishikawa. He said he'll make a decision on the restarts after hearing from experts and learning more about the central government's policies.

Nishikawa said Fukui is facing all kinds of nuclear power issues, including whether to decommission old reactors or extend their 40-year operational limit.

He said the central government needs to explain how it's going to address those problems.

The 2 reactors can't go back online until a provisional injunction issued in April by a local court is lifted. A decision is expected on the injunction next Thursday.

Takahama evacuation plan approved

December 18, 2015

Government OKs evacuation plan in key step for Takahama nuclear plant restart

http://www.japantimes.co.jp/news/2015/12/18/national/government-oks-evacuation-plan-key-step-takahama-nuclear-plant-restart/#.VnPTfr8R-if

Kyodo

The central government approved an evacuation plan Friday for residents near an idled nuclear power plant on the Sea of Japan coast, as it steps up efforts to bring more reactors back online following the 2011 Fukushima nuclear crisis.

A government commission gave the nod to an emergency plan for 180,000 people living within 30 kilometers of Kansai Electric Power Co.'s Takahama nuclear plant in Fukui Prefecture in the event of a serious accident.

The plan was presented to the Nuclear Emergency Preparedness Commission, chaired by Prime Minister Shinzo Abe, after it was finalized earlier in the week by the Cabinet Office as well as Fukui and neighboring Kyoto and Shiga prefectures.

"Should an accident occur, the government will take authority in responding to it," Abe said at a commission meeting.

The approved evacuation plan — the first covering neighboring prefectures — includes evacuation routes and facilities to be used as shelters, as well as rescue measures for people who may be left without an overland escape route. The Takahama plant, about 380 km west of Tokyo, is located at the base of the Otomi Peninsula.

The approval is an important step forward for the power company to resume operations at the plant after its No. 3 and No. 4 reactors cleared stricter safety regulations introduced after the Fukushima disaster.

The restart of the reactors would come after two units at Kyushu Electric Power Co.'s Sendai nuclear plant in Kagoshima Prefecture went back online this year in the first nuclear power generated under the tighter safety rules.

However, a court injunction in April has banned Kansai Electric from reactivating the Takahama units over safety concerns. The Fukui District Court will make a decision next week on the utility's appeal against the decision.

Despite strong public opposition to the restarts, the government is aiming for at least 20 percent of the nation's electricity to come from nuclear power by 2030.

On Thursday, the Fukui Prefectural Assembly gave its consent to the restart of the two reactors at the Takahama plant.

Industry minister Motoo Hayashi, who in charge of the country's energy policy, will likely meet with Fukui Gov. Issei Nishikawa on Sunday, with the governor expected to later express approval for the restarts, according to a source familiar with the matter.

"We will continue to make efforts to seek (public) understanding in a cautious manner," Hayashi said at a news conference.

Govt. OKs evacuation plan for Takahama plant

http://www3.nhk.or.jp/nhkworld/english/news/20151218_21.html

Dec. 18, 2015 - Updated 06:35 UTC+1

The Japanese government has decided on an evacuation plan for residents around the Takahama nuclear power plant in Fukui Prefecture, on the Sea of Japan.

The plan, which was approved on Friday at a meeting of the government task force on nuclear disaster preparedness, was drawn up by the central government as well as local authorities including Fukui Prefecture.

How to evacuate residents in the event of an accident poses a grave challenge to the authorities, as around 180,000 people live in the 30-kilometer zone that covers the 3 prefectures of Fukui, Kyoto and Shiga.

The plan includes securing accommodations for evacuees should they have to flee beyond prefectural boundaries.

At the meeting, Prime Minister Shinzo Abe said safety is the top priority. But he added that nuclear power is indispensable if resource-poor Japan is to secure a stable energy supply.

Fukui Governor Issei Nishikawa says he will judge whether to approve plans to restart 2 reactors at the Takahama plant after considering a final report of a prefectural panel of experts as well as the views of the central government.

Meanwhile, a court injunction has been in place since April barring the reactors from being brought online.

The Fukui District Court is expected to issue a decision on Thursday of next week on an objection filed by Kansai Electric Power Company, the operator of the Takahama plant.

Waiting for Fukui Governor's answer

December 20, 2015

Minister meets Fukui governor over plant's restart

http://www3.nhk.or.jp/nhkworld/english/news/20151220_21.html

Dec. 20, 2015 - Updated 16:23 UTC+1

Japan's industry minister has sought understanding from the governor of Fukui Prefecture for restarting a local nuclear power plant.

Motoo Hayashi met Governor Issei Nishikawa after inspecting the Takahama plant on Sunday.

Hayashi said the government would take charge of dealing with a possible nuclear accident. He also said the government plans to hold briefings across Japan to convince the public that the country needs nuclear power.

Nishikawa replied that he appreciates the government's policy.

The operator of the Takahama plant, Kansai Electric Power Company, is undergoing the final screening for restarting the No.3 and No.4 reactors.

The mayor of Takahama Town and the Fukui prefectural assembly have given their consent for the restart.

Nishikawa is expected to make a decision on the issue.

The Fukui District Court issued a provisional injunction in April blocking the restart of the 2 reactors. The plant's operator has filed an objection.

The court is scheduled to give a judgment on the matter on Thursday.

Fukui Governor OKs restart

December 22, 2015

Governor approves Takahama plant restart

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Dec. 22, 2015 - Updated 04:46 UTC+1

The governor of Fukui Prefecture has approved the restart of 2 reactors at the Takahama nuclear power plant.

Governor Issei Nishikawa announced his decision on Tuesday morning. The approval follows that of the mayor of Takahama, the town hosting the plant.

It is the third plant that has been approved for a restart by the hosting prefecture and municipality after the introduction of new government regulations following the March 2011 Fukushima Daiichi accident.

The operator of the Takahama plant, Kansai Electric Power Company, is undergoing final inspection for

the restart.

It plans to place fuel rods into the No. 3 reactor later this month and into the No.4 reactor in late January. It aims to restart each reactor a month after the procedure.

But the restart may not go according to plan. A district court issued a provisional injunction banning the move in April.

Kansai Electric has filed an objection to the injunction. The court will rule on the objection on Thursday.

Fukui Governor OKs restart (2)

December 22, 2015

Fukui gov. OKs restart of Kansai Electric nuclear reactors

http://mainichi.jp/english/articles/20151222/p2g/00m/0dm/056000c

FUKUI, Japan (Kyodo) -- As Japan seeks to push ahead with the resumption of nuclear power generation following the 2011 Fukushima nuclear crisis, the Fukui governor announced Tuesday he has approved the restart of two nuclear reactors in the prefecture.

Gov. Issei Nishikawa gave the go-ahead for Kansai Electric Power Co. to reactivate the Nos. 3 and 4 reactors at its Takahama plant on the Sea of Japan coast. The utility is looking to restart the No. 3 unit in late January and the No. 4 unit in late February.

However, a court injunction issued in April bans Kansai Electric from reactivating the Takahama units due to safety concerns. The Fukui District Court will make a decision Thursday on an objection filed by the utility against the injunction.

The governor's announcement came after industry minister Motoo Hayashi and Kansai Electric President Makoto Yagi met with him Sunday and Monday, respectively, to secure his consent for the restart.

"I gave comprehensive consideration to the country's and the operator's policy and reached a conclusion" on the restart, the governor said.

Kansai Electric's Yagi said in a release that his company will make best efforts for thorough safety management to prevent an accident like the Fukushima disaster from happening again.

Japan ended a nearly two-year period without nuclear power when two reactors at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture were brought back online earlier this year.

The governor of Ehime Prefecture gave approval for the reactivation of a reactor at Shikoku Electric Power Co.'s Ikata plant in October.

The Fukui governor also cited approval by the local prefectural assembly and the mayor of Takahama as well as safety checks conducted by the prefecture as key factors for his decision, on top of safety clearance by the Nuclear Regulation Authority.

Nishikawa said earlier supporting the local economy, creating new jobs and gaining public understanding would be necessary conditions for deciding in favor of restarting the reactors.

The reactivation should "stabilize employment and boost the economy" in the region, Yasutaka Tanaka, a 59-year-old local gas station owner, said.
Tadashi Matsuda, one of those who filed for the injunction, said the governor had acted prematurely as a court decision has yet to be issued.

Fukui Governor OKs restart (3)

December 22, 2015

Despite injunction, Fukui governor gives green light to restart nuclear reactors

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201512220073
By KEIBU HORIKAWA/ Staff Writer
FUKUI--The Fukui governor on Dec. 22 approved the restarts of two reactors at the Takahama nuclear plant, despite a court injunction that forbids such operations because of the dangers posed by earthquakes.
Kansai Electric Power Co., operator of the plant, has filed an objection to the injunction issued in April by the Fukui District Court. The district court is expected to announce a decision on the matter on Dec. 24.
The injunction was sought by residents living in an area 50 to 100 kilometers from the nuclear plant.
Asked why he did not wait to announce his approval until after the court's decision, Governor Issei Nishikawa said at a Dec. 22 news conference: "There is no particular reason. The timing should not be the issue."
Fukui became the third prefectural government to give the nod to restarting reactors, following Kagoshima and Ehime prefectures, under new nuclear safety regulations that took effect in 2013 after the 2011 Fukushima nuclear disaster.
Of Japan's 43 active reactors, only two at the Sendai plant in Kagoshima Prefecture are currently operating.
Although the court injunction remains in place, Nishikawa's approval to restart the Takahama No. 3 and No. 4 reactors represents another step forward in Kansai Electric's long desire to bring its nuclear reactors back online.
If the utility's objection is granted, Kansai Electric plans to restart the No. 3 reactor in late January and the No. 4 reactor in late February.
The Nuclear Regulation Authority in February said the Takahama No. 3 and No. 4 reactors have met the more stringent safety standards.
The municipal assembly of Takahama, which hosts the nuclear complex, endorsed the proposed reactor restarts in March, followed by Takahama Mayor Yutaka Nose's approval on Dec. 3, and the prefectural assembly's green light on Dec. 17.
Nishikawa's decision came after Prime Minister Shinzo Abe pledged at a Dec. 18 meeting of the central government's nuclear disaster prevention council to hold briefings across the nation to gain the public's support for resuming nuclear plant operations.
Concerns about the nuclear safety persist among the public, given the continuing battle over the triple meltdown at the Fukushima No. 1 nuclear power plant, and the fact that Japan is one of the most quake-prone nations in the world.

Abe also promised that the central government will responsibly come up with comprehensive measures to address nuclear-related issues in Fukui Prefecture, such as extending the operating licenses of reactors beyond the 40-year limit, decommissioning aged reactors, and deciding the fate of the Monju prototype fast-breeder reactor, the problem-plagued centerpiece of Japan's nuclear fuel recycling project.
Nishikawa has said that promoting public understanding of the safety of nuclear complexes was the most important precondition toward a restart. With the prime minister's pledge, Nishikawa apparently decided that all of his requirements toward a restart had been met.
But no plans have been set to secure the safety of residents within a 30-km radius of the Takahama plant in the event of a serious accident. About 180,000 people live in this 30-km zone, which also covers parts of Kyoto and Shiga prefectures.
In light of the Fukushima triple meltdown, local governments hosting nuclear facilities have been required to come up with evacuation plans to prepare for a disaster.
But localities in the Takahama zone have yet to secure vehicles, build roads for a possible exodus or compile measures to ease traffic congestion and eliminate other hurdles for a workable nuclear evacuation plan.
The No. 3 and No. 4 reactors, each with a capacity of 870 megawatts, began commercial operations in 1985. The Takahama plant is one of three nuclear complexes operated by Kansai Electric in Fukui Prefecture.

Fukui's court decision expected on Dec.24

December 23, 2015

Ruling on Takahama nuclear plant to come Thursday [24 Dec.]
http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Dec. 23, 2015 - Updated 02:42 UTC+1
A court in Fukui Prefecture, central Japan, will issue a ruling on Thursday on an objection filed by the operator of the Takahama nuclear power plant to a provisional injunction blocking the restart of 2 reactors.

If the restart is approved, Kansai Electric Power Company says it will start loading fuel into one of the reactors as early as Friday.

The court issued the injunction in April to keep the plant's No.3 and No.4 reactors offline. Japan's nuclear regulators decided in February that the reactors satisfied revised government requirements to prepare nuclear plants for disasters.

The governor of Fukui Prefecture and the mayor of Takahama Town separately approved their restart earlier this month.
The No.3 reactor had undergone inspections of new equipment that had been installed to prepare for disasters, and was ready to load fuel.

If the court approves the restart, Kansai Electric is ready to begin inserting 157 fuel assemblies into the No.3 reactor as early as Friday.

If the restart is rejected, the utility is likely to postpone the start of the procedure.

Fukui court lifts injunction

December 24, 2015

Fukui court allows nuclear restarts

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html
Dec. 24, 2015 - Updated 06:23 UTC+1
A Japanese court has issued a decision that paves the way for the restart of 2 nuclear reactors at a plant in central Japan.

The court reversed an earlier injunction won by residents to keep the reactors at the Takahama nuclear plant offline.

The Fukui District Court issued the injunction in April to keep the plant's No.3 and No.4 reactors offline, citing safety concerns.

The operator of the plant, Kansai Electric Power Company, had filed an objection.

Japan's nuclear regulators decided in February that the reactors at Takahama satisfy new, stricter requirements introduced after the 2011 Fukushima nuclear disaster.

On Thursday, the court said it found nothing irrational in the judgment by the Nuclear Regulation Authority.

The local governor and mayor had already consented to the restart.

With the latest decision, Kansai Electric hopes to restart the No.3 reactor as early as next month.

The court also announced its decision in a separate case. It dismissed a request by citizens to block the restart of 2 reactors at the Ohi nuclear plant, also in central Japan.

Fukui District Court rules in favor of nuclear reactor restart

http://mainichi.jp/english/articles/20151224/p2a/00m/0na/012000c

December 24, 2015 (Mainichi Japan)

The Fukui District Court on Dec. 24 lifted a temporary injunction that had prevented the No. 3 and No. 4 reactors at Kansai Electric Power Co.'s Takahama Nuclear Power Plant in Fukui Prefecture from being restarted.
Mayor Yutaka Nose had given consent to reactivating the No. 3 and No. 4 reactors at the Takahama nuclear plant on Dec. 3, in defiance of the temporary injunction.
In April this year, the Fukui District Court issued a provisional injunction ordering that the reactors remain suspended.

Japan court lifts injunction on restart of Takahama nuclear plant

http://www.japantimes.co.jp/news/2015/12/24/national/japan-court-lifts-injunction-restart-takahama-nuclear-plant/#.VnujoVIR-id

Kyodo
The Fukui District Court on Thursday lifted an injunction against the restart of the Takahama nuclear power plant in Fukui Prefecture.

On Tuesday, Fukui Gov. Issei Nishikawa gave his go-ahead for Kansai Electric Power Co. to restart the No. 3 and No. 4 reactors at the facility.
The utility is looking to restart No. 3 in late January and No. 4 in late February.
The court injunction was brought in April. Kepco challenged it.

Unjust and unacceptable

December 24, 2015

Residents' lawyer: Court decision unjust

http://www3.nhk.or.jp/nhkworld/english/news/20151224_27.html

Dec. 24, 2015 - Updated 10:07 UTC+1
A lawyer for residents who sought an injunction to block the restart of 2 reactors at the Takahama plant has denounced Thursday's court decision as unjust.

Lawyer Hiroyuki Kawai said the Fukui District Court's decision to reverse an earlier injunction was extremely unjust and unacceptable.

He said the court refused to learn from the lessons of the 2011 Fukushima nuclear accident. He also said the court seems to have a foregone conclusion as it apparently considered the plant operator's schedule for restart.

Kawai expressed intent to immediately file an appeal of the case with a high court.

One of the residents who filed the case, Harumi Kondaiji, said she felt indignant that the judge gave up being the guardian of the law and trampled on basic human rights.

Kondaiji said she will turn her indignation to energy to further their fight against the restart.

Kansai Electric happy

Kansai Electric welcomes decisions

http://www3.nhk.or.jp/nhkworld/english/news/20151224_26.html
Dec. 24, 2015 - Updated 09:31 UTC+1

Kansai Electric Power Company has welcomed a district court's 2 decisions on Thursday regarding reactors at 2 of the firm's nuclear plants in central Japan.

Kansai Electric said both decisions support its belief that safety at its Takahama and Ohi plants has been secured.

It said it intends to keep making constant efforts to improve safety at all of its plants.

The company says it will ensure that the facilities meet new, stricter requirements set by Japan's nuclear regulator so that their operation will have support from local communities and society at large.

The utility says it will aim to restart plants that have cleared safety checks as soon as possible.

Takahama: Fuel loading to begin straight away

December 24, 2015

Nuclear fuel to be put into reactor

http://www3.nhk.or.jp/nhkworld/english/news/20151225_02.html
Dec. 24, 2015 - Updated 20:28 UTC+1
The operator of a nuclear power plant in central Japan will begin work on Friday to load fuel into a reactor. A court decision previously allowed the restart of 2 reactors at the Takahama plant.

The Fukui District Court delivered the judgment on Thursday, reversing an injunction it issued in April to keep the plant's No.3 and No.4 reactors offline.

The plant's operator, Kansai Electric Power Company, had filed an objection to the injunction. Different judges presided over the 2 trials.

The governments of the plant's host town, Takahama, and Fukui Prefecture approved the restart earlier this month.

Kansai Electric plans to maneuver a crane and other equipment to finish moving 157 fuel assemblies to the No.3 reactor from a pool in an adjacent building by Tuesday of next week. They will include 24 units of MOX fuel, a mixture of plutonium extracted from spent fuel and uranium.

It will be the first time in about 3 years and 9 months for fuel to be inserted into the reactor. Kansai Electric says it will carefully perform the loading work.

When the fuel transfer is complete, preparations to restart the reactor will enter into the final stages. The utility plans to resume the reactor's operation late next month after checks of key safety facilities.

The reactor is expected to be the third to be restarted under new, stricter requirements introduced after the 2011 nuclear accident at the Fukushima Daiichi plant.

Two reactors at the Sendai plant in the southwestern prefecture of Kagoshima came back online earlier this year.

Kansai Electric says **it intends to restart the No.4 reactor at the Takahama plant in late February.**

Takahama: Fuel loading begins

December 25, 2015

Kansai Electric to begin fuel loading for Fukui nuclear restart

Kyodo
http://www.japantimes.co.jp/news/2015/12/25/national/kansai-electric-to-begin-fuel-loading-for-fukui-nuclear-restart/

TSURUGA, FUKUI PREF. – Kansai Electric Power Co. said Friday it has started loading nuclear fuel into a reactor on the Sea of Japan following a court decision to lift an injunction against the move, paving the way for its restart in late January, which would be the country's third reactor to go online.
After the restart earlier this year of two reactors in southwestern Japan, while others remain offline in the aftermath of the 2011 Fukushima nuclear disaster, the No. 3 reactor at the utility's Takahama plant in Fukui Prefecture would be the first to run on uranium-plutonium mixed oxide, or MOX fuel, if it begins operations as scheduled.
The utility is scheduled to insert a total of 157 fuel rod assemblies by the next Tuesday, including 24 made from MOX fuel, according to Kepco.
The reactor along with the No. 4 unit at the same plant was allowed to resume operation by the Fukui District Court on Thursday.

The power company envisions reactivating the No. 3 unit sometime between Jan. 28 and 30 and having it start power generation and transmission around Feb. 1, followed by the restart of the No. 4 unit in late February.
"We will put top priority on the safety of the work" for the restart, Kansai Electric President Makoto Yagi said at a news conference Friday.
Japan returned to nuclear power generation when Kyushu Electric Power Co. brought two reactors at its Sendai plant in Kagoshima Prefecture back online earlier this year.
The government seeks to make up at least 20 percent of the country's electricity using nuclear power plants by 2030.
The restart of Takahama's two reactors will be "a step forward" toward the goal, Motoo Hayashi, the industry minister in charge of the energy policy, said at a news conference Friday.
Prior to the court decision, both reactors gained approval for resumption from the state's Nuclear Regulation Authority in February.
The injunction issued by the court in April, however, banned the utility from restarting the units until it was lifted on Thursday.
Fukui Gov. Issei Nishikawa on Tuesday gave the go-ahead for the company to restart the two units following approval by the local prefectural assembly and the mayor of Takahama.
The court's presiding Judge Jun Hayashi said in Thursday's decision that he recognizes the rationality of the post-Fukushima safety regulations set by the nuclear regulator.
Hideaki Higuchi, the presiding judge when the same court issued the injunction in April, said then the court could not see any credible evidence in the utility's assumptions regarding earthquake risk and restarting the two reactors posed "imminent danger" to residents around the plant, which is about 380 km west of Tokyo.

See also : Kansai Electric begins fuel loading for nuclear restart

http://mainichi.jp/english/articles/20151225/p2g/00m/0dm/048000c

December 25, 2015 (Mainichi Japan)

TSURUGA, Japan (Kyodo) -- Kansai Electric Power Co. said Friday that it has started loading nuclear fuel into a reactor on the Sea of Japan following a court decision to lift an injunction against the move, paving the way for its restart in late January as the country's third reactor to operate. […]

Fuel loading starts at Takahama reactor

http://www3.nhk.or.jp/nhkworld/english/news/20151225_27.html

Dec. 25, 2015 - Updated 09:29 UTC+1
The operator of the Takahama nuclear power plant in Fukui Prefecture, central Japan, has begun loading fuel into a reactor to bring it back online.

One day earlier, a court in Fukui lifted an injunction that was blocking restart of the plant's No.3 and No.4

reactors.

Kansai Electric Power Company on Friday started the loading process at the No.3 reactor. Its containment vessel has been empty of fuel since March 2012.

157 fuel units will be moved to the vessel from a storage pool using cranes through Tuesday. 24 units are MOX fuel, a mixture of plutonium from spent fuel, and uranium.

Kansai Electric plans to restart the reactor in late January after an inspection of critical equipment.

It would be the 3rd reactor to be reactivated under new stricter requirements introduced after the 2011 nuclear accident in Fukushima. 2 reactors at the Sendai plant in Kagoshima Prefecture were restarted earlier this year.

The use of MOX fuel would be the first in about 3 years and 11 months.

Kansai Electric plans to restart the No.4 reactor in late February.

Takahama restart: No guarantee of safety

December 25, 2015

Editorial: No guarantee of safety with end to Takahama reactor restart injunction

http://mainichi.jp/english/articles/20151225/p2a/00m/0na/019000c

The Fukui District Court on Dec. 24 revoked a provisional injunction banning the restart of the No. 3 and 4 reactors at the Takahama Nuclear Power Plant in Fukui Prefecture. Since Kansai Electric Power Co. (KEPCO), the operator of the power station, has gained consent from the local community to restart the reactors, the utility is set to begin preparations to resume operations. The move would follow the reactivation of the No. 1 and 2 reactors at Kyushu Electric Power Co.'s Sendai plant.

The court made the decision in response to an appeal that KEPCO filed against the provisional injunction -- which had been issued by another presiding judge at the same court in April this year. The point of contention during hearings was whether the green light that the Nuclear Regulation Authority (NRA) issued to the planned reactivation -- based on its inspection on the reactors under the new regulatory standards -- is rational.

The court determined that the inspection the NRA conducted on the reactors was legitimate, noting that the NRA's evaluation of the quake-resistance of the nuclear complex reflects the latest scientific and technological knowledge and that the authority has advanced expertise and is fully independent. The

court thus upheld KEPCO's assertions and concluded that no problem involving the plant's safety can be found.
In contrast, the provisional injunction had stated that the new regulatory standards must be strict enough to ensure that a serious nuclear accident never occurs based on the notion that nuclear plants must not be operated if there is even a small risk of an accident.
The latest decision overturned this idea. Courts remain divided over levels of safety that nuclear plants need following the outbreak of the Fukushima nuclear crisis in March 2011.
Courts had been reluctant to evaluate of the safety of nuclear plants. A ruling that the Supreme Court handed down on a lawsuit on Shikoku Electric Power Co.'s Ikata nuclear plant in 1992 expressed its view that the evaluation of the safety of atomic power stations "requires the latest scientific, technological and comprehensive judgment, and is left to the discretion of rational judgment by the administrative branch." This framework had been maintained until the outbreak of the nuclear disaster.
However, **the accident at the tsunami-ravaged Fukushima No. 1 Nuclear Power Plant operated by Tokyo Electric Power Co. demonstrated that an accident could occur at a nuclear plant even if it passes an inspection by the national government. Courts now need to more strictly examine safety evaluations of nuclear plants by the executive branch.**
The presiding judge who issued the provisional injunction banning the restart of the No. 3 and 4 reactors at the Takahama plant also handed down a ruling in May last year prohibiting KEPCO from reactivating the No. 3 and 4 reactors at its Oi plant.
In his ruling on the lawsuit regarding the Oi plant, the presiding judge prioritized local residents' personal rights to protect their lives and stated that operations at nuclear plants "can be banned as long as there are specific risks, even if the risks are low."
While dismissing a petition for a provisional injunction to ban operations at the Oi and Takahama plants, the Otsu District Court warned in November last year against attempts to hastily restart idled nuclear reactors. "It's impossible to restart reactors as long as no progress is made on the compilation of **evacuation plans."**
Meanwhile, the Kagoshima District Court ruled in April this year in dismissing a petition for a ban on the restart of the Sendai nuclear plant that there is no irrationality in the new safety standards and that an inspection the NRA conducted on the plant was appropriate. The latest Fukui District Court decision also endorses the NRA's broad discretionary power. As such, courts are tending to go back to their passive attitude toward safety evaluations of nuclear plants.
Following the court's decision, KEPCO inserted nuclear fuel into the No. 3 reactor at the Takahama plant with an aim of restarting it in late January 2016. The Fukui District Court cautioned in its latest decision that the green light given by the NRA to the restart of the Takahama reactors "does not rule out the possibility that a serious accident will occur" at the power station. The court thus urged the national government and power companies to implement countermeasures against such disasters, including the compilation of evacuation plans for local residents. Without taking such steps, utilities should not be allowed to restart their idled nuclear reactors.

Takahama: Fuel injection completed

December 29, 2015

Takahama reactor 3 fuel injection completed, including MOX assemblies

http://www.japantimes.co.jp/news/2015/12/29/national/takahama-reactor-3-fuel-injection-completed-including-mox-assemblies/#.VoKnqVIR-id

JIJI
OSAKA – Kansai Electric Power Co. said Monday that it has finished work to inject fuel into reactor 3 at its Takahama nuclear power station in Fukui Prefecture.
The company installed a total of 157 fuel assemblies in the reactor. Among them are 24 units of mixed oxide, or MOX, fuel, a blend of uranium and plutonium extracted from spent nuclear fuel.
The fuel-loading work finished around 6 p.m. Monday (9 a.m. GMT), ahead of schedule, after being launched Friday afternoon.
The work was suspended temporarily after some of the fuel assemblies hit a container on Friday. There were no other problems.
The Takahama unit 3 would be the third reactor to be brought back online under Japan's new nuclear safety standards introduced in July 2013, after the triple reactor meltdown at Tokyo Electric Power Co.'s disaster-stricken Fukushima No. 1 nuclear plant in March 2011.
The other two other reactors are units 3 and 4 at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture. The two, reactivated earlier this year, are currently the only active reactors in Japan.
The fuel injection into the Takahama unit 3 came after the Fukui District Court on Thursday reversed its earlier decision against the restart of the reactor and unit 4 at the same plant, dismissing local residents' opposition due to safety risks.
The Fukui Prefectural Government and the municipal government of Takahama, host to the plant, have already given their consent to the restart.
Following the completion of the fuel injection, Kepco will check the containment vessel and ductwork for reactor 3. The company aims to put the reactor back online between Jan. 28 and 30.

December 29, 2015

Takahama reactor likely to be reactivated in Jan.

http://www3.nhk.or.jp/nhkworld/english/news/20151229_21.html

Dec. 29, 2015 - Updated 15:42 UTC+1

The operator of the Takahama nuclear power plant in Fukui Prefecture, central Japan, plans to reactivate one of its reactors in late January.

Kansai Electric Power Company started loading fuel into the plant's No.3 reactor last Thursday. That's one day after a court in Fukui lifted an injunction that was blocking the restart of the plant's No.3 and No.4 reactors.

Utility officials say the crane loading work was suspended for over 6 hours after an alarm went off on

Friday night while moving fuel from a storage pool into the containment vessel.

The officials say the operation went well after that and that they finished putting 157 fuel units into the reactor on Monday evening.

Kansai Electric plans to restart the No.3 reactor next month after inspecting critical equipment.

It would be the 3rd reactor to be reactivated under new stricter requirements introduced after the 2011 nuclear accident in Fukushima. Two reactors at the Sendai plant in Kagoshima Prefecture were restarted earlier this year.

Kansai Electric also plans to start loading fuel into the No.4 reactor in late January and restart it in late February.

IAEA on NRA

25.01.2016_No8 / News

Japan's Regulator Needs To Prepare For Restarts, Says IAEA

http://www.nucnet.org/all-the-news/2016/01/25/japan-s-regulator-needs-to-prepare-for-restarts-says-iaea

25 Jan (NucNet): Japan's regulatory body for nuclear and radiation safety has demonstrated independence and transparency since it was set up in 2012, but needs to further strengthen its technical competence in light of the planned restart of nuclear reactors following the March 2011 Fukushima-Daiichi accident, an International Atomic Energy Agency (IAEA) team of experts said.
The Integrated Regulatory Review Service (IRRS) team on Friday concluded a 12-day mission to assess Japan's regulatory framework for nuclear and radiation safety, which was modified following the Fukushima-Daiichi accident. The modifications included the establishment of the Nuclear Regulation Authority (NRA) in September 2012.

The IAEA team – made up of 19 experts from 17 countries and five IAEA staff – warned of "significant challenges" ahead and called on the NRA to work to attract competent and experienced staff, and improve staff skills.

The team said Japanese authorities should amend legislation to allow the NRA to perform more effective inspections of nuclear and radiation facilities.

The NRA and all the organisations it regulates should continue to strengthen the promotion of safety culture, including by fostering "a questioning attitude", the team said.

The team praised Japan for swiftly establishing a legal and governmental framework that supports a new independent and transparent regulatory body with increased powers.

It also said the NRA had incorporated lessons learnt from Fukushima-Daiichi in the areas of natural hazards, severe accident management, emergency preparedness and safety upgrades of existing facilities, into Japan's new regulatory framework.

"In the few years since its establishment, the NRA has demonstrated its independence and transparency," said team leader Philippe Jamet, commissioner of the French Nuclear Safety Authority. "It has established new regulatory requirements for nuclear installations and reviewed the first restart applications by utilities. This intensive and impressive work must continue with equal commitment, as there are still significant challenges in the years to come."

The IAEA said IRRS missions are designed to strengthen the effectiveness of the national nuclear regulatory infrastructure, while recognising the responsibility of each state to ensure nuclear safety.

Before being halted following the Fukushima-Daiichi accident, Japan's nuclear power reactors produced about 30 percent of the country's electricity generation, the IAEA said. Two reactors were restarted in 2015 with NRA authorisation, and the NRA is reviewing other restart applications using the new requirements. The country also has fuel cycle facilities, research reactors and widely uses nuclear applications in other fields.

The IAEA team reviewed the responsibilities and functions of the government and the regulatory body for safety, the authorisation of nuclear and radiation facilities and activities, safety assessments, inspections of nuclear facilities, emergency preparedness and response, and several other areas in the field of nuclear and radiation safety.

The team met NRA staff, observed regulatory activities including inspections, and visited nuclear-related sites. They also met with other Japanese officials, the IAEA said.

Juan Carlos Lentijo, IAEA deputy director-general and head of the department for safety and security, said Japan has reformed its regulatory system with "impressive speed and effectiveness" following the Fukushima-Daiichi accident.

"Today, the system provides for clearer responsibilities and greater authority to the regulatory body," he said. "The NRA is on a good path to continue this crucial progress in the future. Its work must continue to ensure that the new regulatory system is applied fully to all facilities and activities."

All of Japan's 48 commercial reactor units were shut down for safety checks and upgrades following Fukushima-Daiichi. Five reactors have been earmarked for permanent shutdown, bringing the number of potentially operable commercial units in the country to 43.

In May 2015 Japan's government said it wanted to see a 20-22 percent nuclear share in the country's energy mix by 2030, down from about 30 percent before Fukushima-Daiichi.

Safety agreement for Shiga prefecture

January 25, 2016

Shiga Pref., Takahama nuclear plant operator sign safety accord

http://mainichi.jp/english/articles/20160125/p2g/00m/0dm/083000c

OTSU (Kyodo) -- The Shiga prefectural government on Monday signed an agreement with Kansai Electric Power Co. on safety issues concerning its Takahama nuclear power plant, located in adjacent Fukui Prefecture, ahead of its planned restart later in the week.

The plant in western Japan will be the second nuclear power station in the country to resume operations under a set of new safety regulations that have been introduced in the wake of the 2011 Fukushima Daiichi nuclear power plant disaster.

The safety accord requires Kansai Electric to immediately report emergency situations at the plant and compensate for damage caused by accidents. But it stopped short of giving Shiga Prefecture a say over the reactors' return to service -- the right usually awarded to host municipalities -- as requested by the prefectural government.

The Fukushima crisis has led the central government to expand the buffer areas around nuclear power plants that should prepare for evacuation from a 10-kilometer radius to 30 km, and local governments which do not host the plants but could be largely hit by accidents have called for a greater say on safety matters.

Shiga Prefecture, a small part of which falls within the 30 km zone, has sought to be part of the process of giving local consent to Kansai Electric on the restart of the four-reactor Takahama complex, but the utility did not agree to the request.

Only Fukui Prefecture and the town of Takahama that host the plant were involved in the process.

Shiga Gov. Taizo Mikazuki said Monday the signing of the accord marked "progress" in terms of fulfilling the prefecture's responsibility to ensure the safety of local people.

But Mikazuki later told reporters that he told Kansai Electric President Makoto Yagi, who attended the signing ceremony together with the governor, that he was reluctant to accept the resumption and asked that Shiga Prefecture be treated in the same way as host areas.

Under the accord, Kansai Electric will also report its plans to transport nuclear fuel and radioactive waste in advance, while cooperating on the prefecture's disaster mitigation measures.

The utility will also promise in a separate document to provide explanations in advance on important changes at the plant, such as the construction of new reactors.

Kansai Electric on Monday reported to the Nuclear Regulation Authority that it will reboot the plant's No. 3 reactor Friday evening.

It will be the first reactor running on uranium-plutonium mixed oxide fuel under the country's new safety regulations that were imposed in 2013. The No. 4 reactor is also scheduled to resume operation in late February, with its nuclear fuel to be loaded on Sunday.

January 25, 2015

Shiga, Kansai Electric sign safety accord ahead of Takahama reactor restart

Kyodo

OTSU, SHIGA PREF. – The Shiga Prefectural Government signed an agreement Monday with Kansai Electric Power Co. on safety issues concerning the Takahama nuclear plant in adjacent Fukui Prefecture, which is scheduled to be restarted Friday.

The plant will be the second nuclear power station in Japan to resume electricity generation under new safety regulations introduced after the 2011 Fukushima crisis.

The safety accord requires Kansai Electric to immediately report emergency situations at the plant and compensate for damage caused by accidents. But it stops short of acquiescing to Shiga Prefecture's demand for a say over the plant's reactivation — a right usually awarded to host municipalities.

The Fukushima disaster led the central government to expand the evacuation preparation areas around nuclear plants to a radius of 30 km instead of 10 km. Local governments that do not host nuclear plants but could be adversely affected by an accident have called for a greater say in safety.

Shiga, a small part of which falls within the Takahama plant's 30-km buffer zone, has sought a role in the local consent process for approving the restart of the four-reactor Takahama complex, only to be rebuffed by Kansai Electric.

Only Fukui Prefecture and the town of Takahama, which hosts the plant, were involved in the process.

Shiga Gov. Taizo Mikazuki said Monday the signing of the accord marked "progress" in terms of fulfilling the prefecture's responsibility to ensure public safety.

But Mikazuki later told reporters that he told Kansai Electric President Makoto Yagi, who attended the signing ceremony together with the governor, that he was reluctant to accept the plant's reactivation and asked that Shiga be treated the same way as the host areas.

Under the accord, Kansai Electric will also report its plans to transport nuclear fuel and radioactive waste in advance, while cooperating on the prefecture's disaster mitigation measures.

The utility will promise in a separate document to provide explanations in advance on important changes at the plant, such as the construction of new reactors.

Kansai Electric on Monday reported to the Nuclear Regulation Authority that it will reboot the plant's No. 3 reactor on Friday evening.

It will be the first reactor to run on uranium-plutonium mixed oxide fuel, or MOX, under new safety regulations imposed in 2013.

The No. 4 reactor is scheduled to resume operation in late February, with its fuel to be loaded Sunday.

Takahama No.3: Friday restart

January 25, 2016

Takahama No. 3 reactor to restart on Friday

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Jan. 25, 2016 - Updated 08:24 UTC+1

Kansai Electric Power Company plans to restart on Friday one reactor at the Takahama nuclear power plant in Fukui Prefecture along the Sea of Japan coast.

The plant will be the 2nd one to resume operation since all nuclear stations in Japan went offline following the Fukushima Daiichi disaster in 2011.

The utility informed Japan's Nuclear Regulation Authority on Monday of the plan to restart Takahama No.3 reactor.

The No. 3 and No. 4 reactors at the plant last February cleared the government's stricter regulations introduced after the disaster. In December, the host town of Takahama and Fukui Prefecture agreed to the restarts.

The No. 3 reactor is loaded with 157 fuel assemblies and is now undergoing inspections. If nothing wrong is found, the utility will activate the reactor as early as Friday afternoon.

The fuel includes 24 units of MOX fuel, a mixture of plutonium extracted from spent fuel and uranium. MOX fuel is regarded as part of Japan's fuel recycling system. The No.3 reactor was using it before getting offline 3 years and 11 months ago.

Kansai Electric Power also plans to load fuel in the Takahama No. 4 reactor on Sunday to ready for its planned restart end of February.

A court in Fukui lifted an injunction that was blocking the restart of the plant's 2 reactors last December.

Takahama plant follows Sendai nuclear plant in the southwestern prefecture of Kagoshima that started commercial operation in September of last year.

Restart of MOX reactor in densely populated region

Residents and activists on Jan. 24 protest the planned resumption of operations at the Takahama nuclear power plant in Takahama, Fukui Prefecture. (Eijiro Morii)

Pluthermal reactor in Fukui Prefecture expected to restart on Jan. 29

January 26, 2016

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201601260034

By HIROKI ITO/ Staff Writer

For the first time since the Fukushima nuclear disaster unfolded, a plutonium-thermal (pluthermal) reactor is scheduled to restart on Jan. 29 **in a densely populated region with Japan's largest concentration of nuclear reactors.**

Kansai Electric Power Co. submitted its plans for the No. 3 reactor at its Takahama nuclear power plant in Takahama, Fukui Prefecture, to the Nuclear Regulation Authority on Jan. 25.

A restart of that reactor would be the third under the NRA's stricter safety regulations that were compiled after the triple meltdown at the Fukushima No. 1 nuclear plant in 2011.

The No. 3 pluthermal reactor at the Takahama plant uses mixed oxide (MOX) fuel, which contains plutonium extracted from spent nuclear fuel.

Pluthermal reactors are crucial components in the government's ambitious, expensive and problem-plagued nuclear fuel cycle project.

Twenty-four of the 157 fuel rods delivered to the No. 3 reactor last month consisted of MOX fuel.

The utility will test the control rods used to regulate the nuclear reaction of the fuel on the morning of Jan. 29. If the NRA deems everything is functioning properly after a final safety check, the operator will remove the control rods and boot up the reactor on the afternoon of that day at the earliest.
Kansai Electric hopes to start commercial operations of the reactor in late February.
The area around Wakasa Bay hosts 13 nuclear power plants, with the Takahama plant located at the west end of the chain.
About 180,000 people reside in 12 municipalities of Fukui, Kyoto and Shiga prefectures within a 30-kilometer radius of the plant.
The NRA in February last year cleared the No. 3 and 4 reactors at the Takahama plant for a resumption of operations.
However, residents around the plant sought a court injunction against the reactor restarts. In April 2015, the Fukui District Court ordered Kansai Electric to keep the two reactors offline.
A different judge of the same court lifted the injunction in December, allowing Kansai Electric to restart the plant for the first time in three years and 11 months, following a suspension of operations for a periodic checkup in February 2012.
The utility also plans to restart the No. 4 reactor at the Takahama plant.
Kansai Electric will start loading nuclear fuel to the No. 4 reactor on Jan. 31 at the earliest. It hopes to fire up the reactor by late February and restart commercial power generation in late March.
All nuclear power facilities were shut down after the Great East Japan Earthquake and tsunami set off the nuclear crisis in Fukushima Prefecture in March 2011.
The No. 1 and No. 2 reactors at the Sendai nuclear power plant in Satsuma-Sendai, Kagoshima Prefecture, resumed operations last August after being cleared by the NRA.

Takahama No.3: Almost there

January 28, 2016

Takahama No.3 nuclear reactor to restart

http://www3.nhk.or.jp/nhkworld/english/news/20160129_01.html
Jan. 28, 2016 - Updated 18:20 UTC+1
The operator of a nuclear power plant in central Japan is to put one of its reactors back online on Friday. It will be the third restart under strict government regulations adopted after the 2011 Fukushima Daiichi accident.

Kansai Electric Power Company plans to reactivate the No.3 reactor at the Takahama plant in Fukui Prefecture if no problems are found with its control rods.

The utility expects the reactor to achieve a self-sustaining chain reaction on Saturday. It plans to start generating and transmitting electricity on Monday. It wants to start commercial operation late next month.

Kansai Electric will use what is known as MOX fuel, a mixture of plutonium extracted from spent nuclear fuel and uranium. The substance is part of Japan's fuel recycling system.

The use of MOX fuel would be the country's first in about 3 years and 11 months.

Last April, a court in Fukui issued an injunction to keep the No.3 and No.4 reactors at Takahama offline. But it reversed the decision last month after Kansai Electric filed an objection.

The utility plans to load fuel into the No.4 reactor on Sunday and restart it as early as late next month.

Two reactors at the Sendai nuclear plant in the southwestern prefecture of Kagoshima went back online last year.

Takahama achieves criticality

January 29, 2016

Takahama reactor achieves criticality

http://www3.nhk.or.jp/nhkworld/english/news/20160130_12.html

Jan. 29, 2016 - Updated 23:08 UTC+1
Kansai Electric Power Company says a reactor that's been restarted in central Japan achieved criticality, a self-sustained nuclear reaction on Saturday morning, which should allow it to start generating power.

The Takahama plant's No.3 reactor in Fukui Prefecture is the third to restart under tougher government regulations introduced after the 2011 Fukushima Daiichi nuclear crisis.

On Friday, the plant's engineers removed some of the control rods from the reactor, and then restarted the facility.

After extracting 3 fourths of the control rods they cautiously adjusted nuclear fission reaction by controlling the density of materials in cooling water.
The utility plans to have the reactor generate power on Monday, if no problems are found with the performance of the control rods and other equipment. The resumption of commercial operation is planned for late February.

The operator says it will closely monitor whether the reactor's equipment is functioning properly after being offline for almost 4 years.

Part of the fuel used is a MOX type, a mixture of plutonium extracted from spent nuclear fuel and uranium. It forms part of Japan's nuclear fuel recycling system.
The reactor would be the first to use MOX fuel under the new regulations.

Two reactors at the Sendai nuclear plant in the southwestern prefecture of Kagoshima resumed operations last year.

January 29, 2016

Japan restarts 2nd nuclear complex under tighter post-Fukushima rules

http://mainichi.jp/english/articles/20160129/p2g/00m/0dm/074000c

FUKUI, Japan (Kyodo) -- A reactor at a nuclear plant in western Japan resumed operation Friday, becoming the second complex to restart, and the first running on uranium-plutonium mixed oxide fuel, under stricter safety rules set after the 2011 Fukushima nuclear disaster.

Kansai Electric Power Co. said it reactivated the No. 3 reactor at its Takahama plant in Fukui Prefecture nearly a year after it gained approval for resumption from the Nuclear Regulation Authority.

It is the third reactor operating under post-Fukushima regulations, following two reactors at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture, which were restarted last August and October, respectively.

The government is pushing ahead with nuclear restarts after all of the country's 48 reactors were shut down for safety reviews following the Fukushima accident.

The state looks to generate at least 20 percent of Japan's overall electricity with nuclear power by 2030 despite public opposition to nuclear power remaining strong since the disaster at the Tokyo Electric Power Co. plant.

Last April, a district court banned Kansai Electric from restarting the Nos. 3 and 4 reactors of the Takahama plant, citing safety concerns.

The same court lifted the injunction last month, allowing the utility to resume the two units, both 870-megawatt pressurized water reactors that began commercial operations in 1985.

Ikata: "Considerable number of issues"

January 28, 2016

Reactor at Ikata nuclear plant unlikely to be restarted before April: utility president

http://mainichi.jp/english/articles/20160128/p2a/00m/0na/011000c

Shikoku Electric Power Co. President Hayato Saeki on Jan. 27 indicated that the No. 3 reactor at the company's Ikata Nuclear Power Plant will not be restarted this fiscal year.

"It would be considerably difficult with just two months left," Saeki said. "It will have to wait until next fiscal year," he said in a regular news conference. Saeki did not specify a target date for restarting the reactor.

In October last year, Ehime Gov. Tokihiro Nakamura gave approval to restart the reactor, ending a series of local procedures. The same month Shikoku Electric submitted an amended request for approval of

construction plans to the Nuclear Regulation Authority (NRA), completing all of the necessary paperwork for government screening.
The NRA, however, pointed out a "considerable number" of issues regarding the basis for figures that were presented, Saeki said. Responding to these issues, including new analysis, is said to be taking time.

Third reactor restarted

January 29, 2016

Takahama No.3 reactor restarted

http://www3.nhk.or.jp/nhkworld/english/news/20160129_28.html

Nuclear & Energy
Jan. 29, 2016 - Updated 09:56 UTC+1
A third nuclear reactor in Japan has been restarted under tougher government regulations introduced after the catastrophic 2011 Fukushima accident.

Kansai Electric Power Company on Friday evening reactivated the Number 3 reactor at the Takahama plant in Fukui Prefecture on the Japan Sea coast by removing control rods.

If everything goes according to plan, the reactor will achieve a self-sustaining chain reaction on Saturday morning and start generating electricity on Monday.

The operator says it will closely monitor whether the equipment is functioning properly because the reactor was offline for almost 4 years. It aims to resume commercial operations in late February.

The Number 3 and Number 4 reactors at the Takahama plant passed screenings by the Nuclear Regulation Authority under the new regulations in February last year.

The operator plans to use what is known as MOX fuel, a mixture of plutonium extracted from spent nuclear fuel and uranium. The reactor would be the first to use MOX fuel under the new regulations.

Two reactors at the Sendai nuclear plant in the southwestern prefecture of Kagoshima went back online last year.

Japan brings third nuclear reactor online

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201601290054
By HIROKI ITO/ Staff Writer

TAKAHAMA, Fukui Prefecture--Takahama nuclear power plant's No. 3 reactor here was restarted on Jan. 29, becoming the third reactor to go back online under stricter safety regulations following the Fukushima disaster in 2011.
At 5 p.m., workers at the plant's control room pulled a lever that removed control rods to reboot the reactor. It is expected to reach criticality by around 6 a.m. on Jan. 30.
The reactor at Kansai Electric Power Co.'s plant should begin commercial operations in late February following test operations planned to start on Feb. 1.
Located in a densely populated region with Japan's largest concentration of nuclear reactors, it is the first plutonium-thermal (pluthermal) reactor to be restarted under the new Nuclear Regulation Authority regulations.
It uses mixed oxide (MOX) fuel, which contains plutonium extracted from spent nuclear fuel, and its restart marks a step forward in the government's troubled nuclear fuel cycle project.
Shikoku Electric Power Co. also plans to use MOX fuel at the No. 3 reactor at the Ikata nuclear power plant in Ehime Prefecture, which is currently in the final stage of the screening for restart.
The area around Wakasa Bay, where the Takahama plant is located, hosts 14 nuclear reactors, and about 180,000 people reside in 12 municipalities of Fukui, Kyoto and Shiga prefectures within a 30-kilometer radius of the plant.
Kansai Electric also plans to reboot the No. 4 reactor at the plant in late February to restart commercial power generation in late March at the earliest.
The first two reactor restarts under the NRA's stricter safety rules were the No. 1 and No. 2 reactors at Kyushu Electric Power Co.'s Sendai nuclear power plant in Satsuma-Sendai, Kagoshima Prefecture.
They resumed operations in August and October last year after being cleared by the NRA.

Two governors regret restart

January 29, 2016

Governors criticize reactor restart

http://www3.nhk.or.jp/nhkworld/english/news/20160130_08.html

Jan. 29, 2016 - Updated 22:24 UTC+1

The governors of two neighboring prefectures near the Takahama nuclear plant have expressed regret over Friday's reactor restart without their consent.

Kansai Electric Power Company restarted the plant in Fukui Prefecture. It was the third reactor in Japan to restart under new government regulations introduced after the 2011 Fukushima Daiichi nuclear accident.

Part of Shiga prefecture is within 30 kilometer radius of the plant. Governor Taizo Mikazuki said on Friday that he cannot approve the restart.

He said his prefecture has been insisting that an effective, in-depth protection plan for handling a nuclear crisis be established.

Mikazuki said his prefecture will strengthen its call for the government and the utility to implement more safety measures at the plant.

Kyoto Governor Keiji Yamada told reporters that part of his prefecture is located within a radius of 5 kilometers of the nuclear station. He said it's regrettable that his prefecture was excluded from the approval process for the plant's restart.

In the prefecture hosting the plant, Fukui Governor Issei Nishikawa urged the government to do more to explain to residents the importance and necessity of nuclear power generation.

Nishikawa said the operator needs to disclose more information, and that his prefecture will enhance monitoring of the plant to ensure the safety of its residents.

Takahama: From 5.3 to 18.5 tons of MOX

January 31, 2016

Restarts threaten to increase amount of deadly MOX at Takahama plant to 18.5 tons

http://www.japantimes.co.jp/news/2016/01/31/national/restarts-threaten-increase-amount-deadly-mox-takahama-plant-18-5-tons/#.Vq4jY1KDmot

JIJI

Restarting a second reactor at the Takahama nuclear power plant in Fukui Prefecture will raise the amount of highly toxic spent mixed-oxide (MOX) fuel present there to an estimated 18.5 tons, Jiji Press has learned.

The plant run by Kansai Electric Power Co. in the town of Takahama had 5.3 tons of MOX — a blend of uranium and plutonium extracted from spent nuclear fuel — there before Friday's restart of the No. 3 reactor.

But lingering problems threaten to ruin the government's long-laid plans for recycling nuclear fuel, leaving spent MOX in need of a home. This means it is likely to join the standard uranium fuel being kept in the nation's rapidly dwindling storage pools until a solution can be found.

The Takahama plant is set to hold the largest amount of spent MOX among domestic nuclear facilities that have engaged in so-called pluthermal power generation utilizing the blended fuel, which can contain weapons-grade plutonium.

Takahama No. 3 is slated to use 24 units of MOX, according to Kansai Electric. Reactor 4 will use four units. Each fuel unit weighs about 660 kg, according to statistics from the Finance Ministry and other data.

Kepco imported 12 French-made MOX units in June 2010 and an additional 20 in June 2013. The utility's Genkai plant in Saga Prefecture and Shikoku Electric Power Co.'s Ikata plant in Ehime Prefecture have about 10.7 tons of spent MOX each — more than any other commercial nuclear plants in japan.
Among noncommercial facilities, the Japan Atomic Energy Agency currently has 63.9 tons stored at Fugen, an advanced converter reactor in Fukui, 23.1 tons at its nuclear fuel reprocessing facility in Ibaraki Prefecture, and 6.1 tons at the experimental Monju fast-breeder reactor in Fukui.
Takahama No. 3 is the nation's third reactor to be rebooted under new safety standards compiled since the Fukushima nuclear disaster began in March 2011.
Kansai Electric plans to reactivate Takahama's No. 4 reactor later this month.

Takahama: Beginning of fuel rod insertion

February 1, 2016

KEPCO begins to insert nuclear fuel into No. 4 reactor at Takahama plant
http://mainichi.jp/english/articles/20160201/p2a/00m/0na/018000c

A fuel rod is transferred through water to the No. 4 reactor building at Takahama Nuclear Power Plant in Fukui Prefecture, on Jan. 31, 2016. (Pool photo)

Kansai Electric Power Co. (KEPCO) began on Jan. 31 to insert fuel rods into the No. 4 reactor at its Takahama Nuclear Power Plant in preparation to restart the unit, company officials said.
The move follows the resumption of operations at the plant's No. 3 reactor on Jan. 29.
The utility will insert 157 fuel rods, each measuring 21 centimeters by 21 centimeters and 4.1 meters long, into the reactor by Feb. 3 and plans to reactivate the unit in late February. Four of the 157 fuel rods are so-called mixed oxide (MOX) fuel containing plutonium extracted from spent nuclear fuel and mixed with uranium.
This is the first time that MOX fuel is being used in Takahama plant's No. 4 reactor. Such fuel is currently in use in its No. 3 reactor.
KEPCO showed the media the transfer of fuel rods from a fuel storage pool that is adjacent to the No. 4 reactor building to the reactor on Jan. 31. A special crane was used to lift up fuel rods one by one and was moved to the reactor building through water to block radiation and cool down the rods.
Takahama plant's No. 3 reactor that has already been reactivated will begin generating electric power shortly and will be in full operation in late February, according to company officials.

Takahama No.3 reactor

February 1, 2016

Kansai Electric's Takahama pluthermal reactor back in operation
http://ajw.asahi.com/article/behind_news/social_affairs/AJ201602010028

The No. 3 reactor at Kansai Electric Power Co.'s Takahama nuclear power plant went back online Jan. 29. (Eijiro Morii)

THE ASAHI SHIMBUN

Kansai Electric Power Co. began generating nuclear power for the first time in two years and five months on Feb. 1 after a reactor at its Takahama plant here reached criticality over the weekend.

The No. 3 reactor was brought back online Jan. 29 and achieved self-sustained fission the following day.

The 870-megawatt reactor at the Takahama plant uses mixed-oxide (MOX) fuel consisting of plutonium and uranium.

It is the first facility in Japan to generate power with this mix of nuclear fuel under stricter safety standards imposed after the 2011 triple meltdown at a nuclear plant in Fukushima Prefecture.

Takahama: A "problematic" restart

February 10, 2016

Takahama's problematic restart

http://www.japantimes.co.jp/opinion/2016/02/10/editorials/takahamas-problematic-restart/#.VrtmGlKDmot

The No. 3 reactor of Kansai Electric Power Co.'s Takahama nuclear power plant in Fukui Prefecture, which was restarted in late January, is expected to start commercial operations in late February. Its No. 4 reactor is also set to be restarted around the same time. Although the Takahama Municipal Government and Fukui Prefecture gave their consent to the restart, there are serious concerns, including those expressed by nearby municipalities and their residents.

Following the restart of the No. 1 and No. 2 reactors at Kyushu Electric Power Co.'s Sendai nuclear power plant in Kagoshima Prefecture, Takahama unit 3 is the third reactor to come back online under the safety regulations introduced by the Nuclear Regulation Authority following the shutdown of the nation's nuclear plants in the wake of the March 2011 disaster at Tokyo Electric Power Co.'s Fukushima No. 1 plant. But it is the first to run on mixed oxide (MOX) fuel, which contains not only uranium but also plutonium extracted from spent nuclear fuel. The No. 4 reactor at Takahama will also use MOX fuel.

Japan has accumulated 48 tons of plutonium — enough to make an estimated 6,000 nuclear bombs — as a result of the government's nuclear fuel cycle policy, which aims to reprocess spent fuel to extract uranium and plutonium to be used again as fuel. The Takahama restart may help the government show its resolve to cut its plutonium stockpile to address U.S. concerns over nuclear proliferation. But the restart will pose a problem in the not-too-distant future. The spent fuel storage facilities for reactors 3 and 4 are expected to become filled in seven or eight years after they are reactivated. Spent uranium fuel from nuclear power plants is to be sent to a fuel reprocessing facility in Rokkasho, Aomori Prefecture, still on a trial run, but the plant cannot reprocess used MOX fuel — meaning that there will be no place to store overflowing spent fuel from the Takahama reactors. Although Kansai Electric aims to choose a site for a medium-term storage facility outside Fukui by around 2020, no prefectures seem willing to host it.

In the wake of the 2011 Fukushima disaster, local governments within 30 km of a nuclear power plant are now required to devise plans to evacuate their residents in the event of a major accident. In the case of Takahama, nearly 180,000 residents in 12 municipalities in Fukui, Kyoto and Shiga prefectures live in the 30-km zone. Part of the city of Maizuru, Kyoto Prefecture, is within 5 km of the Takahama plant. Despite this, Kansai Electric stuck to the position that to restart the reactors it only needs consent from the host town of Takahama and Fukui Prefecture, and it ignored calls from Kyoto and Shiga prefectures and many other municipalities within the 30-km zone that it should also gain their consent. The same situation happened when Kyushu Electric Power Co. pushed to restart the Sendai reactors. The power companies should address the concerns harbored by municipalities and residents that do not host plants but lie close enough to be affected by a nuclear disaster.

Despite the requirement for compiling evacuation plans, no evacuation drills with local residents have been carried out in the municipalities around Takahama and many residents have received no instructions on where they should evacuate to in the event of a severe accident. Maizuru, for example, won't release a new evacuation plan for its residents until March. While there are plans to evacuate some Fukui residents to Hyogo, Kyoto and Tokushima prefectures, many municipalities are not ready to receive them. In addition, evacuations may not proceed as planned in extreme weather conditions such as heavy snow or when roads are congested. The Fukushima disaster also exposed the evacuation difficulties faced by inpatients at hospitals and elderly people in nursing care facilities. And as there are few access roads to the Takahama facility, the evacuation of plant workers and dispatch of emergency teams may be hindered. The Takahama facility is among 14 nuclear power plants concentrated by Wakasa Bay in Fukui Prefecture. If a major disaster hits the plants simultaneously, the area will be highly vulnerable.

In December, the Fukui District Court quashed an injunction issued by the same court in April against restarting the Takahama reactors, paving the way for Kansai Electric to put them back online. Although the ruling upheld the NRA's new safety standards for restarting reactors as rational and endorsed the

authority's decision that the Takahama reactors met the standards, both Kansai Electric and the NRA should not forget that the ruling also stated that the NRA's decision does not rule out the possibility of a severe accident and that high-level efforts for safety must be constantly maintained because there is no such thing as absolute safety. Since it is believed that controlling a reactor that burns MOX fuel is more difficult than one that uses uranium, Kansai Electric cannot be too cautious in operating the Takahama plant.

First screening not enough

February 19, 2016

40 year old Takahama reactors set to clear screening but other hurdles block restart OK

http://www.japantimes.co.jp/news/2016/02/19/national/two-40-year-old-takahama-reactors-set-clear-screening-hurdles-block-restart-ok/#.VsbXauaDmot

Kyodo
Two more reactors at the Takahama nuclear power plant in Fukui Prefecture are expected to clear safety screening by regulators in the near future, but hurdles remain for them to restart, sources said Thursday.
The Nuclear Regulation Authority almost concluded the safety screening Thursday, and reactors 1 and 2 of the plant operated by Kansai Electric Power Co. are expected to become **the first units over 40 years old to clear screening**, the sources said.
Under Japan's new safety rules, the operation of such old reactors is prohibited in principle, but they can be allowed to continue operating for up to 20 more years with safety clearances from the NRA.
Located on the Sea of Japan coast, reactor 1 of the Takahama complex marked 40 years of operation in November 2014 and reactor 2 did likewise last November.
The two reactors are expected to clear the regular safety screening. But they will also have to go through a **separate screening by July 7 to operate beyond 40 years.**
It is still unknown when the reactors can resume operation, as they also need to gain approval for some facility designs, as required by the new safety regulations, set after the 2011 Fukushima disaster started.
A total of five reactors at three plants have so far cleared screening under the stricter safety rules, including three that have resumed operations at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture as well as at the Takahama plant.

Radioactive leak at Takahama No.4

February 21, 2016

Water leakage from Takahama nuclear power plant

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Feb. 21, 2016 - Updated 00:19 UTC+1
The operator of Takahama nuclear plant in Fukui Prefecture has found radioactive water leaking at one of its buildings. The utility says the radiation level is lower than the safety standard and the leakage caused no harm to the environment. The authorities say assessing the situation may delay the planned restart of the reactor.

Kansai Electric Power Company says workers at the Takahama plant's No. 4 reactor were alerted on Saturday by the water leakage alarm at the building adjacent to the reactor.

They found that **8 liters of cooling water containing radioactive substances had leaked and spread on the floor. They also found radioactive water seeping into other equipment in the building. The total amount of leakage was 34 liter**s. All was removed.

The company says the water that spread on the floor contained 14,000 becquerels of radioactive substances, less than one-200th of what is required to report to the government. The utility also says no one was exposed to the radiation and no abnormally high readings of radiation levels were measured at monitoring posts.

Takahama's No.4 reactor is to restart later this month. The company officials say workers started running water in some of the plumbing right before the alarm went off. The leakage was found where a filter to remove impurities has been installed. But they have not figured out where and how exactly the leakage came about.

The utility will stop some of the preparatory works and start examining the problem with the Nuclear Regulation Authority on Sunday. Authority officials say they need to first assess the status. They added **the reactor restart schedule may be affected**.

Radioactive water leak near Takahama reactor puts planned restart in doubt
http://ajw.asahi.com/article/behind_news/social_affairs/AJ201602210028

THE ASAHI SHIMBUN
Days before a reactor was to go back online at the Takahama nuclear plant in Fukui Prefecture, a pool of radioactive water was discovered in a building, possibly delaying the reactivation, the plant operator said Feb. 20.
Kansai Electric Power Co. said 34 liters of contaminated water were discovered in an auxiliary structure of the No. 4 reactor building but is not aware of any environmental impact outside the building as a result. However, the utility did not rule out the possibility of a delay in the resumption of the No. 4 reactor, planned as early as Feb. 26 if all the preparations went well.
“We cannot say anything about the effect of the leak on the restart definitively at this point since we are looking into the cause,” said a Kansai Electric public relations official.

The pool was found at the facility to treat water used to cool the reactor. Workers at the plant were alerted to the leak when an alarm sounded at 3:42 p.m. on Feb. 20 after they sent water through piping at the facility.
The utility, based in Osaka, reported the incident to the Nuclear Regulation Authority and the prefectural government at 4:55 p.m.
The company said radioactivity of the leaked water was estimated at 60,000 becquerels, below the level that requires operators of a nuclear plant to notify the central government.
After the leak was found, Kansai Electric suspended part of the work to prepare for the restart of the No. 4 reactor.
The company had planned to conduct a test on Feb. 21 to check the reactor's status by bringing it to a condition similar to actual operation.
Kansai Electric said it remained unknown whether it can proceed with the planned test on Feb. 21. The No. 4 reactor can produce 870 megawatts of power, using plutonium-uranium mixed-oxide (MOX) fuel. This year marks the 30th since it began operations.
The No. 3 reactor at the plant, which also uses MOX fuel, is expected to resume commercial operations on Feb. 26 after being restarted in late January.
The No. 3 reactor was the third brought back online under stricter safety regulations drawn up by the NRA after the Fukushima No. 1 nuclear plant disaster in March 2011.

Radioactive leak at Takahama No.4 (2)

February 21, 2016

Utility examines western Japan reactor after coolant leak

http://mainichi.jp/english/articles/20160221/p2g/00m/0dm/038000c

February 21, 2016 (Mainichi Japan)
FUKUI (Kyodo) -- Kansai Electric Power Co. on Sunday began looking into the cause of a radioactive coolant water leak at a reactor at the Takahama nuclear power plant in western Japan the previous day.
The utility has suspended preparation work for the restart of Takahama's No. 4 reactor, scheduled for late February, pending an assessment of the small leak. An official from the operator declined to say whether the accident may affect the resumption schedule.
Kansai Electric said Saturday an estimated 34 liters of coolant water leaked within a building attached to the No. 4 reactor, containing a radioactivity level below that which is needed to be reported to the state. The utility said the leak does not affect the environment.
The company has already finished loading nuclear fuels into the No. 4 reactor at the plant in Takahama, Fukui Prefecture, on the Sea of Japan coast.
The No. 3 reactor at the same plant resumed operation Jan. 29, becoming the third reactor to be reactivated under stricter safety rules set after the 2011 Fukushima nuclear disaster.
The government is pushing ahead with nuclear plant restarts after all of the country's 48 reactors were shut down for safety reviews following the Fukushima accident.

The state is looking to generate at least 20 percent of Japan's overall electricity via nuclear power by 2030, despite public opposition to nuclear power remaining strong since the disaster at the Tokyo Electric Power Co. plant.

Radioactive water leak found at Takahama No. 4 reactor, posing restart delay

http://www.japantimes.co.jp/news/2016/02/21/national/radioactive-water-leak-found-takahama-no-4-reactor-discovery-delay-restart/#.VsmIH-aDmov

JIJI, AFP-JIJI

FUKUI – Kansai Electric Power Co. has found a puddle of radioactive water inside an auxiliary building at the Takahama nuclear plant's No. 4 reactor — an announcement that could throw a wrench into plans to reboot the unit later this month.

The Fukui Prefectural Government's nuclear safety division said the leak, announced by the utility Saturday, did not affect the environment.

"Resumption procedures have been suspended in light of the incident because we are still investigating the cause," a Kepco spokesman said.

The suspension could affect the reactivation timetable.

According to the company, an alarm went off after the utility injected water into a pipe connected to the No. 4 reactor's first cooling system at around 3:40 p.m. Saturday. Water was found dripping from two valves on a coolant water filter in the auxiliary building, and the radioactivity of the resulting 8-liter puddle was 14,000 becquerels.

Judging from other traces on the floor, roughly 34 liters were leaked overall, amounting to about 60,000 becquerels.

The No. 4 reactor is 30 years old and has idle for more than 4½ years since being taken offline in July 2011 for a scheduled checkup. That's longer than the No. 3 reactor, which was reactivated in January, and reactor Nos. 1 and 2 at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture, which were rebooted last year.

All four reactors have cleared the stiffer safety requirements set up after the March 2011 triple core meltdown at Tokyo Electric Power Co.'s poorly protected Fukushima No. 1 plant, which is now defunct.

In December, the Fukui District Court overturned an injunction on restarting the two Takahama reactors that had been brought by residents who said their safety had not been proven, despite being greenlighted by the Nuclear Regulation Authority.

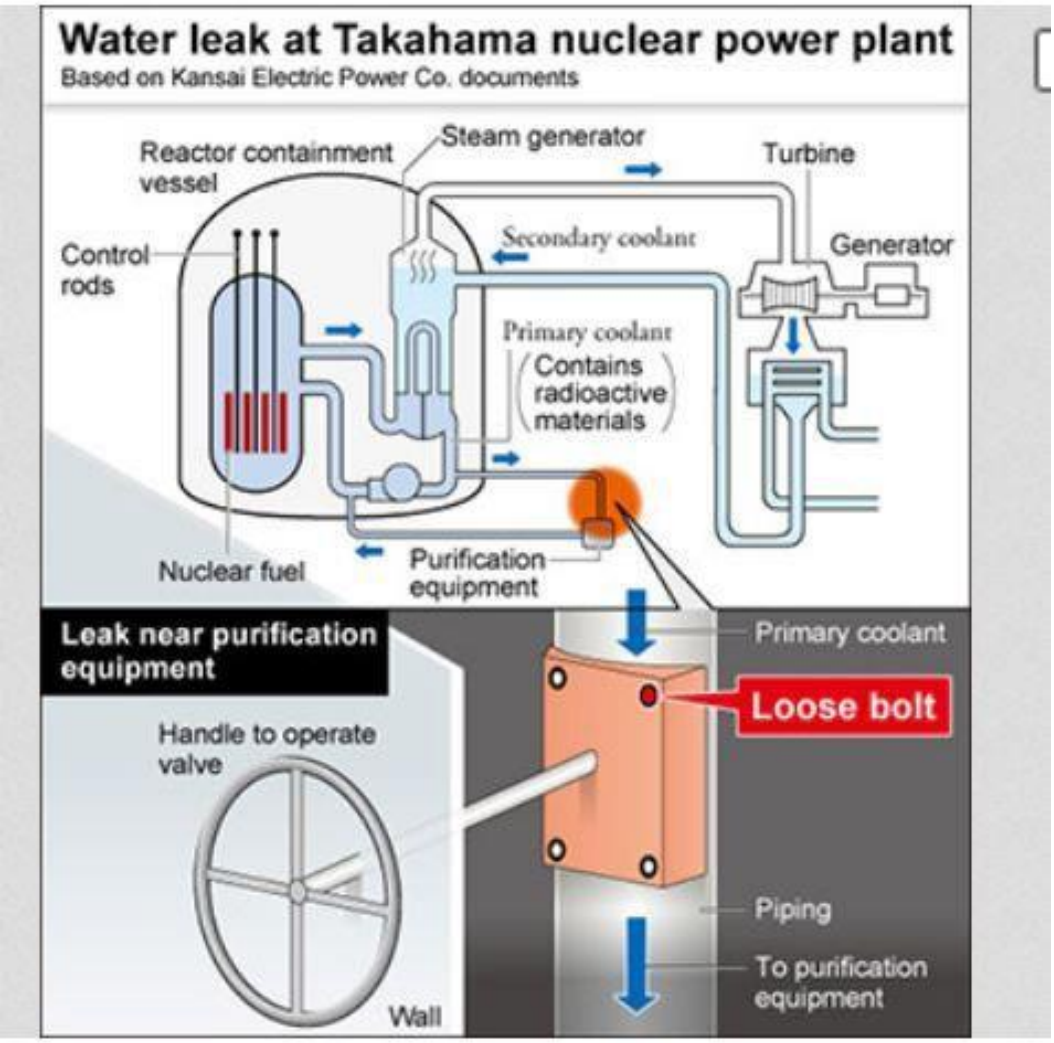
In Kagoshima, the two Sendai reactors were restarted in August and October 2015, ending a two-year hiatus.

No need to delay restart

February 23, 2016

No Takahama reactor restart delay after loose bolt found to be source of leak

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201602230044



THE ASAHI SHIMBUN

OSAKA--The radioactive water leak discovered recently at the Takahama nuclear power plant in Fukui Prefecture was caused by a loose bolt in the piping system and won't delay the planned restart of a reactor, its operator said Feb. 22.

The Kansai Electric Power Co. plant in the town of Takahama is currently undergoing procedures to restart its No. 4 reactor.

The discovery of the pool of contaminated water delayed the startup test at the reactor by a day, to the night of Feb. 22, but it is set to resume operations on Feb. 26 as scheduled.

Some 34 liters of radioactive water were found leaking near the purification equipment installed in the auxiliary structure of the No. 4 reactor building on Feb. 20 during a test to send water down the primary coolant pipe connected to the reactor.

When Kansai Electric examined the fault, they discovered that one of the four bolts attaching a valve to the pipe leading to the purification equipment was loose. The operator believes that water running through the pipe at a higher pressure than when the reactor is in operation had also contributed to the leak.
The bolt was tightened manually and although records stated that the procedure was completed in accordance with protocol, the operator said that it may not have been sufficiently tightened due to the limited space in the area.
Following the discovery of the leak, Kansai Electric examined all similar valves of the No. 4 reactor installed in about 80 locations and went on to conduct the startup test on Feb. 22.
Once the operator confirms that the control rods are functioning in the eight-day test, they will remove them and restart the reactor on Feb. 26.
The valves installed on the No. 3 reactor, which resumed operation on Jan. 29, were also checked for defects. The reactor will start commercial operation on the same day the No. 4 reactor restarts, if all goes according to plan.
Kansai Electric notified the Nuclear Regulation Authority and the Fukui prefectural government of the latest leak just one hour after the discovery, but took six hours to announce the matter publicly.

Beyond the 40-year limit for the first time

February 24, 2016

Nuclear watchdog gives nod on safety to two aging reactors for first time

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201602240072

By MASANOBU HIGASHIYAMA/ Staff Writer
For the first time, Japan's nuclear watchdog has disclosed that two aging nuclear reactors in operation for more than their basic lifespan of 40 years have passed the new safety standards set after the 2011 Fukushima disaster.
The No. 1 and No. 2 reactors of the Takahama nuclear power plant in Fukui Prefecture could now have their operations extended for a further 20 years as the Nuclear Regulation Authority made the announcement on Feb. 24.
To extend the operational lives of the two reactors, operator Kansai Electric Power Co. must receive NRA approval by July on three outstanding items--safety measures, detailed designs and extension of operations.
This is the fourth time the NRA has acknowledged that nuclear reactors are meeting the new safety standards, but the first time for those that are at least 40 years old.
The other three cases were the No. 1 and the No. 2 reactors at the Sendai nuclear power plant in Kagoshima Prefecture, operated by Kyushu Electric Power Co.; the No. 3 and the No. 4 reactors at the

Takahama plant; and the No. 3 rector at Ikata nuclear power plant in Ehime Prefecture, operated by Shikoku Electric Power Co.
After the triple meltdown at the Fukushima No. 1 nuclear power plant in March 2011, laws on nuclear safety were revised. As a result, it was stipulated that the operation period of nuclear reactors is a basic 40 years but that can be extended by up to 20 years--but just one time--with NRA approval.
Although the No. 1 and the No. 2 reactors at the Takahama plant have been operating for more than 40 years, it is a transitional measure until July as Kansai Electric Power has yet to obtain NRA approval for a 20-year extension.
In March 2015, the utility asked to be screened by the NRA to ensure it was meeting the new safety standards. In April 2015, it applied for an additional 20 years for each reactor.
The NRA has been conducting intensive screenings on the reactors because if Kansai Electric Power cannot obtain approval on safety measures, detailed designs and extension of operations by the July deadline, it will have to decommission the two reactors.
In the safety screenings, the main focus was on fire-prevention measures with regard to electric cables. The No. 1 and No. 2 reactors were using cables totaling 1,300 kilometers in length, but they were not fire-retardant.
The utility responded by replacing 60 percent of them with fire-retardant cables, and wrapping the remaining 40 percent with fire-retardant sheets. This met with NRA approval.
With regard to earthquake and tsunami resistance, the utility used the same levels as those for the No. 3 and the No. 4 reactors at Takahama plant, both of which had already been approved by the NRA as meeting the new safety standards.
The NRA devoted 389 pages of the screening paper to its opinion that the No. 1 and the No. 2 reactors at Takahama are meeting the new safety standards. The NRA will collect opinions from the public about its conclusions for 30 days from Feb. 25 and then formally decide whether the two reactors are meeting the new standards on safety measures.
At the same time, it will go ahead with screenings on the remaining two items--detailed designs and the extension of operations. The screening on the detailed designs will focus on quake-resistant capabilities of important facilities. The screening on the extension of operation will check on the deterioration of facilities.
Even if Kansai Electric Power obtains approval on all of the three items, it will take about three years for the utility to finish work on safety measures. Because of that, the operations of Takahama's No. 1 and No. 2 reactors are not expected to be restarted before autumn 2019.

First reactors in Japan get tentative approval to burn for longer than 40 years

http://www.japantimes.co.jp/news/2016/02/24/national/first-reactors-japan-get-tentative-approval-burn-longer-40-years/#.Vs26o-aDmot

Kyodo
Two aging nuclear reactors have come a step closer to being allowed to exceed their 40-year service lifetimes, in what would be the first such extensions under new safety guidelines.

On Wednesday, the Nuclear Regulation Authority reported that safety systems at the No. 1 and No. 2 reactors of Kansai Electric Power Co.'s Takahama plant in Fukui Prefecture meet standards. The decision will be finalized after soliciting comments from the public.
However, the reactors must clear further hurdles before they can resume operation — in the form of further permission from the regulator.
The clock is ticking. They must secure this approval by July 7 or they will be scrapped.
Tougher safety rules were imposed in the wake of the Fukushima No. 1 meltdowns. They prohibit, in principle, the operation of nuclear reactors for longer than four decades, but extensions of 20 years are allowed if operators make safety upgrades and pass screening by the regulator.
The No. 1 reactor of the Takahama complex marked 40 years of operation in November 2014 and the No. 2 reactor last November.
A total of five reactors at three plants have so far obtained final approval for restarts under the stricter safety rules, including two reactors at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture and a reactor at the Takahama plant that have resumed operations.

Reactors given initial OK for restart beyond 40-yr limit for 1st time

http://mainichi.jp/english/articles/20160224/p2g/00m/0dm/067000c

The Takahama Nuclear Power Plant's No. 1 and 2 reactors (from left in the front row) and No. 3 and 4 reactors (from left in the back row) are pictured in this photo taken from a Mainichi helicopter in Takahama, Fukui Prefecture, on Feb. 23, 2016. (Mainichi)
TOKYO (Kyodo) -- Two aging nuclear reactors in western Japan gained initial approval Wednesday for their restart in the first such safety clearance for reactors running beyond the government-mandated 40-year service period under new rules set after the 2011 Fukushima disaster.
The Nuclear Regulation Authority approved safety measures taken for the Nos. 1 and 2 reactors of Kansai Electric Power Co.'s Takahama plant in Fukui Prefecture as being in compliance with post-Fukushima regulations for their resumption. The decision will be finalized after soliciting technical comments from the public.
But it remains uncertain whether the reactors can actually resume operation, as they will also have to obtain further permissions from the regulator necessary to operate beyond the 40-year limit by July 7. Missing the deadline would mean an end to the reactors.
The new, tougher safety rules in principle prohibit the operation of nuclear reactors beyond four decades, but operation for an additional 20 years is allowed if operators make safety upgrades and pass the regulator's screening.
The No. 1 reactor of the Takahama complex marked 40 years of operation in November 2014 and the No. 2 reactor last November.
A total of five reactors at three plants have so far obtained final approval for restarts under the stricter safety rules, including two reactors at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture and a reactor at the Takahama plant that have resumed operations.

Takaham No.4 due to restart on Friday

February 25, 2016

Takahama No. 4 reactor to restart on Friday

http://www3.nhk.or.jp/nhkworld/en/news/20160225_35/

Kansai Electric Power Company says it will restart on Friday another reactor at the Takahama nuclear power plant in Fukui Prefecture, central Japan.

The plant in February last year cleared strict government regulations adopted after the 2011 Fukushima Daiichi accident. Its No. 3 reactor was restarted late last month.

Final preparations are underway at the No. 4 reactor.

The plant's engineers are expected to check control rods on Friday morning. If no problems are found, the utility plans to start removing 32 rods at 5 PM Friday.

Kansai Electric says the reactor will achieve a sustained nuclear chain reaction in about 13 hours.

The firm plans to start generating and transmitting power on Monday and resume commercial operation in late March.

Also on Thursday, inspectors from the Nuclear Regulation Authority are conducting final inspections of the No. 3 reactor.

If it passes and receives certification by the NRA, the reactor could start commercial operation as soon as Friday afternoon.

The No. 4 reactor would be the 4th to restart under the regulations, following the No. 3 and 2 more at the Sendai nuclear plant in the southwestern prefecture of Kagoshima.

Kansai Electric to restart another Takahama reactor under new rules

http://mainichi.jp/english/articles/20160225/p2g/00m/0dm/073000c

FUKUI, Japan (Kyodo) -- Kansai Electric Power Co. said Thursday that a reactor at its Takahama nuclear plant is slated to restart Friday, becoming the second unit to run on uranium-plutonium mixed oxide fuel under new rules set after the 2011 Fukushima nuclear disaster.
The No. 4 reactor at the plant in Fukui Prefecture, western Japan, will be brought back online as the fourth reactor in Japan to operate under post-Fukushima stricter regulations.
Kansai Electric rebooted the No. 3 unit at the same complex last month, also using mixed oxide fuel which is created by plutonium and uranium extracted from spent nuclear fuel. MOX fuel is a key component of the nuclear fuel cycle program pursued by the nuclear power industry and the government.

Last year, two reactors came back onstream at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture.
The latest restart comes as concern about the safety of the No. 4 unit grew recently after radioactive coolant water leaked last Saturday in a building attached to the reactor, containing a radioactivity level below that which is needed to be reported to the state.
The leak was caused by insufficient tension of a bolt used in a valve installed in a pipe and the utility has taken steps to prevent a recurrence.
The government is looking to reactivate more reactors to meet a goal of generating at least 20 percent of Japan's overall electricity with nuclear power generation in 2030.
A reactor at Shikoku Electric Power Co.'s Ikata plant in Ehime Prefecture is expected to follow suit with permission for resumption already given by regulators and the local government.
Kansai Electric is also seeking to resume operations of two more reactors at the Takahama plant, both of which are more than 40 years old.
The aging reactors gained initial approval from the nuclear regulation body Wednesday and could be the first reactors operating beyond the government-mandated 40 years service period under the new safety rules.
But it remains uncertain whether they can actually restart as further permissions obtained from the regulator are necessary to operate beyond the 40-year limit by the July 7 deadline.
The new safety rules prohibit the operation of nuclear reactors beyond four decades in principle, but they can be allowed to continue operation for up to 20 more years if operators make safety upgrades and pass the regulator's screening.
Kansai Electric said the Takahama No. 4 unit will begin operations for restart on Friday afternoon and is expected to reach criticality, or a state of sustained nuclear chain reaction, early Saturday.
The reactor will begin generating and sending electricity as early as next Monday.

Takahama: Surprise!

March 9, 2016

Court issues surprise injunction to halt Takahama nuclear reactors

http://www.japantimes.co.jp/news/2016/03/09/national/court-issues-surprise-injunction-halt-takahama-nuclear-reactors/#.Vt_h-ebbySo

Kyodo
OTSU, SHIGA PREF. – A court has issued a surprise injunction to halt operations at Kansai Electric Power Co.'s Takahama No. 3 and No. 4 nuclear reactors in Fukui Prefecture, **siding with residents** from neighboring Shiga Prefecture worried about the safety of the plant.
The order, by the Otsu District Court in Shiga, is likely to lead to an immediate halt of the No. 3 reactor, which was restarted in late January.
The judgment — the first of its kind affecting reactors that were fired up under beefed-up safety regulations following the March 2011 triple-meltdown at the Fukushima No. 1 nuclear plant — **is a blow**

to the government's renewed push for atomic power. The ruling could also cast doubt on the stringency of the new safety regulations.
Kansai Electric had also been working to restart Takahama's No. 4 reactor this month after an unplanned shutdown due to a technical problem last week.
The Takahama reactors, on the coast of Fukui Prefecture in western Japan, had cleared the new regulations last year.
The Takahama plant is one of two nuclear power stations that are currently online.
The injunction by the Otsu District Court forces the operator to shut down the No. 3 unit, which was restarted in late January, while also keeping the No. 4 reactor offline.
Residents of neighboring Shiga Prefecture, a portion of which is within a 30-km radius of the Takahama plant, had asked for the injunction citing insufficient safety measures and concerns that many residents could be exposed to radiation in the event of a severe accident.
While the central government has expanded evacuation preparation areas to a 30-km radius of a nuclear plant from a previous 10 km, safety concerns have persisted in Shiga. Those in favor of the injunction had cited the March 2011 disaster, where some people living outside the 30-km zone around the Fukushima plant were also forced to evacuate.
The Takahama complex was the nation's second nuclear power plant to be brought back online after clearing the new regulations, with its Nos. 3 and 4 reactors resuming operations on Jan. 29 and Feb. 26, respectively.
But the No. 4 reactor was hit by trouble shortly before and after its reactivation. Ahead of its reboot, radioactive coolant water leak was discovered. Then — just three days after it was rebooted — the unit shut down automatically for a reason yet to be conclusively specified.
In a separate case concerning the two reactors, the Fukui District Court issued an injunction last April banning Kansai Electric from restarting the units, citing safety concerns.
But the same court later lifted the injunction in December, allowing the utility to resume operations at both reactors. Plaintiffs appealed the court decision to the Kanazawa branch of the Nagoya High Court, where the case is pending.
Under the revamped safety regulations, which took effect in 2013, utilities are for the first time obliged to put in place specific countermeasures in the event of severe accidents like reactor core meltdowns and huge tsunami — the direct cause of the Fukushima crisis that began on March 11, 2011.

Takahama: Surprise (3)

March 9, 2016

Court orders Takahama reactor shut down, 2nd offline

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201603090064

THE ASSOCIATED PRESS
A court has issued an unprecedented order for a nuclear reactor in western Japan to stop operating and ordered a second one to stay offline.

The Otsu District Court in Shiga Prefecture, which issued the injunction, said the emergency response plans and equipment designs at the two reactors have not been sufficiently upgraded despite the 2011 Fukushima crisis.
Wednesday's order requires Kansai Electric Power Co. to shut down the No. 3 reactor immediately and keep the No. 4 offline at the Takahama plant in Fukui Prefecture, home to about a dozen reactors.
The two reactors restarted this year after a high court in December reversed an earlier injunction by another court.
The decision reflects Japan's divisive views on nuclear safety and leaves only two of the country's 43 reactors in operation.

Court Orders One of Japan's Two Operating Nuclear Plants to Shut Down

http://www.nytimes.com/2016/03/10/world/asia/japan-nuclear-plant.html?_r=0
By JONATHAN SOBLEMARCH 9, 2016
Photo
TOKYO — A court in Japan ordered one of only two nuclear power plants operating in the country to shut down on Wednesday, citing insufficient safety measures put in place after meltdowns at a facility in Fukushima five years ago.
The plant, Takahama Nuclear Power Plant, had been back online for only two months after an extended freeze on atomic power in Japan in the aftermath of the March 2011 Fukushima disaster.
Japan's government and its power companies have struggled to get the nuclear industry back on its feet. Despite new safety standards introduced in 2013, much of the public remains wary. Only a handful of the more than 40 operable reactors in the country have met the new rules, and lawsuits have made it difficult to restart them.
Prime Minister Shinzo Abe's government sees a revival of nuclear power as critical to supporting economic growth and slowing an exodus of Japanese manufacturing to lower-cost countries. Electricity prices have risen by 20 percent or more since the Fukushima disaster because of increased imports of fossil fuels, though the recent drop in oil prices has taken some of the pressure off.
The court ruling on Wednesday added a new twist to the legal battles over nuclear power.
Judges have enjoined idled plants from being put back into service, but the judgment against Takahama was the first in which a facility that had successfully been restarted was ordered to shut down.
Takahama's owner, Kansai Electric Power Company, brought one reactor at the facility back online in January and another last month.
The court, which is in Otsu, Shiga Prefecture, said neither restart should have happened. It was responding to a request for an injunction filed by residents, who said the plant's owner had underestimated the size of earthquakes that could strike the plant and had not made adequately detailed plans to evacuate people living nearby in case of an accident.
Government safety regulators say Takahama meets Japan's new safety guidelines, which address such issues. But the court ruled for the plaintiffs, saying there were "points of concern in accident prevention, emergency response plans and the formulation of earthquake models."
Kansai Electric said it would appeal. It has won previous appeals against injunctions issued against its plants, including Takahama. The company overcame a separate lawsuit to bring the plant online in January.
Takahama is in Fukui Prefecture, a stronghold for the atomic power industry that is home to 13 commercial reactors and that has earned the nickname Genpatsu Ginza, or Nuclear Alley. But the latest

lawsuit was filed by residents of the neighboring Shiga Prefecture, who said they would be affected by radiation from a serious accident at Takahama.
Radiation releases from the plant in Fukushima affected a wide swath of northeastern Japan. More than 100,000 residents were evacuated, and many are still unable or unwilling to return.
The restart of Takahama was already plagued by problems. About a week before the second reactor was returned to service in February, a puddle of radioactive water from a leaking pipe was found inside the building housing the unit. A few days after the restart, the reactor abruptly shut down automatically, for reasons that Kansai Electric has not been able to determine.

Takahama: Surprise! (2)

March 9, 2016

Court orders shutdown of Takahama reactors

http://www3.nhk.or.jp/nhkworld/en/news/20160309_25/

A Japanese court has issued an injunction to suspend operations of 2 nuclear reactors at the Takahama plant in Fukui Prefecture, central Japan. It's the first such injunction for reactors currently in operation.

Twenty-nine residents of neighboring Shiga Prefecture sought an injunction in January last year demanding that the plant's operator, Kansai Electric Power Company, keep the No.3 and No.4 reactors offline. They claim the reactors are unsafe and at risk of major accidents.

The Takahama plant's No.3 reactor was restarted in January this year under new government regulations introduced after the 2011 Fukushima disaster. The No.4 reactor was put back online last month, but 3 days later it shut down automatically for reasons still under investigation.

On Wednesday, the Otsu District Court ruled in the residents' favor.

Kansai Electric Power will have to stop the No.3 reactor as soon as possible because the injunction takes effect immediately.

The company says it plans to lodge an objection to have the decision canceled.

Japan court rules against operating restarted Takahama reactors

http://mainichi.jp/english/articles/20160309/p2g/00m/0dm/078000c

OTSU, Japan (Kyodo) -- A Japanese district court on Wednesday ordered Kansai Electric Power Co. not to operate its two reactivated nuclear reactors, delivering a blow to the government's push for nuclear power under new safety requirements introduced after the 2011 Fukushima disaster.

- 【Related】Kansai Electric to restart another Takahama reactor under new rules
- 【Related】Analysis: Nuclear watchdog's green light for Takahama reactors a threat to '40-year rule'
- 【Related】KEPCO begins to insert nuclear fuel into No. 4 reactor at Takahama plant

In issuing the injunction on the Takahama plant, the first of its kind affecting reactors that resumed operations under the post-Fukushima rules, the Otsu District Court cited "problematic points" in planned emergency responses for major accidents and "questions" remaining on tsunami countermeasures and evacuation planning.

The Takahama plant in Fukui Prefecture is one of two nuclear power stations that are currently online.

The injunction will force the operator to shut down the No. 3 unit, which was restarted late January, and keep offline the No. 4 unit whose operation was recently suspended due to equipment trouble.

Kansai Electric said it will "swiftly start procedures to file an objection to the court's decision" after confirming the detailed content of the court decision and will "make all-out efforts to have it revoked at an early date."

Chief Cabinet Secretary Yoshihide Suga told a press conference that the government will continue to seek the resumption of reactors that have cleared what it calls the "world's toughest (safety) standards."

On whether the court judgment could affect the country's overall nuclear policy, the top government spokesman only said, "I have not heard the details. Anyway, I believe Kansai Electric will first appropriately deal with the issue."

The injunction had been sought by residents of neighboring Shiga Prefecture, a tiny part of which falls within a 30-kilometer radius of the Takahama plant. The plaintiffs living within 70 km of the complex argued that safety measures are insufficient and that many residents could be exposed to radiation if a severe accident occurs.

While the central government has expanded evacuation preparation areas to a 30-km radius of a nuclear power plant from the previous 10 km, safety concerns remain in Shiga Prefecture because in the March 2011 disaster some people living beyond the 30-km zone around the Fukushima Daiichi nuclear power plant also had to evacuate.

Under the revamped safety regulations, which took effect in 2013, utilities are for the first time obliged to put in place specific countermeasures against severe accidents like reactor core meltdowns and huge tsunami -- the direct cause of the Fukushima disaster that began on March 11, 2011.

But Presiding Judge Yoshihiko Yamamoto said there are problems even in the latest safety measures, such as in the designing of the quake-resistance standards. And he also criticized Kansai Electric for its failure to offer sufficient explanations regarding the safety of the Takahama plant.

Kansai Electric reactivated the Takahama Nos. 3 and 4 reactors on Jan. 29 and Feb. 26, respectively. But the process was plagued with problems, with the No. 4 unit shutting down automatically just three days after it was rebooted.

In a separate case concerning the two reactors, the Fukui District Court issued in April last year an injunction banning Kansai Electric from restarting the units, citing safety concerns.

But the same court lifted the injunction in December, allowing the utility to resume operations at both reactors. Plaintiffs appealed the court decision to the Kanazawa branch of the Nagoya High Court, where the case is pending.

Starting to halt Takahama plant after injunction

March 10, 2016

After injunction, work starts to halt reactor at Takahama plant

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201603100005

THE ASAHI SHIMBUN

Kansai Electric Power Co. started shutting down a nuclear reactor in Fukui Prefecture on March 10 after a court issued an unprecedented injunction and questioned the effectiveness of the world's "strictest" safety standards.

The Osaka-based utility plans to file an objection to the injunction or request a stay of execution of the order to suspend operations of the No. 3 and No. 4 reactors at its Takahama nuclear plant.

But the injunction issued by the Otsu District Court in neighboring Shiga Prefecture on March 9 took effect immediately, and the No. 3 reactor is expected to be brought to a complete halt around 8 p.m.

It was the first time a court in Japan has issued orders for an operating reactor to be taken offline.

"It is extremely regrettable," Kazuo Kijima, chief of Kansai Electric's atomic fuel cycle division, said at a news conference in Osaka on March 9. "It is totally unacceptable."

The two 870-megawatt reactors had passed the Nuclear Regulation Authority's new safety regulations that were imposed after the disaster unfolded at the Fukushima No. 1 nuclear power plant in 2011.

The No. 3 reactor, which was brought online on Jan. 29, had started commercial operations on Feb. 26.

But technical trouble caused the No. 4 reactor to automatically shut down only three days after it was restarted on Feb. 26. Previously, a leak of radioactive water was found in the No. 4 reactor building.

The Otsu District Court focused on the overall safety of the plant before issuing the injunction.

Presiding Judge Yoshihiko Yamamoto said the utility failed to provide a convincing argument that it is fully prepared for the most powerful quake and tsunami that could hit the nuclear plant.

Specifically, the court concluded that the Takahama plant lacked a sufficient safety cushion to withstand maximum shaking of such an earthquake emanating from an active geological fault.

It said Kansai Electric's assumption of the length of that fault was inaccurate.

To drive home the point that the utility was ill-prepared, the district court cited archives of a huge tsunami that struck the Wakasa region, where the plant is situated, following the Tensho earthquake in 1586.

The court also said Kansai Electric failed to offer an adequate explanation on how it would respond to a leak of coolant water from a quake-damaged storage pool for spent nuclear fuel at the plant.

The central government has been pushing for the restarts of reactors if they pass the NRA's safety standards.

Kansai Electric, which relied on nuclear power for half of its electricity output before the Fukushima disaster, the highest ratio among regional utilities, had high hopes that the two reactors would turn around the company's finances.

The two reactors at the Takahama plant were the third and fourth in the nation to go online under the NRA's new rules that went into force in 2013.

However, the district court said the NRA's regulations should be more comprehensive.
Judge Yamamoto noted that the specific causes of the disaster at the Fukushima No. 1 nuclear plant have yet to be identified even five years after three of its reactors melted down.
"If we squarely face the fact that a disaster whose scope went beyond expectations has occurred, the new regulations should have been set based on the philosophy that an accident caused by oversight should not result in a disastrous situation," Yamamoto said.
The court said it was "extremely concerned" that the NRA put in place its new regulations when efforts to unravel the full picture of what went wrong at the Fukushima plant were "only half-way through."
"We hesitate to conclude that they (new regulations) serve as a basis for public welfare," the court said.
NRA Chairman Shunichi Tanaka defended the regulations at a news conference on March 9.
"I do not believe that there are any flaws in them," he said. "New regulations always pursue safety by incorporating the latest findings."
Chief Cabinet Secretary Yoshihide Suga also appeared calm despite the court decision.
"Our policy to restart the reactors remains unchanged since they were judged to meet the world's strictest regulations," he said.
The court, however, stressed that the central government has a larger role to play to ensure the safety of people living near nuclear plants, such as taking the lead in drawing up evacuation plans in the event of a serious accident.
After the Fukushima disaster, new guidelines require local governments within a 30-km radius of a nuclear facility to prepare evacuation plans for an emergency.
"Broader regulations than the existing ones should be set, with an eye on such evacuation plans as well, and the central government is obliged to draw up them," the court said.
The 29 plaintiffs from Shiga Prefecture live in areas 30 to 70 kilometers from the Takahama plant in Fukui Prefecture, which is home to 13 reactors.
Citing the impact of the Fukushima nuclear disaster, the plaintiffs requested the court injunction over fears that damage from a severe accident at the Takahama plant could go well beyond the 30-km zone.
Residents of Shiga Prefecture are keen to protect Lake Biwako, which covers one-sixth of the prefecture's area.
The lake, the largest in Japan, supplies water for 14.5 million residents in the Kinki region, including Kyoto and Osaka prefectures.
Kenichi Ido, leader of a group of lawyers representing the plaintiffs, called the court decision "epoch making."
"The impact of the ruling on other courts across Japan is significant," said Ido, a former judge. "We could bring a halt to the operation of a nuclear plant even though Shiga Prefecture does not host one. The court made the decision because Japan experienced the Fukushima disaster."
The court's decision is the second to order Kansai Electric to suspend operations of the Takahama plant.
A similar injunction in April last year by the Fukui District Court was later rescinded by a different judge of the same court.

Takahama No.3 reactor halted on injunction

http://www3.nhk.or.jp/nhkworld/en/news/20160310_42/

Kansai Electric Power Company has shut down a reactor at its Takahama nuclear plant in Fukui Prefecture, central Japan, in accordance with a court injunction.

This is the first time in Japan that operating reactors have been stopped on a court decision.

Workers began placing control rods inside the No.3 reactor at 10 AM on Thursday to stop nuclear fission. Output was gradually reduced, and the reactor came to a halt at around 8 PM.

A district court issued an injunction on Wednesday ordering the plant's No.3 and No.4 reactors to be taken offline. The court decided that the operator has not offered an adequate explanation of how it would prevent or deal with accidents and other emergencies.

The No.3 reactor was restarted in January of this year.
Unit 4 went back online last month but shut down automatically 3 days later because of a glitch which is still under investigation.

The reactors must stay offline until the injunction is overturned.

The shutdown leaves just two reactors operating in Japan, both at the Sendai power station in Kagoshima Prefecture in the southwest.

Work begins to halt Takahama No.3 reactor

http://www3.nhk.or.jp/nhkworld/en/news/20160310_21/

The operator of the Takahama nuclear plant in Fukui Prefecture, central Japan, has begun shutting it down following a court injunction.

The Otsu District Court in neighboring Shiga Prefecture issued an injunction on Wednesday ordering the plant's No.3 and No.4 reactors taken offline.

The court said the operator, Kansai Electric Power Company, has not sufficiently explained the reactors' safety to local residents despite the high risks.

Kansai Electric began placing control rods inside the No.3 reactor at 10 AM on Thursday to stop nuclear fission. The operator suspended generating electricity at around 5 PM.

Output will gradually be reduced until it reaches zero at around 8 PM.

NHK video on Takahama plant

March 9
Video
http://www3.nhk.or.jp/nhkworld/en/news/videos/20160309232630687/

Takahama History

Takahama No.3 shut down

March 11, 2016

Takahama nuclear reactor shut down following court order

http://mainichi.jp/english/articles/20160310/p2g/00m/0dm/087000c

FUKUI (Kyodo) -- Kansai Electric Power Co. halted on Thursday a reactor at its Takahama nuclear power plant a day after a court ordered the utility to shut it down.

- 【Related】Court questions credibility of safety standards as it orders suspension of 2 reactors
- 【Related】Takahama reactor injunction torpedoes Kansai Electric's business strategy
- 【Related】Residents rejoice over court order to halt Takahama nuke plant reactors

The other reactor at Takahama subject to the court order, the No. 4 unit, was already offline.
The No. 3 unit, which was reactivated Jan. 29, is the first active reactor in Japan to be suspended under a court injunction. The utility cannot reactivate the two units unless the order is overturned.
The No. 4 unit was restarted Feb. 26 but automatically shut down three days later due to an equipment problem. It was brought into a state of cold shutdown to investigate the cause of the trouble.
On Wednesday, the Otsu District Court ordered that the two reactors be halted as requested by local residents, citing "problematic points" in planned responses for major accidents, and "questions" on tsunami countermeasures and evacuation planning.
The ruling was a blow to the government's push for nuclear power under stricter safety requirements introduced after the 2011 Fukushima disaster.
Prime Minister Shinzo Abe said that the government will continue to seek the restart of reactors that have cleared the new safety regulations to ensure stable power supply in resource-poor Japan.
"I hope Kansai Electric will provide further explanations about the safety (of the reactors), and the government will also give guidance," Abe said at a press conference on the eve of the fifth anniversary of the devastating March 11, 2011 earthquake and tsunami, which triggered the Fukushima nuclear plant disaster.
The order came as Japan was on course to become reliant on nuclear power again after two reactors at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture were brought back online last year, followed by another two at the Takahama plant in Fukui Prefecture earlier this year.
The government looks to derive 20 to 22 percent of the country's electricity from nuclear power in 2030 by bringing reactors back online after the Fukushima disaster led to a nationwide shutdown of nuclear plants.

The No. 3 and 4 units run on mixed oxide or MOX fuel, which is created using plutonium and uranium extracted from spent nuclear fuel. It is a key component of the nuclear fuel cycle pursued by the nuclear power industry and the government.

Screening suspended at Niigata plant

March 23, 2016

Screening of Kashiwazaki-kariwa plant to be halted

http://www3.nhk.or.jp/nhkworld/en/news/20160323_25/
Japan's nuclear regulator says it will suspend screening for restarts of 2 reactors at a nuclear power plant in central Japan.

The reactors are the Number 6 and 7 units of the plant at Kashiwazaki-kariwa in Niigata Prefecture.

The Nuclear Regulation Authority said on Wednesday that Tokyo Electric Power Company must supply more data for a new method of assessing quake resistance of facilities and buildings.

The screening has focused on measures to prevent serious accidents, as the regulator judged that the 2 reactors have a new design and pose fewer safety risks.

Niigata Governor Hirohiko Izumida says he wants the regulator to conduct thorough safety checks. He also suggests that finding the truth of the 2011 Fukushima nuclear accident is essential for ensuring the safety of nuclear plants.

The 2 reactors are boiling-water types, like those of the damaged Fukushima Daiichi plant.

The screening was in the final stage, with more progress than that for any similar reactors. The regulator says assessing the 2 reactors' quake resistance may take 6 more months. It adds that while the screening is suspended, it will resume that for other reactors of the same type.

Reactors must meet tougher government requirements introduced after the Fukushima accident before going back online.

Safety checks for Tepco's Kashiwazaki-Kariwa nuclear plant to be prolonged

http://www.japantimes.co.jp/news/2016/03/23/national/safety-checks-for-tepcos-kashiwazaki-kariwa-nuclear-plant-to-be-prolonged/#.VvKR53qDmov

JIJI
Safety screenings for the No. 6 and No. 7 reactors at Tokyo Electric Power Co.'s Kashiwazaki-Kariwa nuclear power plant are set to be prolonged further, it was learned Wednesday.
It is nearly two years and six months since Tepco applied for safety checks for the reactors in Niigata Prefecture. Under new regulations put in place after the Fukushima nuclear disaster of 2011, a reactor must pass screenings by the Nuclear Regulation Authority before going back online.
The NRA's secretariat reported at a regular NRA meeting on Wednesday that Tepco is not yet ready to undergo an examination of the company's new method for assessing the degree of quake-resistance at the Kashiwazaki-Kariwa reactors.
Preparations for the examination, including completing documents, can take as long as six months, sources familiar with the matter said.
The reactors at the Kashiwazaki-Kariwa plant are boiling water reactors, the same type as those at Tepco's disaster-stricken Fukushima No. 1 nuclear plant.
The secretariat also said documents are largely ready for screening items other than those relating to quake-resistance and that these could serve as models for other boiling water reactors.
The NRA unveiled a plan to resume safety checks for the No. 2 reactor at Chugoku Electric Power Co.'s Shimane nuclear plant in Shimane Prefecture and the No. 2 reactor at Tohoku Electric Power Co.'s Onagawa plant in Miyagi Prefecture. Both are boiling water reactors.

Ikata No.3 almost ready to restart/ No.1 to be scrapped

March 25, 2016

Shikoku Electric's Ikata No. 1 nuclear reactor to be scrapped

http://mainichi.jp/english/articles/20160325/p2g/00m/0dm/043000c

OSAKA (Kyodo) -- Shikoku Electric Power Co. plans to give up restarting the No. 1 reactor of its Ikata nuclear complex in western Japan and scrap it because extending the aging unit's lifespan would be hugely expensive, company sources said Friday.

Shikoku Electric's plan could have an impact on other major utilities as they decide whether to seek to keep their aging reactors operable beyond the 40-year time limit, a rule imposed after the 2011 Fukushima Daiichi nuclear power plant disaster.
The regional utility serving the main island of Shikoku is expected to announce the plan as early as later in the morning.
Stricter government regulations set in 2013 following the Fukushima nuclear crisis prohibit the operation of nuclear reactors beyond 40 years in principle. But operation for an additional 20 years is possible if operators make safety upgrades and pass the regulator's screening.

Around the country, five reactors at four other nuclear power plants that are around 40 years old are already set to be scrapped.
The No. 1 reactor at the Ikata power complex in Ikata, Ehime Prefecture, reaches the 40-year time limit next year. If the utility wants to continue operating the reactor, it needs to apply for an extension to the Nuclear Regulation Authority in advance.
Shikoku Electric has determined that decommissioning the unit is better than seeking to extend its lifespan as it expects safety measures to keep the reactor in use would cost over 100 billion yen ($886 million), the sources said.
The utility, meanwhile, plans to restart the newer No. 3 reactor at the three-reactor plant in July.

March 23, 2016

Ikata plant to apply for restart in July

http://www3.nhk.or.jp/nhkworld/en/news/20160322_37/

The operator of the Ikata nuclear power plant in Ehime Prefecture, western Japan, is planning to apply to restart one of its reactors in July.

The No.3 reactor at Shikoku Electric Power Company's Ikata plant passed an initial inspection of its safety equipment last July. The Nuclear Regulation Authority's screening was based on new regulations introduced after the 2011 accident in Fukushima.

The regulators are now checking the detailed plans of the equipment for quake resistance and other functions.

They are expected to approve these plans as early as Wednesday.

NHK has learned that Shikoku Electric is set to apply for a final inspection and aims to win approval for its schedule for the restart.

The timetable is expected to call for putting nuclear fuel in the reactor in June, and restarting it the following month.

If it passes the final inspection, the No.3 reactor at the Ikata plant would be the 5th to be put back on line, following 2 reactors at the Sendai plant in Kagoshima Prefecture and another 2 at the Takahama plant in Fukui Prefecture.

But the operation of the 2 reactors at Takahama has been suspended due to mechanical problems and a court injunction.

Takahama Nos 1 & 2 meet new NRA regulations

April 20, 2016

2 older reactors meet new requirements

http://www3.nhk.or.jp/nhkworld/en/news/20160420_13/

Two nuclear reactors at the Takahama plant on the Sea of Japan coast have become the first reactors aiming to operate beyond 40 years to pass Japan's nuclear authority's new regulations introduced after the 2011 accident at the Fukushima Daiichi nuclear plant.

Under a system also introduced after the 2011 accident, the lifespan of reactors across Japan has been limited to 40 years in principle.

Reactors aged 40 years old or more need to meet the assessment regulations of the Nuclear Regulation Authority and other conditions as part of the process for gaining permission to extend operations.

On Wednesday, the authority officially decided to pass a screening document saying the Number 1 and 2 reactors at the Takahama plant in Fukui Prefecture have met the regulations. The reactors are currently offline.

Earlier in February, the nuclear regulator judged that fire prevention measures on electric cables -- a problem unique to older reactors -- and other revised measures met the regulations. They effectively approved the draft screening document at that time.

Wednesday's approval session came after a 30-day period of soliciting public opinions on the document, which is a necessary process in the assessment. It was reported at the session that some of the opinions said the draft underestimated the size of possible quakes and also criticized the fact that actual tests on improved electric cables had been put off.

The session unanimously approved the draft with some revisions, without changing its conclusion.

Attention is now focused on whether the reactors can clear remaining conditions and gain approval for the extension by the time limit of July 7th.

The remaining conditions include checks on deterioration at the facility and an assessment of detailed plans on quake resistance.

The operator, Kansai Electric Power Company, says putting the reactors back online will take more than 3 years, due to the need for more safety work.

Research reactors in Osak Pref. approved for restart

May 11, 2016

2 research nuclear reactors approved for restart

http://www3.nhk.or.jp/nhkworld/en/news/20160511_12/

Japan's nuclear regulator has given basic approval for restarting 2 research reactors in Osaka Prefecture.

The reactors are the first approved for research under government rules introduced after the 2011 Fukushima Daiichi nuclear accident.

The Nuclear Regulation Authority agreed on documents on Wednesday stating that safety measures in case of fire, tornados and other events meet requirements.

The reactors are at Kyoto University's laboratory in Kumatori Town and Kindai University in Higashiosaka City.

The regulator did not invite public input into the approval process as the reactors' outputs are far smaller than that of commercial reactors.

Kyoto University hopes to restart its reactor in July, and Kindai University in September, after onsite inspections and other checks.

Six more research reactors are on the waiting list for the regulator's approval.

Research institutions have limited funding and manpower. Their failure to apply earlier for approval has put students at a disadvantage.

Regulator Chairman Shunichi Tanaka instructed the secretariat to review the regulations for research reactors. He said the safety requirements for commercial reactors are too strict to apply to small output research reactors.

Not wanted

May 14, 2016

No municipalities near Hamaoka nuclear plant want restart: survey

http://mainichi.jp/english/articles/20160514/p2a/00m/0na/019000c

None of the 11 municipalities within the 30-kilometer-radius urgent protective action planning zone (UPZ) around the Hamaoka nuclear plant in Omaezaki, Shizuoka Prefecture, want the power station's idled reactors restarted, a Mainichi Shimbun survey has found.
The reactors at the Hamaoka plant, operated by Chubu Electric Power Co., were shut down on May 14, 2011 at the request of the central government, following the meltdowns at the Fukushima No. 1 nuclear

plant in March that year. The survey, sent to the mayors of each municipality as well as Shizuoka Gov. Heita Kawakatsu in April, was timed to coincide with the fifth anniversary of that shutdown.
Chubu Electric is aiming to restart the Hamaoka plant's No. 3 and 4 reactors, and has filed a request for a safety review by the Nuclear Regulation Authority (NRA). The Mainichi survey was undertaken to assess the pros and cons of restarting the plant, and has revealed persistent local concerns over plant safety.
Five response options were included in the questionnaire on whether or not the reactors should be restarted. Among these, three of the municipal leaders said that they were "against" the restart, five said that they were "unable to make a decision at the present time," and four answered "other."
None of the respondents said they "agree" with the restart, or even that they "agree subject to the meeting of specific requirements."
The three mayors who said they opposed a restart were Shigeki Nishihara from the Shizuoka prefectural city of Makinohara, Kinuyo Soneya from the city of Shimada, and Norihiko Tamura from the town of Yoshida.
Nishihara, whose city lies directly above the predicted focus of a Nankai Trough earthquake, noted that "a (nuclear) accident would endanger the very existence of the nation."
Meanwhile, Tamura commented that "(citizens') safety cannot be guaranteed," and Soneya noted, "There is no guaranteed evacuation plan accompanying (the proposed restart)."
Among those who said they were "unable to make a decision at the present time" or "other," four mayors stipulated specific stringent conditions for approving the restart. These were Kakegawa Mayor Saburo Matsui, Kikugawa Mayor Junichi Ota, Fukuroi Mayor Hideyuki Harada and Fujieda Mayor Shohei Kitamura.
Mayors Matsui and Ota listed the requirement of understanding from citizens, while Harada and Kitamura indicated conditions related to the accident at the Fukushima No. 1 nuclear plant.
"The investigation of the Fukushima accident's causes has been insufficient," commented Mayor Harada. "As long as safety cannot be completely guaranteed, I cannot approve the (reactor) restarts."
Mayor Kitamura noted, "The discussion regarding the plant restart should not begin until there has been a complete resolution to the problems associated with the Fukushima accident, and citizens are thoroughly at ease."
Meanwhile, Omaezaki Mayor Shigeo Yanagisawa noted that "safety checks are ongoing," and accordingly answered that he was "unable to make a decision" on the reactor restarts.
Gov. Kawakatsu similarly responded that he was "unable to make a decision," and added, "Unless safety can be guaranteed, there is no way (that the restart would be approved)."
Chubu Electric officials commented that they will "do everything possible to ensure safety."

Injunction sought against Ikata restart

June 2, 2016

Residents seek injunction against reactor restart

http://www3.nhk.or.jp/nhkworld/en/news/20160531_33/

A group of residents in Ehime Prefecture, western Japan, is seeking a court injunction to suspend the restart of a nuclear reactor, claiming earthquake safety concerns.

Twelve residents filed for the injunction at the Matsuyama District Court on Tuesday. They want to stop a plan by Shikoku Electric Power Company to resume operation of the No.3 reactor at the Ikata nuclear plant in late July.

The residents point out that the Ikata plant is located about 5 kilometers from Japan's longest fault system. They say the operator must assume the possibility of significant earthquakes in the near future, after the powerful quakes that struck Kumamoto Prefecture in April. Those tremors occurred along faults linked to the major fault system.

They say that the level of earthquake preparedness claimed by the operator is not sufficient.

Another group of residents in Ehime has already filed for a similar injunction.

And residents in Hiroshima Prefecture, on the other side of the Inland Sea, have also requested a court injunction to suspend the reactor's restart.

Residents file request to revoke restart permit (Sendai)

June 10, 2016

Residents file for revoking reactor restart permit

http://www3.nhk.or.jp/nhkworld/en/news/20160610_27/

A group of people has asked a court to cancel permits by Japan's nuclear regulator for operating 2 reactors at a plant in Kagoshima Prefecture, southwestern Japan.

The No.1 and 2 reactors at the Sendai plant are the country's only online reactors. The Nuclear Regulation Authority gave the permits in 2014.

More than 30 residents of Kagoshima and Fukuoka prefectures and elsewhere joined the suit filed on Friday with the Fukuoka District Court.

They said the permits should be revoked due to risks of a massive volcanic eruption, and that new government regulations to prepare nuclear plants for disasters are insufficient.
The plaintiffs say the requirements are not based on scientific knowledge about volcanic eruptions, and that the regulator does not fully examine the possibility of mega-eruptions in its screening.

A plaintiff from Kagoshima City says an accident at the plant could cause effects of radioactive substances for decades. She says she wants the court to properly decide whether the facility should be allowed to operate.

The authority has declined to comment on the lawsuit, saying it has not received relevant documentation.

In 2014, another group of residents filed a request to block a restart of the reactors, but a district court and a high court dismissed the petition.

Current screening procedures "very dangerous"

June 12, 2016

Former nuclear regulatory body official calls for review of safety screening method

http://www.japantimes.co.jp/news/2016/06/12/national/former-nuclear-regulatory-body-official-calls-for-review-of-safety-screening-method/#.V116mORddLP

JIJI
Japan needs to review its current method for screening nuclear plant safety, seismologist and former senior regulator Kunihiko Shimazaki said in a recent interview.
The current method risks underestimating the magnitude of possible earthquakes that may hit nuclear plants, Shimazaki, former acting chairman of the Nuclear Regulation Authority, said.
"A review is needed" for the method to calculate the design basis quakes that is currently adopted in the NRA's screening procedures, he said.
Shimazaki said that he has confirmed the need for such a review after examining data on powerful quakes that hit Kumamoto Prefecture and other areas in Kyushu in April.
"The NRA has to be aware that the current screening procedures have shortcomings," he said, adding it is "very dangerous to keep using the method."
Before leaving the NRA in September 2014, Shimazaki was in charge of assessing quake and tsunami impacts in its nuclear safety screening.
The current method risks underestimating design basis quakes when it is applied to vertical faults found mainly in western Japan, according to him.
The design basis quakes for Kansai Electric Power Co.'s Takahama and Oi nuclear plants, both in Fukui Prefecture, and Kyushu Electric Power Co.'s Genkai nuclear plant in Saga Prefecture, should be recalculated based on a different method, he said.
The NRA should draw up a revised method by taking into account new data, including on strong tremors such as the Kumamoto quakes, Shimazaki said.
The Nos. 3 and 4 reactors at the Takahama plant have passed the NRA's safety screening. The NRA is expected to approve Kansai Electric's request for extending operational periods at the plant's Nos. 1 and 2 reactors beyond 40 years, a basic lifetime for nuclear reactors in Japan.

Restart or not: What impact?

June 8, 2016

Residents near Sendai nuclear plant agonize over future power supplies

(Mainichi Japan)
http://mainichi.jp/english/articles/20160608/p2a/00m/0na/016000c
SATSUMASENDAI, Kagoshima -- Residents here are agonizing over whether they will be able to do away with nuclear power and shift to renewable energy.
The No. 1 and 2 reactors at the Sendai Nuclear Power Plant in this Kagoshima Prefecture city of Satsumasendai were put back online in the summer of 2015.
There had been a common view that the suspension of operations at the Sendai nuclear power complex in the wake of the Fukushima nuclear disaster was having a grave impact on the local economy. But there were unexpected responses to a questionnaire survey of local businesses conducted by the city's chamber of commerce and industry in 2014. **On a question about the impact of the suspension of nuclear reactors, 50.3 percent of the 358 companies that responded to the survey said that there was "no" impact, surpassing 48.9 percent of the companies that said "yes."**
Hiroshi Tanaka, 58-year-old president of local electronics parts manufacturer Okano Electronics Co., said, "There was no impact." At the request of the municipal government two years ago, he played a mediator role in ensuring cooperation among 18 local companies to put street lights using solar power to practical use. The city is currently making a strong effort to introduce renewable energy such as solar and wind power. The municipal government withheld approval of a plan to build a third reactor at the Sendai nuclear power station after the outbreak of the Fukushima nuclear crisis in 2011. The total output of renewable energy in the city stood at 250 kilowatts generated by only one windmill before the Fukushima nuclear disaster, but it rose to a total of 134,000 kilowatts as of the end of March 2016, enough to cover the needs of all 46,000 households in the city.
Satsumasendai Mayor Hideo Iwakiri has been saying, "The No. 1 and 2 reactors will eventually be decommissioned. We want to gear up for the next generation of energy." Tanaka also said, "We will take the next step while the reactors are running." Obviously, it is difficult for the renewable energy industry to create the same amount of jobs as the nuclear power industry. The city is planning to build a major conference hall by using government subsidies of 2.5 billion yen it is to receive for allowing the two reactors to resume operations. The city government, therefore, has been criticized for its policy focusing on the construction of public structures. But there are still calls within the construction industry to build another reactor at the Sendai nuclear power station.
Still, there are signs of the city becoming keen to fully break away from nuclear power. A 71-year-old former head of a neighborhood community association in the city's Takae district, about 6 kilometers from the Sendai Nuclear Power Plant, said, "We cannot relieve our anxiety because of the accident in Fukushima. We want the existing reactors to keep running until they are decommissioned, but we want new ones to be installed somewhere else. I think that's what everyone thinks."
The central government is planning to have nuclear power make up 20 to 22 percent of the nation's electric power needs in the future. The city is not able to do away with nuclear power so easily, so it is agonizing over the future of its energy program while putting up a two-front strategy -- nuclear power and renewable energy.
I got on a boat to visit an islander, hoping to hear his real opinion. The Koshikijima Islands, about 30 kilometers west of the Sendai nuclear plant, merged into the city of Satsumasendai in 2004. Single-seat

electric vehicles for tourists are lined up at a harbor on Kamikoshiki-jima island, the central part of islanders' activities. In the yard of an shutdown school, a private-public project was under way to conduct a demonstration experiment on a power storage system that combines solar panels and used batteries for electric vehicles.
Kyushu Electric Power Co. built the country's first commercial wind power plant on the island in 1989. After the outbreak of the Fukushima nuclear crisis, the city called the Koshikijima Islands "Eco Islands."
The man I went to see is Kenta Yamashita, 30, who runs a company called "Higashishinakai no Chiisanashima Burando" (Small Island Brand in East China Sea). He studied architecture at a Kyoto university and worked for a while after graduating from college. He returned to his home six years ago to start his own business. His company, which has 13 employees, is engaged in projects to show the attractive points of the island such as "minshuku" (private homes that provide lodgings for travelers) and tour guides.
The Fukushima nuclear accident occurred one year after he returned to the island. No matter how much he is proud of the island's beautiful nature, he can see the Sendai Nuclear Power Plant far away on a sunny day.
I sat face to face with him in his office that was converted from a house that was more than 100 years old, and asked him unashamedly about what he thinks of nuclear power. He lowered his eyes and thought for a while before saying with a stern face, "There is no electricity generated by nuclear power not even one kilowatt on this island. I don't care about whether the reactors are running or not."
Yamashita told me about a fishing port that has a breakwater, a stone wall built by islanders. So, I asked him to take me there. It was a place where fishermen sat on the stone wall and repaired fishing nets over small talk. Yamashita said, "This is an affluent island if you live idyllically. I think the distinct character of this island is the landscapes that cannot be measured by economics." He said that he had an incisive memory of the stone wall.
This was from around a time when Yamashita moved away from the island to go to high school on the Japanese mainland. When he came back to the island on holidays, his father, who was working for a construction company, was destroying part of the stone wall at the fishing port as part of work to widen a road. He thought, "Who needs such construction work? What is the point of construction work to destroy a place that everyone has been caring about?" On that night, he rebuked his father in anger. His father replied, "It was for the sake of you."
It requires money to go to school on the mainland. Yamashita was plagued by the irrational fact that he was able to live by having someone destroy the landscape that he had been familiar with since his infancy. He could not say anything to respond to what his father said.
"If you think about the economy alone, this is the worst island," Yamashita said. He went on to say, "I want to do my best to create work which I can proudly tell the generation of our children 'this is for the sake of you'. I believe that is the role for me to play."
Yamashita then told me, "It is true that there are many people who rely on the nuclear power plant for their living. I can't flatly say this and that." He feels that nuclear power is equal to a public works project to destroy the stone wall. "It is better not to have nuclear reactors. But once they start moving, they will move closer to decommissioning. I even think that it was good to restart the reactors."

Kepco submits revised application for Takahama restart

14.06.2016_No116 / News in Brief

Kepco Submits Revised Application In Bid To Extend Takahama-1 And -2 Operations

http://www.nucnet.org/all-the-news/2016/06/14/kepco-submits-revised-application-in-bid-to-extend-takahama-1-and-2-operations

Plant Operation
14 Jun (NucNet): Kansai Electric Power Company (Kepco) said yesterday it had submitted a revised application to the Nuclear Regulation Authority to extend operations at its Takahama-1 and -2 nuclear units in Fukui Prefecture, southwest Japan, beyond 40 years.

Kepco said in a statement the submission follows the NRA's approval last week of an engineering work plan for the extensions.

The revised application includes additional results of seismic safety evaluations with maximum acceleration increased from 550 centimetres per square second (gal) to 700 gal.

In April the reactors met new safety requirements introduced by the NRA following the March 2011 Fukushima-Daiichi accident.

However, anti-nuclear groups filed a lawsuit with Nagoya District Court claiming extended operation of the two units could be dangerous because the reactors have already operated commercially for more than 40 years.

According to laws regulating nuclear stations in Japan, reactors are generally limited to a 40-year operational lifetime.

This can be extended by 20 years if approved by the NRA. Kepco wants to extend the licences for both Takahama-1 and -2.

The two 780-MW pressurised water reactor units have been in commercial operation since November 1974 and November 1975 respectively.

On the same site, Takahama-3 and -4 have already passed safety checks and received restart approval from local authorities. But on 9 March Otsu District Court ordered Kepco not to operate the two 830-MW units, in a legal ruling in favour of a local anti-nuclear group who alleged extended operation of the units could pose a safety danger.

The group said there were doubts about the station's seismic standards and about the NRA's new regulatory standards.

The Japan Atomic Industrial Forum said the court's decision "pointed to problems in both reactors regarding such matters as design concepts, earthquake resistance, tsunami measures, and evacuation plans, based on the experience of… Fukushima-Daiichi".

The court said: “There is fear that the personal rights of residents are being violated, and that Kepco has not sufficiently explained that safety is secured.

Quake scale underestimated

June 17, 2016

Quake scale may be underestimated in calculations for nuclear plants: Ex-NRA official

http://mainichi.jp/english/articles/20160617/p2a/00m/0na/010000c

Nuclear Regulation Authority (NRA) former deputy chairman Kunihiko Shimazaki asked the nuclear power watchdog on June 16 to recalculate the maximum possible earthquake estimate -- known as the standard ground motion -- for some nuclear plants in western Japan using a different formula, since the current calculation may include underestimated figures.

- 【Related】Nuclear regulator sees no need to halt reactors despite quake concerns
- 【Related】Court decisions divided over risk evaluations of nuclear reactors

The NRA will hold a meeting on June 20 and discuss handling the matter to recalculate figures for Kansai Electric Power Co.'s Oi Nuclear Power Plant in Fukui Prefecture that is now under safety screening.t
After retiring from the NRA position in 2014, Shimazaki, professor emeritus at the University of Tokyo, examined one of the calculation formulas used to work out the standard ground motion for the Oi nuclear plant. The formula is known as the Irikura-Miyake recipe. As a result, Shimazaki claims that he has confirmed that in cases where an active fault at the estimated hypocenter is straight up-and-down or close to vertical, the scale of the calculated motion becomes smaller compared to the figures calculated with other formulas. The figures worked out with the Irikura-Miyake recipe for the recent Kumamoto Earthquake did not match data recorded in the actual tremor.
Shimazaki has submitted a statement to an ongoing appeal trial at the Nagoya High Court Kanazawa branch over the suspension of the No. 3 and No. 4 reactors at the Oi plant pointing out the problem with the calculation formula.
Shimazaki told NRA members, including Chairman Shunichi Tanaka, at the June 16 meeting that different formulas should be used and other measures should be considered such as re-evaluating the earthquake resistance of the plant if necessary.
According to the NRA, in addition to the Oi plant where the fault at the estimated hypocenter is either vertical or close to vertical, the Irikura-Miyake recipe is being used to calculate the standard ground motion at Kansai Electric's Takahama nuclear plant in Fukui Prefecture that has passed the NRA screening and Kyushu Electric Power Co.'s Genkai nuclear power station in Saga Prefecture that is now under safety screening.

After the meeting with NRA officials, Shimazaki told reporters that first and foremost figures for the Oi plant should be recalculated. While he suggested that recalculation should be considered for the Genkai plant, there will be little effect on the Takahama plant as it is located away from an active fault.
Kojiro Irikura, professor emeritus at Kyoto University who developed the formula in question, said the method has been scientifically proven to be effective in estimating the scale of an earthquake. He admits, however, when used to predict ground motion the formula may provide smaller figures for the scale of a tremor in cases where the angle of an active fault is close to vertical. He added, "The formula should be used with caution to avoid an underestimate."

Court maintains ban on restart

June 17, 2016 (Mainichi Japan)

http://www.japantimes.co.jp/news/2016/06/17/national/crime-legal/kepco-fails-suspend-injunction-takahama-nuclear-plant/#.V2fZQ6LiiSq

Kepco loses challenge to Takahama nuclear injunction

OTSU, SHIGA PREF. – The Otsu District Court on Friday rejected a bid by Kansai Electric Power Co. to lift an injunction against restarting reactors at a nearby plant, dealing yet another setback to attempts by the utility and the central government to return swiftly to nuclear power.
The move means the No. 3 and No. 4 reactors at the Takahama nuclear plant, in Fukui Prefecture, will remain idled.
In a statement, Kepco condemned the court's action.
In his decision, Judge Yoshihiko Yamamoto said Kepco failed to provide sufficient evidence to back up its claims that the two reactors were safe.
"The very first article of the law that established the Nuclear Regulation Authority says a fundamental point of Japan's nuclear power administration is clearly establishing the understanding that the maximum effort must be made at all times to prevent an accident involving the use of nuclear power," said Yamamoto. "But unless the operator shows that there is nothing lacking in regards to safety, it's presumed some safety points are lacking."
The decision was welcomed by citizens' groups fighting the restart of the two reactors, but it was also expected. Yamamoto was the same judge who had granted their initial request back in March that shut down the reactors, also citing a lack of convincing evidence on the part of Kepco that the plants were safe. The reactors were originally restarted at the beginning of the year.
"It was a just decision, very direct. We hope it will provide a spark to other legal efforts in other parts of Japan to stop nuclear power plants from being restarted," Yoshinori Tsuji said after the ruling. Tsuji was one of the plaintiffs who filed for an injunction in March.
Legal wrangling over the two reactors continues. Kepco has filed a separate legal challenge to the Otsu court's decision, and said Friday it hoped that when that ruling came, possibly in July or August, it will lead to restarts.

Shiga residents seeking to keep the reactors offline have said Friday's decision did not mean their court battles were over.
"If the Otsu court rules against Kepco, it could end up in the Osaka High Court, possibly next year," said Hidenori Sugihara, another one of the plaintiffs who sought the injunction.
The Otsu court case has demonstrated the difficulty of restarting nuclear power plants in a timely manner. Under laws drawn up by the NRA that went into effect in 2012, localities within a 30 kilometer radius of a nuclear power plant are supposed to establish evacuation plans in the event of an emergency.
But the expanded radius has greatly increased the number of local governments and residents who are concerned about a rush by the utilities to restart as many plants as possible.
In the Kansai region, where parts of Kyoto and Shiga prefectures lie within 30 kilometers of Fukui Prefecture's plants, lawsuits by residents like the one in Otsu have the potential to slow down, if not halt, Kepco's plans for restarts.
The original injunction was brought by Shiga residents who fear an accident at the plant would have a damaging impact on Lake Biwa, the nation's largest freshwater lake and the source of water for about 14 million residents in cities such as Kyoto and Osaka.

Japan court rejects appeal, keeps ban on restarting 2 nuclear reactors

http://mainichi.jp/english/articles/20160617/p2g/00m/0dm/039000c

OTSU, Japan (Kyodo) -- A Japanese court kept its ban on operation of two nuclear reactors at the Takahama power plant in Fukui Prefecture on Friday by rejecting the plant operator's request to suspend an injunction it had issued over the reactivated reactors.
The Otsu District Court's decision concerns the injunction issued in March over the Nos. 3 and 4 units at the Kansai Electric Power Co. plant that marked a major setback for the government's push to ramp up nuclear power generation. Local residents had filed for the injunction on safety concerns.
In Friday's decision, the court said it "cannot conclude that (the reactors) are safe, merely because they have met new regulatory standards on nuclear power plants." New, more stringent safety rules were introduced in 2013 in the wake of the meltdowns at the Fukushima Daiichi nuclear power plant in 2011.
"Kansai Electric should at least explain how the regulations on operation and designs of nuclear power plants were toughened and how it responded to them," the decision said.
The decision, issued under the same presiding judge, Yoshihiko Yamamoto, as the injunction in March, marks the final word on one process regarding the injunction because Kansai Electric cannot take further action on it.
The two reactors will remain offline as long as the injunction is not invalidated through a separate track examining an objection filed by Kansai Electric when the court issued the injunction. This track is also being presided over by the same judge.
The March 9 injunction was the first of its kind affecting operating reactors. One of the reactors was taken offline one day after the order. The other reactor was already offline.

The court said then there are "problematic points" in planned responses for major accidents and "questions" on tsunami countermeasures and evacuation planning, in light of the 2011 Fukushima disaster.
The Osaka-based utility subsequently sought to suspend the injunction, saying its safety measures are thoroughly proven and the court's decision was scientifically and technologically groundless. It also said the suspension of the reactors has cost the company 300 million yen ($2.88 million) in losses daily.
The Takahama plant had cleared the post-Fukushima safety regulations in February last year, allowing Kansai Electric to reactivate the Nos. 3 and 4 reactors on Jan. 29 and Feb. 26, respectively. But their operations were beset with problems, with the No. 4 unit shutting down automatically due to a trouble just three days after it was rebooted.
The residents of Shiga Prefecture living within 70 kilometers of the four-reactor plant had filed the injunction as they worried about their safety in the event of a nuclear accident or disaster.
The plaintiffs argued that safety measures are insufficient and feared residents' exposure to radiation in case of a severe accident.
A part of Shiga falls within a 30-kilometer radius of the plant, which is set by the central government as an evacuation preparedness zone.

Extending the 40-year limit

June 20, 2016

Regulator allows extended use of old reactors

http://www3.nhk.or.jp/nhkworld/en/news/20160620_17/

Japan's nuclear regulator has for the first time given the green light to extending the use of two old nuclear reactors that have been in operation for 40 years.

Regulations introduced after the 2011 Fukushima Daiichi accident do not allow in principle the use of reactors beyond 40 years unless safety measures meet new criteria.

Officials at the Nuclear Regulation Authority met on Monday to discuss extending the operation of the Numbers 1 and 2 reactors at the Takahama plant in Fukui Prefecture on the Sea of Japan.

They assessed the deterioration rate of the facilities.

They unanimously accepted an extension of up to 20 years on the condition that operator Kansai Electric Power Company carry out reinforcement work on aging pipes that fail to meet earthquake safety standards.

In April, the regulator judged that fire prevention measures for electric cables -- a problem unique to older reactors -- and other revisions had met the new regulations.

In June, the regulator approved a plan describing the earthquake resistance of the facilities.

The operator has now gained all the approvals it needs for the extension by the July 7th deadline. Kansai Electric Power says it will need more than 3 years to complete the planned reinforcement work and restart the reactors.

NRA gives two-decade extension to 40-year-old Takahama reactors; residents' reactions mixed

http://www.japantimes.co.jp/news/2016/06/20/national/nra-looks-ok-2019-restart-aging-kepco-reactors-fukui-coast/#.V2jhg6Jdeot

The Nuclear Regulation Authority on Monday approved an additional 20 years of operation for two aging reactors on the Sea of Japan coast that will become the first such units to be rebooted under new rules introduced after the Fukushima disaster.
The atomic regulator green-lighted Kansai Electric Power Co.'s plan to restart its No. 1 and No. 2 reactors — both more than 40 years old — at the Takahama nuclear power plant in Fukui Prefecture.
But the reboot is unlikely to happen soon, with the company eyeing an October 2019 timetable for completing the final screening measures.
The rules, which were tightened after the 2011 triple meltdown at Tokyo Electric Power Co.'s Fukushima No. 1 plant, in principle set the maximum operational life span for nuclear reactors at 40 years. However, the regulations also stipulated that operations can be extended by an additional 20 years if the NRA approves.
Meanwhile, Takahama's two other reactors — No. 3 and No. 4 — remain idle after the Otsu District Court rejected a bid Friday by Kepco to lift an injunction preventing their restart.
The utility has condemned the court's move.
Kepco had been closely monitoring the condition of the two aging reactors in a stricter manner than regular checkups since December 2014 as it sought to obtain approval for extending their life spans.
After confirming there were no abnormalities, the utility applied for an NRA screening in April last year.
The utility had been required to complete three procedures by July 7 to obtain permission for restarting units No. 1 and No. 2. While they had already passed a test for compatibility with the new rules and received approval for a construction plan detailing equipment design, the only remaining test had been of the reactors' anti-degradation measures.
In that screening, regulators asked that the utility address the potential for long electrical cables to catch fire and how it would cover the containment vessels with concrete in the event of a serious accident. NRA chief Shunichi Tanaka said he hopes the power company will conduct inspections more often than required to ensure the facilities are safe.
The utility will spend ¥200 billion ($1.9 billion) to improve the reactors' safety over the next 3½ years.
They are expected to be restarted sometime after fall 2019.
Reactors 1 and 2 will thus reach the end of service in November 2034 and 2035, respectively.
Residents had mixed reaction to the decision.
The town of Takahama "has lived with the nuclear power plant for a long time. I hope the (reactors') resumption will help revitalize the local economy," a woman in her 20s said, though admitting she is worried about their safety.

While Takahama Mayor Yutaka Nose welcomed the decision, he said he will ask the regulator and plant operator for detailed explanations of the safety steps to respond to residents' concerns.
Kansai Electric said in a press release that it believes permission for reactors to run beyond the 40-year limit heralds the restart of more of Japan's aging reactors.
The government is pushing to bring dozens of reactors back online after the Fukushima disaster prompted a nationwide shutdown, as it looks to atomic power to provide 20 to 22 percent of its electricity by 2030.
The government will need a dozen aging reactors running beyond the four-decade limit to meet its goal, experts say, given the difficulty of building new reactors now that Japan's long-held nuclear safety myth has been shattered by the triple meltdown in Fukushima.
The No. 1 reactor began operating in November 1974, while the No. 2 reactor did so in November the following year. Both reactors have been suspended since regular checkups in 2011

Fuel loading at Itaka No.3

June 24, 2016

Fuel loading begins at Ikata No.3 nuclear reactor

http://www3.nhk.or.jp/nhkworld/en/news/20160624_20/

Workers have begun loading nuclear fuel into a reactor at the Ikata power plant in western Japan. The operator plans to restart the reactor in late July.

They started removing units of fuel rods from a pool on Friday, and placed them into the No.3 reactor one at a time. Sixteen of the 157 units of fuel rods are the type of fuel called MOX, which is a mixture of plutonium extracted from spent fuel and uranium.

The operator, Shikoku Electric Power Company, plans to complete the procedure next Monday.

The utility hopes to put the reactor back online in late July, after conducting drills based on the scenario of a serious nuclear accident.

The reactor's operations were suspended in April 2011, following the Fukushima Daiichi nuclear accident the previous month.

But Japan's nuclear regulators decided last year that the No.3 reactor met the new government regulations that were introduced after the Fukushima accident.

Ikata will become the 3rd nuclear plant to be restarted under the new regulations, following the Sendai plant in southwestern Japan and the Takahama plant in central Japan.

But the 2 reactors at the Takahama plant are now offline under a court injunction.

Not safe to restart

June 24, 2016

Protesters hold rally at Ikata plant

http://www3.nhk.or.jp/nhkworld/en/news/20160624_21/

People opposing the restart of a reactor at Shikoku Electric Power Company's Ikata nuclear plant in Ehime Prefecture have held a rally in front of the complex.

Around 10 people, including members of an Ehime-based civic group, gathered near the plant's main entrance on Friday and chanted slogans against the restart.

They read out a statement protesting the insertion of nuclear fuel into the No.3 unit.

The statement said the system for transmitting electricity to the plant cannot withstand a powerful earthquake and the plant's safety cannot be guaranteed. A stable power supply is needed to maintain the cooling of the reactor.

One of the protesters said that in view of the powerful temblors that struck Kumamoto, the operator should not rush the process of inserting fuel into the reactor.

Ikata No.3 reactor: commercial operations to resume end of August

June 30, 2016

Ikata looks to fire up MOX-fueled Ehime reactor around Aug. 25

http://www.japantimes.co.jp/news/2016/06/30/national/ikata-looks-fire-mox-fueled-ehime-reactor-around-aug-25/#.V3TEHaJdeov

JIJI

MATSUYAMA, EHIMA PREF. – Shikoku Electric Power Co. is considering launching commercial operations of its reactor 3 at the Ikata nuclear power plant in Ehime Prefecture around Aug. 25, later than mid-August as initially planned, sources told Jiji Press on Wednesday.

The company reviewed the schedule to provide more time for a preuse inspection by regulators that is necessary for reactivating the reactor, the sources said.
At reactor 3, Shikoku Electric finished loading 157 fuel assemblies, including 16 units of mixed oxide, or MOX, fuel, a blend of uranium and plutonium extracted from spent nuclear fuel, on Monday.
The company plans to resume operations of the reactor as early as July 26 if no major troubles are found in safety checks.

Reactor 3 was shut down in April 2011 for a routine safety inspection.
Shikoku Electric expects the reactor to improve its earnings by some ¥25 billion annually after it begins commercial operations.

Imari mayor again Genkai restart

July 5, 2016

Local mayor vows not to approve restart of Genkai nuke plant

http://mainichi.jp/english/articles/20160705/p2a/00m/0na/004000c

IMARI, Saga -- Imari Mayor Yoshikazu Tsukabe said on July 4 that he had no intention of approving a plan to restart the Genkai Nuclear Power Plant in Saga Prefecture.

- 【Related】Shareholders urge utilities to end nuclear power generation
- 【Related】High court denies injunction against MOX fuel use at nuclear plant
- 【Related】Quake scale may be underestimated in calculations for nuclear plants: Ex-NRA official

The Saga Prefecture city of Imari falls within 30 kilometers from Kyushu Electric Power Co.'s Genkai nuclear power station. Imari Mayor Tsukabe said at a regular news conference, "I have no intention of giving consent to restarting (the nuclear plant)."
It is the first time for the head of a municipal government among eight municipalities in three prefectures of Saga, Fukuoka and Nagasaki that are within 30 kilometers from the Genkai nuclear plant to voice such opposition.
Tsukabe said, "If a nuclear accident occurs, we can't recover from it," adding, "I will state my opposition (if I am questioned by the prefectural government)."

"Alarming" candidate

July 11, 2016

Japan Elections: Antinuclear Candidate's Win Poses Risk to Plant Restarts

http://www.wsj.com/articles/japan-elections-antinuclear-candidates-win-poses-risk-to-plant-restarts-1468232103
Ex-journalist Satoshi Mitazono defeats incumbent Yuichiro Ito
By MAYUMI NEGISHI
Updated July 11, 2016 8:28 a.m. ET
TOKYO—The election Sunday of an antinuclear governor in the only Japanese prefecture with an operating nuclear power plant poses another risk to the government's efforts to restart idled nuclear plants.

Former journalist Satoshi Mitazono defeated incumbent Kagoshima Gov. Yuichiro Ito largely by pledging to suspend operations at Kyushu Electric Power Co.'s Sendai nuclear plant, which is located in the southern prefecture.

Mr. Mitazono's victory underscores the strength of antinuclear sentiment in the country, even as Japanese companies such as Toshiba Corp. and Hitachi Ltd. win orders to build plants abroad in countries searching for a reliable, emissions-free source of power.

Kyushu Electric shares tumbled 7.5% to a three-year low Monday.

The Japanese public remains skeptical about the safety of nuclear power after the 2011 triple meltdowns at the Fukushima Daiichi nuclear plant, with many parents still screening food for radiation. Communities hosting the plants are resisting plans to restart reactors.

The Japanese government aims to revive at least 32 of the 54 reactors it shut down following the Fukushima disaster, and plans for nuclear power to account for about a fifth of the nation's total electricity generation by 2030. It also hopes to double the contribution from renewable energy to meet a goal of cutting the nation's greenhouse gas emissions by about a quarter from 2013 levels.

Nuclear power is also seen by many analysts and policy makers as key to Japan's energy security. The country is forced to import nearly all of its fossil fuel.

"Relying on oil and gas is not sustainable, with huge costs to people's health and the economy, and serious consequences for the environment," said Hooman Peimani, research fellow at the Tokyo-based Asia Pacific Energy Research Centre.

Yet **the government's goals for nuclear look increasingly ambitious as local communities fight back**. In March, a district court in Fukui prefecture issued an injunction halting two reactors at Kansai Electric Power Co.'s Takahama nuclear plant just months after they had been restarted. The court said Kansai Electric had failed to show the public that the reactors were safe, despite having met stricter safety standards established after the Fukushima accident.

The only other nuclear plant now scheduled to be restarted is Shikoku Electric Power Co.'s plant in Ikata, in southern Ehime prefecture. The restart is slated for August.

"The people are worried," Mr. Mitazono said in a TV interview shortly after the election Sunday night. "We will not operate nuclear reactors when their safety cannot be guaranteed."

The fight against nuclear at home has Japanese plant operators seeking business overseas—particularly in China and India. Hitachi last week said it would work with plant operator Japan Atomic Power to build and run nuclear plants in the U.K.

Toshiba, through U.S. unit Westinghouse Electric, hopes to secure contracts to build 45 nuclear reactors by 2030. Westinghouse is already building four reactors each in the U.S. and China. Toshiba said last week that it is eyeing 12 more deals in India, three in the U.K., and a total of five in the U.S. and Turkey.

Having nuclear plants idled is costly for Japan's utilities, which are competing in a newly deregulated retail market. Restarting the Sendai plant has enabled Kyushu Electric to cut its imports and consumption of fossil fuels, which helped it log a profit in the year ended in March.

Mizuho Securities Co. analyst Norimasa Shinya said in a note to clients Monday that if the Sendai plant were to remain shut after planned maintenance checks later this year, Kyushu Electric's recurring profit would fall by nearly a third, or about 18 billion yen ($176 million), in the current business year.

Kyushu Electric declined to comment on the impact of a possible shutdown at Sendai. "We have not been told to halt operations, nor do we know when, if, or how such a request would be made," a spokesman said. "Voters voted on a wide array of issues, and not just on nuclear."

Write to Mayumi Negishi at mayumi.negishi@wsj.com

For the 3rd time court rules against Takahama restart

July 12, 2016

Court rules a third time against Takahama reators

http://www.japantimes.co.jp/news/2016/07/12/national/court-rules-third-time-takahama-reators/#.V4TRc6Jdeot
by Eric Johnston
Staff Writer

OTSU, SHIGA PREF. – The Otsu District Court ruled against Kansai Electric Power Co. for the third time in five months Tuesday, in a decision that will keep its Takahama No. 3 and 4 reactors in Fukui Prefecture shut down indefinitely.
Both sides are now gearing up for an appeal by Kepco to the Osaka High Court, where a decision could come next year, while the plaintiffs are expected to file further suits.
The utility had filed an objection to the Otsu court's March decision, which granted a temporary injunction on the Takahama reactors, forcing Kepco to shut them down about two months after they had been restarted.
The court reaffirmed its decision in June and again made the same ruling on Tuesday after Kepco fought the June decision.
"The utility was not arguing that both reactors were safe based on expert evidence and reasonable safety standards, but that they were safe due to detailed assertions directly related to their safety and prima facie evidence," said presiding Judge Yoshihiko Yamamoto, the same judge who has twice ruled against Kepco. "However, the new safety standards haven't drawn the limits of what dangers should be accepted by society."
Representatives for the plaintiffs welcomed the ruling.
"Once again, the Otsu court has ruled against the safety of restarting the reactors, especially with Lake Biwa nearby, even though Kepco has said it'll likely appeal to the (Osaka) High Court," said Yoshinori Tsuji, one of the chief plaintiffs.
The case boiled down to the basic question of what determines adequate safety for a nuclear power plant. It has raised questions about the way the Nuclear Regulation Authority is handling safety inspections for restarts.
Tuesday's verdict will fuel attempts elsewhere to block reactor restarts. The Otsu plaintiffs said they were preparing to file requests in other local courts for a temporary injunction on restarting the Ikata reactor in Ehime Prefecture, which is expected to take place in the coming weeks.

Court blocks restart of 2 Takahama reactors

http://www3.nhk.or.jp/nhkworld/en/news/20160712_25/

A district court has issued a fresh injunction to block the restart of 2 reactors at the Takahama nuclear plant in central Japan. It points out that clearing new regulations does not necessarily guarantee the safety

of reactors.

The Otsu District Court in Shiga Prefecture issued the injunction on Tuesday for the No.3 and No.4 reactors at the Takahama plant in neighboring Fukui Prefecture.

In March, the court issued an injunction to suspend the operations of the 2 reactors. This was the first court order of its kind in Japan.

The operator, Kansai Electric Power Company, filed an objection to cancel the injunction.

The district court held hearings to consider the opinions of Kansai Electric and residents of Shiga Prefecture.

In Tuesday's ruling, presiding judge Yoshihiko Yamamoto said the utility had not given an adequate explanation of what caused the 2011 accident at the Fukushima Daiichi nuclear plant.

He said that the approval of the Nuclear Regulation Authority, based on the new regulations that were introduced after the Fukushima disaster, will not be sufficient to guarantee the reactors' safety.

Kansai Electric issued a statement saying that it is disappointed, and it plans to appeal to a higher court.
The utility also says it will begin removing nuclear fuel rods from the 2 reactors next month as there is a possibility they will be offline for a long time.

Court again nixes appeal to restart 2 Takahama nuclear reactors

July 12, 2016 (Mainichi Japan)

http://mainichi.jp/english/articles/20160712/p2g/00m/0dm/067000c

OTSU, Japan (Kyodo) -- A Japanese court again disallowed the operation of two nuclear reactors Tuesday, rejecting their operator's request to suspend an injunction the same court had issued over the once-reactivated units at the Takahama power plant in Fukui Prefecture, western Japan.
The Otsu District Court's decision, following the injunction issued in March over the Nos. 3 and 4 units at the Kansai Electric Power Co. plant, would continue to legally prevent the Osaka-based utility from restarting operation of the reactors on the Sea of Japan coast about 380 kilometers west of Tokyo.
Kansai Electric plans to appeal the decision to the Osaka High Court, company officials said.
In June, the district court also rejected the plant operator's appeal to temporarily void the effects of the injunction, with public concerns lingering over the restart of nuclear power plants in Japan in the wake of the 2011 Fukushima Daiichi disaster.
Tuesday's decision was issued under the same presiding judge, Yoshihiko Yamamoto, who made the judgments in March and June.
The March injunction was the first of its kind affecting operating reactors. One of the reactors was taken offline one day after the order. The other reactor was already offline.

The Takahama plant has cleared the post-Fukushima safety regulations, allowing Kansai Electric to reactivate the Nos. 3 and 4 reactors. But their operation was beset with problems.
Kansai Electric has announced it will remove fuels from the two nuclear power reactors in August, even though Prime Minister Shinzo Abe's government has expressed a desire to ramp up nuclear power generation at home.

Kagoshima Gov. wants Sendau halted for safety checks

July 14, 2016

Kagoshima's new governor vows to halt Sendai nuclear plant for safety checks

http://www.japantimes.co.jp/news/2016/07/14/national/kagoshimas-new-governor-wants-sendai-nuke-plant-halted-faults-evacuation-routes-checked/#.V4fS2qJdeot

Kyodo
KAGOSHIMA – Incoming Kagoshima Gov. Satoshi Mitazono says he plans to ask Kyushu Electric Power Co. to suspend operation of the Sendai nuclear power plant for safety checks.
In an interview on Wednesday, Mitazono said he will make the request to the utility at a yet to be decided date to examine the effects of powerful earthquakes that hit nearby Kumamoto and Oita prefectures in April.
The former TV commentator was elected Sunday as governor of the only prefecture in Japan with an operating nuclear power plant.
During campaigning, Mitazono pledged to halt its operation.
"I will require Kyushu Electric to temporarily suspend the operation" for a survey of nearby faults and a review of evacuation plans to ensure safety, he said.
"There are many citizens in this prefecture concerned about the nuclear power plant operating after the quakes in Kumamoto," he said.
Prefectural governors are not authorized to stop the operation of a nuclear reactor, but utilities require local consent to restart them.
Backed by an anti-nuclear camp, Mitazono defeated incumbent Yuichiro Ito, who allowed two reactors at the Sendai complex to be reactivated last year.

Mitazono to ask for halt of reactors

July 28, 2016

New Kagoshima gov. to request halt of reactors, possibly in Aug.

http://mainichi.jp/english/articles/20160728/p2g/00m/0dm/072000c

KAGOSHIMA, Japan (Kyodo) -- New Kagoshima Gov. Satoshi Mitazono, elected on an antinuclear platform, said Thursday he will request a temporary halt of reactivated nuclear reactors in the southwestern Japan prefecture, currently the only reactors operating in the country.
"There are concerns over nuclear power plants following the Kumamoto earthquakes (in April)," Mitazono said in a press conference held after his first appearance as governor, adding that Kyushu Electric Power Co.'s Sendai plant should be "halted once to conduct checks and reviews again."
The No. 1 reactor of the Sendai plant is scheduled to be taken offline for regular checkups on Oct. 6, but Mitazono may submit his request for the suspension as early as late August.
The Nos. 1 and 2 units at the plant resumed operation in August and October last year, respectively, becoming the first two reactors to be brought back online under stricter safety rules set after the 2011 Fukushima Daiichi nuclear power plant disaster.
No other reactors are currently online in Japan amid lingering safety concerns among the public, with some subject to court injunctions and others preparing to resume operation.
The governor is not authorized to stop the operation of reactors, but a safety accord reached between the prefectural government and the plant operator allows local government officials to enter the plant to confirm necessary safety steps are being taken.
Kyushu Electric Power is likely to make the case that the Sendai reactors are safe.
In the July 10 gubernatorial election, 58-year-old Mitazono, a former TV Asahi Corp. commentator, defeated previous governor Yuichiro Ito, 68, who was seeking his fourth four-year term with the support of the ruling Liberal Democratic Party and its junior coalition partner Komeito.

New Kagoshima governor to ask for halt to reactors

http://www3.nhk.or.jp/nhkworld/en/news/20160728_22/

The new governor of Kagoshima Prefecture in southwestern Japan says he plans to request, possibly next month, for a temporary halt of the only nuclear plant in the country currently in operation.

Satoshi Mitazono took office as governor on Thursday following his election victory on July 10th. During his election campaign, he called for a halt of the Sendai nuclear power plant in the prefecture. The two reactors at the plant are currently online.

At a news conference, the new governor said people in Kagoshima are worried about the Sendai nuclear plant after the series of powerful earthquakes in neighboring Kumamoto in April.

Mitazono reminded reporters that in his campaign he called for halting the reactors for rechecks and reviews.

He said he wants to lodge a strong request with the operator, Kyushu Electric Power Company, as soon as possible. He suggested he plans to make the request in late August or early September.

Kyushu Electric plans to take the two reactors offline for regular checks, starting with Number One in October followed by Number Two in December.

Sitting in the governor's office, Mitazono said he's ready to work. He said he wants his office to be an open one, where anyone is welcome.

Restart 26 reactors by 2018?

27.07.2016_No147 / News in Brief

Japan Report Predicts 26 Reactor Restarts By March 2018

http://www.nucnet.org/all-the-news/2016/07/27/japan-report-predicts-26-reactor-restarts-by-march-2018

27 Jul (NucNet): Seven nuclear power reactors will be restarted in the current fiscal year, by the end of 31 March 2017, with another 19 in the following fiscal year to the end of March 2018, a report by Japan's Institute of Energy Economics says. However, the report points out numerous uncertainties surrounding nuclear reactors, including judicial judgments and local agreements. In addition to its standard scenario, the report outlines a low scenario in which 12 reactors would be restarted in the same period. The Japan Atomic Industrial Forum said four reactors have been restarted in Japan after clearing examinations under the new regulatory standards imposed by the Nuclear Regulation Authority. They are Sendai-1 and -2 and Takahama-3 and -4, although the Takahama units have since been taken offline after a court issued a temporary injunction following a protest lodged by anti-nuclear activists. Applications for 22 additional reactor restarts have been filed. All of Japan's 48 commercial reactor units were shut down for safety checks and upgrades following the Fukushima-Daiichi accident. Five reactors have been earmarked for permanent shutdown, bringing the number of potentially operable commercial units to 43.

Related reports in the NucNet database (available to subscribers):

- Kepco Files Appeal To High Court Over Takahama Shutdowns (News in Brief No.139, 15 July 2016)

Sendai shutdown: Mitazono ready for fight

July 29, 2016

New Kagoshima governor ready for Sendai plant shutdown fight

THE ASAHI SHIMBUN
http://www.asahi.com/ajw/articles/AJ201607290046.html

KAGOSHIMA--Satoshi Mitazono repeated his assertion that operations at Sendai nuclear power plant in the prefecture should be suspended at his first news conference as Kagoshima governor on July 28.
He said that he will make the request to Kyushu Electric Power Co., the operator of the plant, "between late August and early September."

"As long as residents in the prefecture are feeling anxious due to the Kumamoto earthquakes, I strongly urge Kyushu Electric to temporarily halt the operations of the reactors and conduct another inspection," Mitazono, a former TV journalist, said.
The new governor raised his voice as he made the remarks in response to a question about the suspension of the No. 1 and No. 2 reactors at the Sendai plant in Satsuma-Sendai, the only units in Japan currently in service.
Mitazono was elected as Kagoshima's governor on July 10. The suspension of the Sendai plant's operation for additional safety checks was one of his campaign pledges.
Although a governor has no legal authority to order a halt, Mitazono said, "Whether or not a governor has that authority and making a request to a utility are a separate issue."
Regarding the method for how he will make the request and its contents, Mitazono said, "I will sum up the ideas while exchanging opinions with various people."
Mitazono also referred to the possible decommissioning of the two reactors at the Sendai plants, which have been in operation for more than 30 years.
He plans to establish an expert panel to discuss nuclear plant-related issues in the near future including the decommissioning of the aging reactors.
The governor also expressed his view that "the construction of a new reactor would be difficult," in reference to the proposed No. 3 unit that Kyushu Electric is planning to add at the plant.
During the news conference, he also said that he plans to increase the number of radiation monitoring posts around the Sendai plant from 73 to about 100.
The devices measure radiation levels near the plant and serve as a barometer for issuing an evacuation order to residents at the time of a nuclear accident.
"I want to install many high-performance ones," Mitazono said.

How much will it cost to restart?

July 31, 2016

Extra safety precautions balloon costs to restart reactors

http://www.asahi.com/ajw/articles/AJ201607310028.html
THE ASAHI SHIMBUN
Eleven operators of nuclear power plants expect to spend more than 3 trillion yen ($32 billion) to safeguard their facilities, revealing the continuing skyrocketing costs, an Asahi Shimbun survey has found.
The overall costs will likely grow even further in the coming years as many of the plants applying for a restart did not include expenses to build centers to deal with a terrorist attack, required under the new regulations set after the 2011 Fukushima disaster.
The latest survey, conducted in June, found the combined spending on safety precautions totaled 3.32 trillion yen, up about 935 billion yen from a similar survey a year ago.
The estimate was partly updated to implement measures to continue to operate reactors past the 40 years of their lifespan.
Some companies had to bolster their plants to withstand an earthquake more powerful than the one previously forecast to hit the sites, in line with the Nuclear Regulation Authority's recommendation.

The survey covered 10 regional utilities operating nuclear power plants and Electric Power Development Co., known as J-Power, which is building a nuclear plant in Oma, Aomori Prefecture.
The first of the series of cost studies was conducted in January 2013, followed by one done annually.
The results of the studies showed that the cost to update safety precautions soared between 600 billion yen and 900 billion yen annually to meet the new regulations, which took effect in 2013.
Kansai Electric Power Co.' spending grew by 2.5-fold to 730 billion yen from last year's 285 billion yen, the most of all surveyed.
The surge resulted from the company's plan to operate three reactors at two of its nuclear plants beyond their 40-year lifespans.
As for the construction of anti-terrorism facilities, only five of 16 plants that have filed their applications to restart with the NRA include figures for such facilities in their estimate.
A terrorism response center is expected to cost tens of billions of yen per plant, likely pushing up the overall costs into the hundreds of billions of yen.
Although companies believe that they can recoup their investments once their plants go back online after the NRA's examination, it is unclear whether events will transpire as envisioned.
Kansai Electric has been ordered to suspend the operation of reactors at its Takahama plant in Fukui Prefecture following a court injunction in March.
Unforeseen problems could force operators to shut down their reactors for a prolonged period, experts say.
(This article was written by Takashi Sugimoto and Masanobu Higashiyama.)

Mihama No.3 OK for another 20 years

August 3, 2016

Aging Mihama reactor meets extension requirements

http://www3.nhk.or.jp/nhkworld/en/news/20160803_26/

Japan's nuclear regulator says another aging reactor in Fukui Prefecture has basically met its requirements for extending its operation.

Kansai Electric Power Company applied last year to allow the Mihama No.3 reactor to continue operating for another 20 years. The reactor is 40 years old this December, the age limit set by the government.

The Nuclear Regulation Authority on Wednesday unanimously agreed on a draft certification of the utility's safety measures. It said they meet the new requirements set after the 2011 Fukushima Daiichi nuclear accident.

The regulator will seek public input for one month, starting Thursday, before formally endorsing the documents of certification.

The reactor facilities must then be checked in detail for quake resistance design and degree of aging. The deadline for final permission is the end of November.

The regulator earlier this year approved an extension of up to 20 years for 2 aging reactors at the utility's Takahama nuclear plant in Fukui Prefecture.

Officials with the utility say actual restart of the reactors will take about 3 years, due to additional engineering needed to ensure safety.

Ikata No.3 to start again mid-August

August 8, 2016
08.08.2016_No155 / News in Brief

Japan's Ikata-3 To Resume Operation On 15 August, Shikoku Says

http://www.nucnet.org/all-the-news/2016/08/08/japan-s-ikata-3-to-resume-operation-on-15-august-shikoku-says

Plant Operation

8 Aug (NucNet): The Ikata-3 nuclear unit in Ehime Prefecture, southern Japan, will start generating electricity on 15 August 2016 after workers complete the replacement of parts on the 846-MW reactor, owner and operator Shikoku Electric Power Company said. The company said it expects to resume normal commercial operation in early September. The utility said it had originally planned to start commercial operation of the unit in late August. The delay is due to the need to replace the seals on three reactor coolant pumps, the company said. There are three units at the Ikata nuclear station. Shikoku Electric has already said it plans to decommission Ikata-1 because projected financial returns from operating the reactor will be "insufficient" to justify the high expected costs of necessary safety measures. The Japan Atomic Industrial Forum said four reactors have been restarted in Japan after clearing examinations under the new regulatory standards imposed by the Nuclear Regulation Authority following the March 2011 Fukushima-Daiichi accident. They are Sendai-1 and -2 and Takahama-3 and -4, although the Takahama units have since been taken offline after a court issued a temporary injunction following protests lodged by anti-nuclear activists. Applications for 22 additional reactor restarts have been filed. All of Japan's 48 commercial reactor units were shut after Fukushima-Daiichi. Five reactors have been earmarked for permanent shutdown, bringing the number of potentially operable commercial units to 43.
Related reports in the NucNet database (available to subscribers):

- Local Assembly Says No To Referendum On Ikata-3 Restart (News in Brief No.31, 15 February 2016)

Ikata No.3 will restart in a few days

August 10, 2016

Ikata nuclear reactor to be restarted this week

http://www3.nhk.or.jp/nhkworld/en/news/20160810_23/

Workers at the Ikata nuclear power plant in western Japan are engaged in the final inspection of control rods ahead of a planned restart of a reactor there on Friday.

The Ikata plant will be the 3rd to come back online under new regulations adopted after the 2011 Fukushima Daiichi nuclear accident.

Inspectors from the Nuclear Regulation Authority are also participating in the final checkups on Wednesday at the plant's number 3 reactor, operated by Shikoku Electric Power Company.

The checks include confirming whether 16 control rods work properly in the reactor. They are designed to operate automatically during an earthquake and other emergencies.

If the inspection finds no problems, workers will restart the reactor on Friday by pulling out the control rods. The operator plans to start generating electricity and feeding it to the grid 3 days later.

The company initially planned the restart for late July. But trouble with a water cooling pump caused a delay.

Two reactors at the Sendai nuclear plant in Kagoshima Prefecture, southern Japan, have already resumed power generation.

The regulator also approved the restart of 2 reactors at the Takahama plant in Fukui Prefecture, central Japan. But a court injunction suspended their operation.

Ikata No.3 (MOX) reactor restarted

August 12, 2016

Shikoku Electric restarts reactor under post-Fukushima regulations

http://mainichi.jp/english/articles/20160812/p2g/00m/0dm/035000c

MATSUYAMA, Japan (Kyodo) -- Shikoku Electric Power Co. restarted a reactor at its Ikata power plant in western Japan on Friday, making it the fifth unit reactivated under tougher regulations set following the 2011 Fukushima nuclear disaster.

The No. 3 reactor at the plant in Ehime Prefecture is the only restarted unit in Japan that runs on uranium-plutonium mixed oxide, or MOX, fuel, as a court ordered Kansai Electric Power Co. in March to suspend two reactors at its Takahama plant after they resumed operations earlier this year, citing safety concerns.

MOX fuel, created from plutonium and uranium extracted from spent fuel, is a key component of the nuclear fuel recycle program pursued by the nuclear power industry and the government.

The government aims to bring reactors back online after the Fukushima crisis led to a nationwide halt of nuclear plants, as it plans to have nuclear power account for 20 to 22 percent of the country's total electricity supply in 2030 to cut greenhouse emissions and lower imported fuel costs.

The Ikata unit is expected to reach criticality, or a state of sustained nuclear chain reaction, on Saturday and begin generating and transmitting electricity on Monday before resuming commercial operation in early September for the first time since it was halted in April 2011 for regular inspection.

"We will take steps toward criticality and resumption of power generation with priority on ensuring safety," Shikoku Electric President Hayato Saeki said in a statement on Friday.

Meanwhile, around 70 residents and others opposing the reactor restart gathered around the seaside plant early Friday morning, chanting slogans such as "Don't contaminate the Seto Inland Sea," and "Stop the nuclear plant."

Junko Saima, a 72-year-old woman from Yawatahama, adjacent to the town hosting the plant, which is located on one side of a narrow peninsula, said, "I am nervous that some kind of accident may occur."

Opponents are concerned about the effectiveness of government-prepared evacuation plans in case of an accident and about potential major earthquakes that are not taken into account in the plans, while proponents are hailing the resumption as it could bring economic benefits.

The restart follows the reactivation of two reactors at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture last year and the brief run of the Nos. 3 and 4 units at Kansai Electric's Takahama complex in Fukui Prefecture.

The mayor of Ikata town and the governor of Ehime Prefecture have already given their consent to restart the No.3 reactor after regulators approved its restart in July last year.

In June, Shikoku Electric loaded nuclear fuel at the power plant eyeing to reboot it on July 26. However, reactivation was postponed due to problems with the reactor's cooling system.

A group of local residents filed a suit in May seeking an injunction to halt the restart arguing that a series of earthquakes that have hit nearby Kyushu Island in April could trigger quakes along the median tectonic line running close to the Ikata reactor.

The plant is about 170 kilometers east of Kumamoto Prefecture, the epicenter of the quakes.

Meanwhile, in Kagoshima, new Gov. Satoshi Mitazono is planning to ask Kyushu Electric to suspend the two reactivated reactors at the Sendai plant to double-check any safety impact on the units from the powerful earthquakes that hit neighboring Kumamoto in April.

Ikata reactor set for cautious restart

http://www3.nhk.or.jp/nhkworld/en/news/20160812_01/

The Ikata nuclear power plant in western Japan is set to restart on Friday. It will be the 3rd plant to go online under new regulations issued after the Fukushima Daiichi disaster.

Operator Shikoku Electric Power says it will restart the No.3 reactor very carefully. It has been idle for more than 5 years.

Inspectors from the Nuclear Regulation Authority have been joining workers at the Ikata plant in Ehime Prefecture in checking the control rod system. The rods, designed to contain nuclear fission reactions, are crucial in controlling the reactor.

The operator plans to remove the rods to resume operation of the reactor at around 9 AM as no problems have been found so far.

If the process goes as scheduled, the reactor is expected to achieve a self-sustaining nuclear chain reaction by Saturday morning.

The utility plans to begin electricity generation and transmission to the grid on Monday, and start commercial operation early next month.

The reactor has been offline since it underwent a regular inspection one month after the 2011 nuclear accident in Fukushima. It had been in operation for about a year at that time.

The utility says the plant's workforce includes personnel who have no experience of reactor operation, and that even veteran workers have not rebooted reactors for a long time.

The firm says it will spend more than 20 hours, 5 hours longer than the previous time, to proceed with each step in achieving criticality of the reactor.

Two reactors at the Sendai plant in Kagoshima Prefecture, southern Japan, have been operating since last year.

Two reactors at the Takahama plant in Fukui Prefecture, central Japan, were restarted earlier this year. But a court injunction has been suspending their operation.

Applications for restarting 21 other reactors at 14 nuclear plants across Japan are being checked at the Nuclear Regulation Authority.

Protestors rally at Itaka plant

August 12, 2016

Protest rally staged at Ikata

http://www3.nhk.or.jp/nhkworld/en/news/20160812_15/

People opposing the restart of a reactor at the Ikata nuclear power plant have staged a protest rally in front of the plant.

More than 100 protesters gathered early Friday morning at the entrance of the plant, operated by Shikoku Electric Power Company. They held flags and banners with anti-nuclear messages.

When the plant's No.3 reactor resumed operations at around 9 AM, they shouted "Stop the operations."

A woman in her 40s from Kagoshima Prefecture said she feels sad, just like she did a year ago when Kagoshima's Sendai nuclear power plant was brought back online.

She said she fears that powerful earthquakes like the ones that hit Kumamoto Prefecture, western Japan, earlier this year could occur around the Ikata plant.

A man in his 60s from Fukui Prefecture, central Japan, said the reactivation of the Ikata reactor is regrettable. He said he hopes the lawsuits filed with district courts will stop its operation.

Ikata reactor restarted despite lingering fears

August 13, 2016

EDITORIAL: Another nuclear plant restarted amid lingering safety concerns

http://www.asahi.com/ajw/articles/AJ201608130031.html

Ikata nuclear power plant, foreground, is located at the root of the Sadamisaki Peninsula. (The Asahi Shimbun)

The No. 3 reactor at Shikoku Electric Power Co.'s Ikata nuclear plant in Ehime Prefecture was restarted Aug. 12, becoming the fifth reactor to be brought online under the stricter safety standards introduced in the aftermath of the 2011 Fukushima nuclear disaster.

The move followed the restart of the No. 1 and No. 2 reactors at Kyushu Electric Power Co.'s Sendai nuclear plant in Kagoshima Prefecture and the No. 3 and No. 4 reactors at Kansai Electric Power Co.'s Takahama plant in Fukui Prefecture. However, the two reactors at the Takahama plant have remained offline since March after the Otsu District Court ordered the operator to shut them down.

The No. 3 unit at the Ikata plant is now the only operating reactor in Japan that burns mixed oxide, or MOX, fuel, composed of plutonium blended with uranium.

1991

But this reactor shares many of the serious safety problems that have been pointed out for the reactors at the Sendai and Takahama plants. It is impossible for us to support the decision to resume operations of the Ikata plant reactor without resolving these problems.
What is particularly worrisome about the Ikata plant is the anticipated difficulty in securing the smooth evacuation of local residents in the event of a serious accident.
The facility is located at the root of the Sadamisaki Peninsula, a 40-kilometer-long spear of land that juts westward into the sea with a maximum width of 6 km or so.
This narrow strip of land west of the plant is home to about 5,000 people.
The only land route for the emergency evacuation of local residents is a national highway that passes near the nuclear plant into inland areas.
Under the evacuation plan crafted jointly by the local governments in the region and the central government, local residents are supposed to be evacuated mainly by ship from ports in the peninsula if the highway becomes impassable because of an accident at the plant.
But many of the communities in the peninsula are located on slopes in coastal areas. They could be cut off from the rest of the peninsula if a landslide occurs.
There are seven radiation protection facilities within the town of Ikata, but four of them are located in designated landslide-prone areas.
People aged 65 or older account for more than 40 percent of the town's population.
The municipal government has plans in place to support the evacuation of residents of each district. But residents say there is no way to secure evacuation of the entire town if multiple disasters occur.
People living in areas located between 5 and 30 kilometers from a nuclear power plant are supposed to take shelter in their own homes or public facilities, in principle, when a serious nuclear accident takes place.
But the series of earthquakes that rocked central Kyushu around Kumamoto Prefecture in April underscored anew the devastating effects of multiple disasters. The swarm of quakes included two registering a maximum intensity of 7 on the Japanese seismic scale, which caused severe damage to buildings across wide areas of Kumamoto Prefecture.
Ehime Prefecture is likely to be shaken violently if it is struck by the predicted massive Nankai Trough earthquake.
But the prefecture is ill-prepared for such a gigantic quake, with the ratio of public facilities that are quake-proof in the prefecture being the third lowest in Japan. These public facilities are supposed to play a key role in disaster response scenarios.
Evacuation plans are designed mainly to cope with situations in the wake of a single nuclear accident.
At the very least, however, the central and local governments should give serious consideration to the possibility of a nuclear accident being triggered or accompanied by other disasters like an earthquake and a landslide, and evaluate whether the lives of local residents will be protected in such situations.
Satoshi Mitazono, the new governor of Kagoshima Prefecture who took office last month, has indicated his intention to ask Kyushu Electric Power to halt the two reactors at its Sendai plant in response to local anxiety that has been aroused by the Kumamoto earthquakes.
Shikoku Electric Power's decision to bring the Ikata reactor back on stream despite the fresh safety concerns is deplorable.
Another sticky issue is how to dispose of spent nuclear fuel.
If the No. 2 reactor at the Ikata plant is also restarted following the No. 3 unit, the spent fuel pool will become full in six to seven years. But there is no prospect of building a new storage facility for spent fuel.
There is no practical way, either, to reprocess spent MOX fuel.

The utility, which covers the Shikoku Island, has apparently enough capacity to meet power demand during this summer too.
The company has estimated that restarting the reactor will boost its annual earnings by 25 billion yen ($247 million). But this offers no compelling case for bringing the reactor back online at this moment. Electric utilities, the central government and local governments in areas where nuclear power plants are located should all stop seeking to restart reactors until they have first dealt with the raft of safety issues.

August 12, 2016

Shikoku MOX plant restarts amid outcry over fresh quake fears

by Eric Johnston
http://www.japantimes.co.jp/news/2016/08/12/national/shikoku-electric-poised-fire-ehime-plant-mox-reactor-amid-protests/#.V6226aJdeos

Staff Writer

MATSUYAMA, EHIME PREF. – Shikoku Electric Power Co. restarted the Ikata No. 3 reactor Friday at its plant on the narrow Sadamisaki Peninsula in Ehime Prefecture as citizens groups sought injunctions in three different prefectures to turn it back off amid various safety concerns, including the viability of evacuations.
The reactor is the fifth to be switched back on since all of the nation's atomic reactors were closed due to the March 2011 triple core meltdown at the Fukushima No. 1 power plant following a mega-quake and tsunami.
However, a March decision by the Otsu District Court to place a temporary injunction on two Kansai Electric Power Co. reactors in Takahama, Fukui Prefecture, left only two reactors at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture in operation. They were restarted a year ago.
The Ikata No. 3 unit is also the only reactor burning the mixed uranium-plutonium oxide (MOX) fuel.
Shikoku Electric reported no problems with the restart Friday morning, saying it was expected to reach criticality by Saturday morning and begin generating and transmitting electricity by Monday. After a series of final checks, the utility plans to start selling reactor-generated electricity early next month.
But the reactor's restart has not gone unchallenged. The Otsu District Court decision, which shut down Kepco's Takahama No. 3 and 4 reactors less than two months after they were restarted, has energized residents who opposed the Ikata restart. In light of the quakes in Kyushu earlier this year, many now fear a natural disaster could also damage the reactor, and that official evacuation plans for the slender peninsula could prove unrealistic.
Petitions seeking a temporary injunction on the Ikata reactor have been filed in the district courts of Matsuyama in Ehime, as well as Hiroshima and Oita, by people living relatively close to the plant. Matsuyama is about 60 km from Ikata and Hiroshima is within 100 km. Oita's Saganoseki Peninsula is about 45 km away.
A temporary injunction from any one of the three courts would almost certainly mean Ikata No. 3 would have to shut down immediately. For this reason, anti-nuclear lawyers involved with the petitions remain hopeful the courts will do what politicians have not.

“The Otsu court decision to shut down the Takahama reactors sent a shock wave through the government and the utilities. Political measures including demonstrations are needed. But I’ve come to believe the best way to stop the restart of nuclear power plants is through legal means, such as filing lawsuits and requests for temporary injunctions,” Hiroyuki Kawai, a lawyer involved with the Matsuyama, Hiroshima and Oita petitions, said at a news conference in Matsuyama late last month.
The Otsu decision angered Kepco and senior corporate leaders in the Kansai region who fear it will spark a nationwide movement against nuclear power plants. Some are now pushing the government to establish a separate court presided over by judges with specialized knowledge, or to establish separate legal measures to review petitions by citizens’ groups targeting restarts in the hope of obtaining more favorable rulings.
“From the viewpoint of a stable energy supply, it’s necessary to reduce the legal risks as much as possible,” Kansai Economic Federation chairman and former Kepco Chairman Shosuke Mori said at his regular news conference last month.
Other pro-nuclear Kansai economic leaders support Mori’s call for legal changes.
“Why should the nation’s energy policy be impaired by a judge at a district court? I hope the law is quickly changed so this doesn’t happen,” said Kansai Economic Federation Vice Chairman and Hankyu Railways Chairman Kazuo Sumi after the initial Oita ruling in March.
In their request for a temporary injunction on the Ikata unit, citizens’ groups cite the fact that it lies about 5 km from the Median Tectonic Line, which runs from Kyushu to Honshu. They also say that evacuation plans in the event of a natural disaster that damages the plant could prove impossible if the roads along the narrow, landslide-prone peninsula hosting it collapse or are washed away by a tsunami.
Even officials who support the restart have stressed the need for better communication with the prefectural and central governments in the event of an accident that forces an evacuation.
“There are heightened concerns compared with the past, and we’ll strengthen the information collection system,” Ikata Vice Mayor Matabei Moriguchi said Friday after the restart.

Ikata No.3 reaches criticality

August 15, 2016

Ikata nuclear plant’s No. 3 reactor begins generating power

Kyodo

MATSUYAMA, EHIME PREF. – The Ikata nuclear plant began generating electricity Monday, ahead of its planned reconnection to the grid on Sept. 7, operator Shikoku Electric Power Co. said.
The plant in Ehime Prefecture is one of only two nuclear power stations currently operating in Japan, despite the government seeking to plug back into the energy source more than five years after the Fukushima crisis.
The plant’s No. 3 reactor was reactivated Friday after it cleared safety checks drafted in the wake of the catastrophe at the Fukushima No. 1 nuclear plant.

The reactor is the sole operating unit running on plutonium-uranium mixed oxide fuel, which contains plutonium extracted from reprocessing spent fuel.
MOX is a central component of Japan's fuel cycle and is also important as a way to reduce the nation's stockpile of weapons-grade plutonium.
But MOX fuel is more radioactive than ordinary uranium fuel, and this meant it was controversial even before the Fukushima crisis.
The 890-megawatt reactor will shift to commercial operation after final checks by the Nuclear Regulation Authority.
The unit was taken offline in April 2011 for scheduled maintenance and inspections and remained in that state until last week.

Ikata restart: Serious concerns remain

August 17, 2016

Editorial: Grave concerns remain over restart of Ikata nuclear plant

http://mainichi.jp/english/articles/20160817/p2a/00m/0na/012000c

Shikoku Electric Power Co. has restarted the No. 3 reactor at its Ikata Nuclear Power Plant in Ikata, Ehime Prefecture, and begun generating and transmitting electric power. It is the fifth reactor that has been reactivated after passing safety screenings by the Nuclear Regulation Authority (NRA) -- following the No. 1 and 2 reactors at Kyushu Electric Power Co.'s Sendai plant in Kagoshima Prefecture and the No. 3 and 4 reactors at Kansai Electric Power Co.'s Takahama plant in Fukui Prefecture.

- 【Related】Ikata nuclear plant's No. 3 reactor begins generating power
- 【Related】Shikoku Electric restarts reactor under post-Fukushima regulations
- 【Related】4 radiation protection shelters near Ikata nuke plant located in landslide risk areas

Ehime Gov. Tokihiro Nakamura told a news conference, "The best possible safety measures have been taken at the plant. An accident similar to that in Fukushima will never happen." His remarks appear to signify that the myth of the infallible safety of atomic power stations, which had been prevalent in the electric power industry and the government until the outbreak of the Fukushima nuclear crisis in March 2011, have been revived.
In particular, serious concerns remain about the Ikata plant from the viewpoint of preventing a nuclear disaster.
The biggest problem is that the power station is situated at the base of the Sadamisaki Peninsula, which is 40 kilometers long from east to west and about 800 meters wide at its narrowest location. Approximately 4,700 people live in areas west of the nuclear plant, but should a nuclear accident occur at the station, the escape route for local residents could be blocked.
Moreover, the median tectonic line fault, one of Japan's largest active faults, is situated only about six to eight kilometers off the nuclear plant. A powerful Nankai Trough quake is feared to hit Shikoku Island where the power station is located. A complex disaster of a powerful earthquake and a nuclear accident could happen. The ground in some areas of the Sadamisaki Peninsula is fragile.

Under evacuation plans worked out by the prefectural and municipal governments, residents of areas west of the plant would escape from the peninsula in cars or boats if a nuclear accident were to occur. However, if a complex disaster were to hit the peninsula, there are fears that residents might not be able to flee by land or sea. In such a situation, residents would be required to stay indoors at home or in evacuation shelters to avoid being exposed to radiation.
However, if the area were to be hit twice by a temblor registering 7 on the 7-point Japanese intensity scale just like in the Kumamoto Earthquake, it would be difficult to continue staying indoors.
Public evacuation shelters are not absolutely safe. There are seven radiation proof facilities in the town of Ikata. However, four of them are located in landslide caution zones.
The Ikata plant is Japan's only nuclear plant using mixed oxide (MOX)-fuel consisting of plutonium and uranium since operations at the Takahama Nuclear Power Plant have been suspended in response to a court order. It has been pointed out that MOX-fuel makes control rods more ineffective than conventional nuclear fuel. Furthermore, specifically how to dispose of spent MOX-fuel has not yet been determined.
Local bodies hosting nuclear plants are obligated to work out evacuation plans for local residents in case of a nuclear accident. Even if such plans are inadequate, the NRA still approves reactivation of nuclear plants because such plans are neither subject to screening by the NRA nor a precondition for restarting atomic power stations. A system under which a third-party organization would check the efficacy of evacuation plans before restarting nuclear plants needs to be established.
Shikoku Electric Power estimates that the operation of Ikata plant's No. 3 reactor will increase the company's annual profits by some 25 billion yen. However, power companies across the country have leeway to supply electricity to households and businesses this summer. There is no need to make haste to restart idled nuclear plants from the viewpoint of ensuring a stable supply of electric power.
The government and power companies' attempts to rely on nuclear plants while indefinitely postponing countermeasures against a possible complex disaster are unacceptable.

TEPCO reactors to restart in central Japan?

August 24, 2016

Two Tepco Kashiwazaki-Kariwa reactors may pass geared-up safety checks by March

http://www.japantimes.co.jp/news/2016/08/24/national/two-tepco-kashiwazaki-kariwa-reactors-may-pass-geared-safety-checks-march/#.V71e46Jdeos

Kyodo
Nuclear regulators have decided to gear up the safety assessment of two reactors operated by Tokyo Electric Power Company Holdings Inc. in central Japan, raising the possibility of finishing the process by next March, sources said Tuesday.
Reactor Nos. 6 and 7 at the Kashiwazaki-Kariwa plant in Niigata Prefecture are boiling water reactors, the same type as the ones that suffered core meltdowns in 2011 at Tepco’s Fukushima No. 1 complex.

All reactors in Japan — either BWRs or pressurized water reactors — are required to meet tougher safety criteria imposed after the Fukushima crisis, but the BWR assessment has been delayed due to the need to install safety equipment that involves extensive work.
If reactors 6 and 7 clear the assessment, they will become the first BWRs technically qualified to resume operation under the post-Fukushima rules.
Facing massive decommissioning costs and compensation payments after the Fukushima disaster, Tepco applied for the safety assessment of the two reactors in September 2013, hoping that restarting the units will help turn around its business.
But it is unclear whether the development will lead to their swift restart because Niigata Gov. Hirohiko Izumida has said he will "not talk about restarting" the reactors unless a study on the Fukushima calamity is sufficiently carried out.
The Kashiwazaki-Kariwa complex on the Sea of Japan coast is one of the world's largest nuclear power plants in capacity if all of its seven reactors were in operation.
Allowing Tepco to reactivate its reactors can be controversial, as the utility is still struggling to scrap the crippled reactors at the Fukushima plant. Tens of thousands of people who lived nearby also remain displaced evacuees.
The Nuclear Regulation Authority decided last August to prioritize checking the two Kashiwazaki-Kariwa reactors, hoping to make them a model case of the BWR assessment process. But it retracted the decision in March after Tepco failed to offer sufficient explanation on questions raised by the regulators.
But Tepco has come up with the necessary documents and the NRA decided to reinstate the priority status of the Kashiwazaki-Kariwa reactors at least until mid-September. The NRA has conveyed its plan to other utilities whose BWRs are being checked, the sources said.
Under the new safety requirements, BWRs must be equipped with filtered venting systems so that radioactive substances will be reduced when gas and steam need to be released to prevent damage to containment vessels.
The venting facilities are not an immediate requirement for PWRs as they are housed in containers larger than those of BWRs, allowing more time until pressure rises inside the containers.
Currently, two reactors at Kyushu Electric Power Co.'s Sendai plant and another reactor at Shikoku Electric Power Co.'s Ikata plant are operating in Japan after passing the safety checks. They are all BWRs.

Operating of Oma plant postponed again (till 2024)

September 9, 2016

J-Power delays plan to begin operating Oma nuclear plant until 2024

http://www.japantimes.co.jp/news/2016/09/09/national/j-power-delays-plan-begin-operating-oma-nuclear-plant-2024/#.V9LN2jVdeos
Kyodo
AOMORI – Electric Power Development Co. said Friday that it has decided to **postpone its plan to start operating its Oma nuclear power plant by two years to fiscal 2024 due to longer-than-expected safety tests by the nuclear regulatory body.**
The company, known as J-Power, has delayed the schedule for the second time after it applied for the safety check of the plant, which will be **the world's first reactor to run solely on plutonium-uranium mixed oxide fue**l, in December 2014, with an initial plan aimed at starting operation in fiscal 2021.

But it put off the original schedule in September last year to around fiscal 2022 due to the prolonged screening process by the Nuclear Regulation Authority after the company was asked to provide further explanations of the plan to build the plant in Aomori Prefecture.
"We would like to continue responding appropriately to (requests from) the regulation authority for safety screening," said Shosaku Kusunose, executive managing officer in charge of the Oma plant project.
Nuclear power plant operators in Japan need to obtain safety clearance from the NRA under tougher regulations adopted after the Fukushima nuclear crisis in 2011, which led to a nationwide halt of nuclear power plants.
Following the 2011 Fukushima disaster, the city of Hakodate in neighboring Hokkaido sued the company and government in April 2014, demanding a halt to the plant's construction.

6.000 workers every day at Kashiwazaki-Kariwa plant

September 16, 2016

TEPCO keeps thousands on the clock at idled Kashiwazaki-Kariwa plant, hoping for restart

http://www.japantimes.co.jp/news/2016/09/16/national/tepco-keeps-thousands-clock-idled-kashiwazaki-kariwa-plant-hoping-restart/#.V9un-DVdeou

by Emi Urabe
Bloomberg
More than 6,000 workers cycle through the world's biggest nuclear plant every day to operate and maintain a facility that hasn't sold a kilowatt of electricity in more than four years.
The buzz at Tokyo Electric Power Co. Holdings Inc.'s Kashiwazaki-Kariwa plant plays out daily across Japan, where utilities employ thousands of workers and spend billions of dollars awaiting the green light to restart commercial operations. With only three of the country's 42 operable reactors running, they're betting a central government committed to nuclear power will win over local officials and a wary public who don't believe enough has been done to guarantee safety since the worst meltdown disaster since Chernobyl.
"Even though operating expenses of nongenerating reactors remain high, utilities would prefer to keep them open while there is any chance they can restart," said James Taverner, a Tokyo-based analyst at IHS Markit Ltd. "Utilities have already committed significant expenditure for plants to meet new safety standards, and decommissioning costs are considerable."
The nine biggest regional utilities spent more than ¥1.5 trillion ($14.6 billion) on their nuclear plants during the year to March, according to Bloomberg calculations based on the latest earnings reports. Over that same period, those plants accounted for just 1.1 percent of the nation's electricity.
Nuclear-related costs accounted for 9 percent of all operating expenses at the utilities in the previous fiscal year, according to the calculations. That includes personnel and maintenance, as well as waste disposal and contributions to the nation's nuclear damage compensation system.

The burden of paying for nuclear facilities producing little electricity has been softened by price declines in recent years for coal, natural gas and oil, which are also used as fuels for power generation. Tepco sees itself swinging to a net loss as fossil fuel prices recover, making the restart of Kashiwazaki-Kariwa key to profitability, Naomi Hirose, the company's president, said in an interview earlier this year.

Costs for operating the country's nuclear facilities were slightly higher before the March 2011 Fukushima disaster, at about ¥1.7 trillion a year, when atomic energy accounted for nearly 30 percent of Japan's electricity mix. Tokyo Electric estimates that restarting one of the newest reactors at Kashiwazaki-Kariwa — known as KK — would boost net income by as much as ¥10 billion a month.

Tepco's plant, the world's biggest with about 8.2 gigawatts of generating capacity, has seven reactors at a facility spread across more than 1,000 acres (400 hectares) in Niigata Prefecture.

Workers clad in jumpsuits and loaded down with manuals convene daily in a mock-up of the reactor control room, preparing for the restart of the plant under new safety guidelines imposed after the Fukushima meltdowns.

"Everyday, this room is full of workers, from fresh employees to old veterans, sharpening their skills," Noboyuki Suzuki, a deputy manager in the company's human resources development group, said at the KK plant last month. "Operators at this facility are required to go through training here on a regular schedule."

About three-fourths of the Tepco employees and contract workers at the plant are from the prefecture hosting the facility, making it one of the area's biggest economic drivers.

The plant is an economic windfall for the region, employing thousands of workers and supporting restaurants, shops and even taxi companies, according to Masayoshi Oota, an official from the village of Kariwa. "If the (reactors) were to disappear, then so would the economic benefit," he said.

The nuclear energy industry employs more than 80,000 engineers, construction workers and operators, according to a report published by the Ministry of Economy, Trade and Industry last year.

To boost confidence in the giant facility's safety, Tokyo-based Tepco has spent ¥470 billion on flood barriers, a 15-meter seawall and a reservoir the size of 30 Olympic-size swimming pools to supply water in the event a reactor pump fails.

KK's restart is far from assured. The plant was forced to shut for 21 months following a strong earthquake in July 2007. Though some units eventually restarted, all were shuttered again after the March 2011 Fukushima debacle started, for safety checks.

There is skepticism among the public. The restart of nuclear reactors is opposed by 53 percent of Japanese and supported by just 30 percent, according to a nationwide poll conducted earlier this year by the Mainichi newspaper.

Local courts and governments have been some of the biggest roadblocks to restarting more reactors, crimping Prime Minister Shinzo Abe's goal of deriving as much as 22 percent of the nation's energy needs from nuclear by 2030. Goldman Sachs Group Inc. lowered its price target on six Japanese power utilities this month on risk of delays in restarting operations or renewed shutdowns.

"While some reactors have been restarted, the method to shut them down again (is) evolving," Goldman analyst Hiroyuki Sakaida wrote in a report dated Sept. 14. "We think it will be difficult to fully price in nuclear restarts and restored dividends until fundamental solutions are found to resolve the economic uncertainty surrounding nuclear power operations."

Should the plant clear the necessary regulatory, legal and political hurdles and resume operations, Tepco plans to maintain the facility's workforce at current levels, a reflection of how many workers are needed even during a period called cold shutdown.

“Right now we are focused on the nation’s regulatory review of the plant,” said Chikashi Shitara, facility chief at KK. “Even though the plant isn’t running, there is still a lot we must do.”

Local agreement may be needed to restart Fukushima Daini plant

September 24, 2016

Japan mulls legislation requiring local government approval for restarting Fukushima No. 2 nuclear plant

http://www.japantimes.co.jp/news/2016/09/24/national/japan-mulls-legislation-requiring-local-government-approval-restarting-fukushima-no-2-nuclear-plant/#.V-YueTVdeos

JIJI
The Japanese government is considering legislation to oblige Tokyo Electric Power Company Holdings Inc. to obtain approval from local governments if it applies for restarting its Fukushima No. 2 nuclear power station, Jiji Press learned Friday.
The legislation is also expected to stipulate that the plant be decommissioned if Tepco fails to win such approval and is unable to submit an application for its restart within three years after the law takes effect, sources said.
It will be a special measure under the nuclear reactor regulation law, which does not require local government approval for restarting reactors.
The government aims to submit the legislation to the extraordinary session of the Diet that will be convened on Monday, the sources said.
All the No. 1 to No. 4 reactors at the Fukushima No. 2 plant have been offline since the March 2011 earthquake and tsunami led to a triple meltdown at the Fukushima No. 1 nuclear power station.
Although three of the four reactors at the No. 2 plant lost cooling functions temporarily in the 2011 disaster, they avoided severe accidents such as a core meltdown.
Tepco has not clarified what to do with the No. 2 plant. It is working on decommissioning the stricken No. 1 plant.
The Fukushima prefectural government and its assembly have been calling for scrapping the No. 2 plant.
The legislation could force Tepco to decommission the No. 2 plant because it raises further hurdles for resuming operations.
The government has yet to decide on details of the legislation, including the scope of local governments whose approval would be necessary for reactor restarts, the sources said.
The government allows the restart of nuclear reactors that pass the Nuclear Regulation Authority’s screening based on the stricter safety standards introduced after the accident at the Fukushima No. 1 plant.
But the government sees a need for taking special measures for the No. 2 plant because it is located near the No. 1 plant, which caused severe damage to Fukushima Prefecture, the sources said.

Mihama No.3 and the 40-year rule

October 5, 2016

Another aging reactor passes safety checks to operate beyond 40 yrs

http://mainichi.jp/english/articles/20161005/p2g/00m/0dm/074000c
TOKYO (Kyodo) -- Another aging nuclear reactor in Japan passed a key safety assessment Wednesday as a step toward going back on line, signaling a weakening of the force of a rule introduced after the 2011 Fukushima disaster to limit reactors' operations to 40 years in principle.

- 【Related】Editorial: Japan should phase out aging nuclear reactors
- 【Related】40-year rule for Japan's nuclear reactors sidelined as Mihama unit passes screening
- 【Related】NRA's Takahama reactor approval a blow to 40-year lifespan rule

The No. 3 unit at Kansai Electric Power Co.'s Mihama plant in Fukui Prefecture is the latest reactor seeking to continue in service beyond the 40-year limit to pass the screening, after two such units at the utility's Takahama complex, also in Fukui.
The No. 3 unit went offline in May 2011 for a regular checkup and has not been restarted since due to inspections to meet tougher safety requirements introduced after the Fukushima disaster.
But hurdles remain before the Mihama reactor can restart. It will have to obtain further permission from the Nuclear Regulation Authority on details of equipment design and other issues by the end of November, when it will reach 40 years since entering service.
Missing the deadline would require the utility to scrap the reactor.
Even if the deadline is not missed, resumption of the reactor is not expected before the spring of 2020 to allow time for the operator to finish preparing all the required safety measures, according to Kansai Electric.
Kansai Electric plans to spend about 165 billion yen ($1.6 billion) to upgrade the facilities to meet the new regulations, which reflect the lessons learned from the Fukushima Daiichi nuclear power plant disaster.
The 40-year operational limit has been included in the regulations with the aim of encouraging the retirement of aging reactors that could be prone to accidents.
Although operation for an additional 20 years is possible, nuclear regulators initially indicated that it would be extremely difficult to actually get approval for an extension.
Some utilities have decided to scrap their aging reactors due to expensive safety costs. Kansai Electric has also given up restarting the Nos. 1 and 2 reactors of the three-unit Mihama plant.
But the 40-year-old limit has come to look as if it lacks teeth because utilities are still seeking extensions where they see it as economically viable, with nuclear regulators acknowledging that technical issues could be overcome with sufficient investment.

Niigata governor's election threatens restart

October 17, 2016

Niigata election a setback for restarting Japan's biggest nuclear power plant

http://www.japantimes.co.jp/news/2016/10/17/national/politics-diplomacy/setback-operator-worlds-largest-atomic-plant-anti-nuclear-doctor-elected-niigata-governor/#.WAS1Ccldeot

Reuters, Kyodo, Bloomberg

NIIGATA – Sunday's victory by an anti-nuclear activist in the Niigata gubernatorial election is a setback for Prime Minister Shinzo Abe's energy policy.

Ryuichi Yoneyama, 49, defeated the candidate endorsed by Abe's Liberal Democratic Party. Former construction ministry bureaucrat Tamio Mori, 67, was expected until the last moment to cruise to victory. Yoneyama, a doctor and lawyer, has never held office.

The campaign was dominated by concerns over the future of the world's biggest nuclear power station, the seven-reactor Kashiwazaki-Kariwa complex in Niigata Prefecture.

Currently, only two reactors across Japan are operating in the wake of the 2011 Fukushima nuclear disaster, and Abe has pushed hard for restarts.

"Under current circumstances where we can't protect the lives and the way of life of citizens in the prefecture, I can't approve a restart," Yoneyama told reporters Monday.

Supported by the Japanese Communist Party and two other small parties, Yoneyama secured close to 530,000 votes. Mori trailed with 465,000.

The focus will now be how Yoneyama will be able to cooperate with municipalities and the central government in creating evacuation plans for nuclear disasters. These will be key before restarts can take place.

Abe, meanwhile, told a Diet committee that he will respect the choice of Niigata and that he will cooperate with the new governor.

Shares in Tokyo Electric Power Company Holdings Inc., which operates the Kashiwazaki-Kariwa reactors, fell 8 percent Monday.

The complex has a capacity of 8 gigawatts. Its revival is key to saving Tepco, which was brought low by the Fukushima crisis and then repeated admissions of cover-ups and safety lapses.

"Senior managers at Tepco have made it clear that restarting the Kashiwazaki reactors is fundamentally important to restoring their finances," Tom O'Sullivan, founder of Tokyo-based consultant Mathyos, said by email. "There now has to be significant uncertainty over restarting those reactors."

Yoneyama's victory came after Tepco President Naomi Hirose highlighted the utility's financial vulnerability this month. He said it may face insolvency if it were to recognize the cost of decommissioning the crippled Fukushima No. 1 plant.

Tepco has said that resuming operations for just one of the Kashiwazaki-Kariwa reactors would boost its profit by about ¥10 billion a month.

This was Yoneyama's fifth attempt at public office, and the first time he was successful.

During the campaign he promised to continue the policy of the outgoing governor, who had long thwarted the ambitions of Tepco to restart the plant. Tepco supplies about a third of Japan's electricity.

When the race tightened, the election became a litmus test for nuclear safety and put Abe's energy policy and Tepco's handling of Fukushima back under the spotlight.

"The talk was of Kashiwazaki-Kariwa, but I think the result will affect nuclear restarts across the country," said Shigeaki Koga, a former trade and industry ministry official who is a critic of nuclear restarts and the Abe administration.

Koga said it will be important for Yoneyama to join forces with another newly elected governor skeptical of nuclear restarts, Satoshi Mitazono of Kagoshima Prefecture.

“Without strong support from others, it won’t be easy to take on Tepco,” he said.
The government wants to restart nuclear plants that pass safety checks while also promoting renewables and burning more coal and natural gas.
All of Japan’s reactors were eventually taken offline after Fukushima, but the Niigata plant’s troubles go back further.
Several reactors at Kashiwazaki-Kariwa have been out of action since an earthquake in 2007 caused radiation leaks and fires in a disaster that prefigured the Fukushima calamity and Tepco’s bungled response.
Yoneyama, who has worked as a radiological researcher, said on the campaign trail that Tepco lacks the means to prevent Niigata children from getting thyroid cancer in a nuclear accident, as he said happened in Fukushima. He said the company did not have a solid evacuation plan.
The LDP’s Mori, meanwhile, was forced to tone down his support for restarting the plant as the race tightened, insisting safety was the top priority for Kashiwazaki-Kariwa, while promoting the use of natural gas and solar power in Niigata.
People affected by the Fukushima crisis welcomed the election result, while operators of nuclear power-related businesses expressed concern.
Some evacuees of the 2011 crisis, including a 57-year-old man living in temporary housing in the city of Fukushima, said they hope the voices of the anti-nuclear camp will be reflected in Yoneyama’s policies.
“I don’t want another nuclear plant accident ,” he said. “No nuclear plant should be restarted.”
Kotaro Nagai, 67, who operates a guest house in Kagoshima Prefecture, home to the Sendai nuclear plant, however, said the financial boon for hosting reactors is the key factor behind his support for restarts.
“There are many people who have benefited financially from nuclear power plants,” Nagai said. “A restart is a matter of life and death for us.”

Upset in Niigata pushing LDP to review nuclear energy policy

THE ASAHI SHIMBUN
October 17, 2016 at 14:45 JST

http://www.asahi.com/ajw/articles/AJ201610170029.html

An opposition-backed candidate’s victory in the Niigata gubernatorial election threw the Abe administration into a state of shock over the possible consequences to its nuclear energy policy and its standing on the national level.
Niigata Governor-elect Ryuichi Yoneyama has taken a cautious stance on restarting the Kashiwazaki-Kariwa nuclear plant in the prefecture, the key issue in the gubernatorial election north of Tokyo.
The ruling coalition parties of the Liberal Democratic Party and Komeito thought they had a sure winner in Tamio Mori, a former Nagaoka mayor, before the official campaign period started.
But the voters’ rejection of the coalition-backed candidate means the Abe administration will have to review its energy policy.
“Our side lost in an election in which the opposition parties took an anti-nuclear stance,” a senior government official said. “That will naturally have an effect on the central government’s energy policy.”
The defeat of Mori, however, could have repercussions beyond just energy policy.

“There will be an effect on national politics in general, above and beyond nuclear energy policy, because this will give the opposition parties additional momentum,” a high-ranking LDP official said on Oct. 16.
The ruling coalition and proponents of nuclear power saw a great opportunity when Hirohiko Izumida, who had long opposed restarting the Kashiwazaki-Kariwa plant, announced he would not run for re-election.
After Yoneyama entered the race and said he would continue the cautious stance taken by Izumida, LDP executives went to Niigata to campaign on behalf of Mori.
After such efforts by the ruling party failed, one pro-nuclear energy LDP official said about restarting the Kashiwazaki-Kariwa plant, “We will have to take a wait-and-see approach for the time being.”
Yoneyama’s victory also throws a monkey wrench into plans of the Ministry of Economy, Trade and Industry to help Tokyo Electric Power Co., the operator of the Kashiwazaki-Kariwa plant, to return to a more stable corporate footing.
TEPCO has been hampered by the huge costs associated with cleaning up after the 2011 disaster at its Fukushima No. 1 nuclear power plant.
Economy ministry officials had preconditioned their TEPCO rehabilitation plan on a resumption of operations at some of the seven reactors at the Kashiwazaki-Kariwa plant.
Although a prefectural governor does not have the legal authority to order utilities to start or suspend operations at a nuclear plant, the common practice until now has been for utilities to obtain the consent of the local government before resuming operations.
With Yoneyama having clearly stated his reluctance toward such a resumption, TEPCO faces a much higher hurdle in its attempt to reboot the Kashiwazaki-Kariwa plant.
“We will persistently try to gain the understanding of the new governor, but it might be difficult to resume operations over the next four years,” a high-ranking economy ministry official said.

Nuclear foe Ryuichi Yoneyama elected Niigata governor, threatening Tepco reactor restarts

http://www.japantimes.co.jp/news/2016/10/17/national/politics-diplomacy/anti-nuclear-candidate-yoneyama-leading-niigata-gubernatorial-election/#.WAS1Xcldeos

Kyodo, Reuters

NIIGATA – An anti-nuclear candidate was elected governor of Niigata on Sunday, dealing a potential blow to Tokyo Electric Power Co.’s attempts to restart the world’s biggest nuclear power station.
The winner, Ryuichi Yoneyama, 49, is a doctor and lawyer who has never held office and was backed mostly by left-wing parties.
The campaign was dominated by concerns over the future of the massive Kashiwazaki-Kariwa power station and nuclear safety more than five years after the Fukushima crisis.
Yoneyama defeated former Nagaoka Mayor Tamio Mori, 67, who was backed by the pro-nuclear Liberal Democratic Party.
Yoneyama gathered more than 528,000 votes, about 60,000 more than Mori. Voter turnout was 53.05 percent, up significantly from the 43.95 percent in the previous gubernatorial election in 2012.

"It's really regrettable. We will take the judgment of voters very seriously," said Keiji Furuya, a Lower House member who served as head of Mori's campaign office.
Yoneyama promised to continue the policy of the departing governor, who had long thwarted Tepco's ambitions to restart the plant.
Reviving the seven-reactor giant, with capacity of 8 gigawatts, is key to saving the utility, which was battered by the Fukushima catastrophe of March 2011 and then the repeated admissions of coverups and safety lapses.
Tepco is vital to Prime Minister Shinzo Abe's energy policy, which relies on rebooting more of the reactors that once provided about 30 percent of the nation's electricity needs.

Genkai 3 & 4 cleared for restart... despite opposition

Dossier 8
November 9, 2016

Japan regulator clears more reactors for restart amid opposition

http://www.japantimes.co.jp/news/2016/11/09/national/japan-regulator-clears-reactors-restart-amid-opposition/#.WCLUVcmDmos

Bloomberg
Japan's nuclear regulator cleared another pair of reactors on the southernmost island of Kyushu for restart despite a growing chorus of opponents who object to any resumption of nuclear operations.
The Nuclear Regulation Authority approved a preliminary report on Wednesday that says Kyushu Electric Power Co.'s Genkai Nos. 3 and 4 reactors in Saga Prefecture meet post-Fukushima safety rules, one of the biggest hurdles an operator must clear. A 30-day comment period must be held before any final approval.
Genkai's approval is another small step for Prime Minister Shinzo Abe, who has backed a policy of restarting the nation's reactors to lower electricity rates, shore up the economy and boost global competitiveness. However, the looming threat of legal action and local opposition has put the fate of the entire restart process in doubt. Japan aims to have nuclear power account for as much as 22 percent of its energy mix by 2030, compared with more than a quarter before Fukushima and a little more than 1 percent now.
"This news will provide a boost for Japan's nuclear industry, but progress to restart reactors still lags behind the initial hopes of incumbent utilities," James Taverner, an energy analyst at IHS Markit Ltd., said by email. "Japan's policymakers and regulators continue to have a challenge to carefully balance industry needs and public safety concerns."
Last year, Kyushu Electric restarted the Nos. 1 and 2 reactors at its Sendai station, becoming the first utility to bring a reactor back online since new safety rules were brought in following the Fukushima disaster.
Almost 51 percent of the citizens of Saga Prefecture, where the Genkai plant is located, oppose its restart, while 39.3 percent approve, according to a regional newspaper poll conducted between Sept. 30 and Oct.

2. The same poll last year showed that 45.3 percent of respondents were against the restart, while 46.8 percent approved.

Restarting both units would boost net income by ¥12 billion ($117 million) a month, Naoko Iguchi, Tokyo-based spokeswoman for the utility, said by phone. The Sendai Nos. 1 and 2 reactors provided a ¥33 billion boost to net income for the six months ended Sept. 30, Masakatsu Tanaka, an official in Kyushu Electric's Tokyo office, said last month.

The Genkai reactors, with a combined capacity of 2.36 gigawatts, are expected to restart in the fiscal year ending March 2018, the Nikkei reported last month, citing President Michiaki Uriu. The company would consider lowering power rates once four units are online, Tokyo-based Kenji Kawabata, the company's deputy regional director, said last year.

Almost all the country's reactors remain shut because of the new safety regulations and public opposition following the 2011 Fukushima disaster. Only two of Japan's 42 operable reactors are producing power commercially as of Oct. 6, when Kyushu Electric shut its Sendai No. 1 unit for maintenance.

Sendai's return to service may be delayed due to the recent election of a new governor in Kagoshima who strongly opposes its operation. Local government approval — including endorsement from the governor — is traditionally sought by Japanese utilities before returning plants to service.

Tokyo Electric Power Co. Holdings Inc. fell the most in almost four months on Oct. 17 after Ryuichi Yoneyama was elected governor of Niigata the previous day. Yoneyama opposes Tokyo Electric's plan to restart its Kashiwazaki-Kariwa nuclear facility located in his prefecture.

Genkai nuke plant's No. 3, 4 reactors pass screening for possible restart

http://mainichi.jp/english/articles/20161109/p2a/00m/0na/023000c

The Nuclear Regulation Authority (NRA) has given a de-facto green light to reactivation of the No. 3 and 4 reactors at the Genkai Nuclear Power Plant in Saga Prefecture, bringing the total number of reactors that have passed the nuclear watchdog's screenings to 10 across Japan.

At a regular meeting on Nov. 9, the NRA put together a draft document indicating that the Genkai plant's No. 3 and 4 reactors met the new safety criteria introduced in the wake of the Fukushima nuclear disaster. The document will be officially approved following a one-month public comment period.

In order for the two reactors to be restarted, plant operator Kyushu Electric Power Co. will need to clear two more screenings on specific facility designs and other elements, as well as a pre-operation inspection. Actual reactivation is expected to come sometime after fiscal 2017.

Kyushu Electric applied for the safety screenings of the two reactors in July 2013, around the same time it filed a similar application to reactivate the No. 1 and 2 reactors at the Sendai Nuclear Power Plant in Kagoshima Prefecture, which are now online.

However, the NRA prioritized the Sendai plant screening as a model case for accelerating the entire safety review processes, putting the Genkai reactor screening on the back burner. The fact that the utility had changed an emergency response base's structure from a seismic isolation design to a quake-resistant design also contributed to the prolonged screening on the Genkai complex.

There are few active faults in areas around the Genkai plant that could trigger major earthquakes, and the maximum projected seismic acceleration is 620 gal and the maximum tsunami height is projected at about 6 meters -- smaller than for other nuclear complexes.
Meanwhile, there are 17 remote islands within a 30-kilometer radius of the plant, with a total population of around 20,000. While a nuclear accident evacuation plan is required to be mapped out for sites within that area, challenges remain for the islands as it would be difficult for residents to evacuate in the event of multiple disasters, such as a nuclear plant accident coupled with tsunami. Furthermore, measures for radiation protection at evacuation shelters on those islands haven't been improved yet.
The nuclear plants that have heretofore passed NRA screenings are: the No. 1 and 2 reactors at the Sendai plant, the No. 1 through 4 reactors at Kansai Electric Power Co.'s Takahama nuclear plant in Fukui Prefecture, Kansai Electric's No. 3 reactor at the Mihama plant in the same prefecture, and Shikoku Electric Power Co.'s No. 3 reactor at the Ikata plant in Ehime Prefecture.
Of those, five reactors -- the No. 1 and 2 reactors at the Sendai plant, the No. 3 and 4 reactors at the Takahama plant and the No. 3 reactor at the Ikata plant -- have been reactivated. However, the No. 3 and 4 reactors at the Takahama complex and the No. 1 reactor at the Sendai plant have been suspended due to a provisional injunction handed down by the Otsu District Court and a regular inspection, respectively. As a result, only two of those reactors are currently online.

NRA takes steps to restart Genkai nuclear plant
http://www3.nhk.or.jp/nhkworld/en/news/20161109_20/

Japan's nuclear regulator has taken steps to restart the Genkai plant in Saga Prefecture, western Japan. The restart will happen next summer at the earliest.

The Nuclear Regulation Authority presented its draft assessment of safety measures for the plant's No.3 and No. 4 reactors at a meeting on Wednesday.

The draft effectively approves safety measures set forth by the plant's operator, Kyushu Electric Power Company. Genkai is the 5th commercial nuclear plant in Japan to reach this stage.

The agency says the utility's measures meet new government requirements introduced after the Fukushima Daiichi nuclear accident in March 2011.

The measures include raising the maximum magnitude of a possible earthquake and making emergency command centers quake-resistant.

The regulator also says effective plans are in place to prevent meltdowns and damage to containment vessels in case of severe accidents. The No. 3 reactor uses mixed-oxide fuel, which includes plutonium extracted from spent nuclear fuel.

The NRA will hear public comments for 30 days before formally approving the assessment.

Kyushu Electric must receive approval for equipment designs, pass inspections and obtain local consent before restarting the reactors.

Extending 40-year lifespan once again might set a trend

November 17, 2016

EDITORIAL: NRA decision on aging reactors is irresponsible and unnecessary

http://www.asahi.com/ajw/articles/AJ201611170033.html

The Nuclear Regulation Authority on Nov. 16 gave the green light to Kansai Electric Power Co.'s application to extend operations of the aging No. 3 reactor at its Mihama nuclear power plant for up to 20 years. The plant in Fukui Prefecture will reach its 40-year-lifespan at the end of the month.

The Mihama No. 3 unit is the third reactor to be granted a license renewal by the nuclear safety watchdog following the No. 1 and No. 2 reactors at the same utility's Takahama nuclear power plant, also in Fukui Prefecture.

In the aftermath of the disaster at Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant in 2011, the law was revised to set 40 years, in principle, as the lifespan of nuclear reactors. The licenses for reactor operations can be renewed once for up to an additional 20 years, but license renewal is supposed to be highly exceptional.

We are deeply concerned that the NRA's decision to approve the extended operation of an aging reactor could set a trend, gradually eviscerating the principle. We feel obliged to express again our opposition to the decision.

There are reactors that have been in service for more than 40 years in the United States and Europe. But experts have warned about a possible significant decline in the level of safety due to such aging issues as deterioration of the reactor vessel, which cannot be replaced.

The No. 3 reactor at the Mihama nuclear plant had a serious accident in 2004 when 11 workers were killed or injured by high temperature steam blowing out of a worn-out pipe in a turbine facility.

One of the factors behind the deadly accident was inadequate inspection over many years.

Older nuclear power plants require more careful maintenance and safety checks.

The extended operation of the aging reactors will impose a heavy burden on Kansai Electric Power, which is responsible for securing their safety.

The utility has promised to raise its estimation of ground motion due to possible earthquakes that might strike areas around the plants and take appropriate measures to bolster the quake-resistance of the reactors by spring 2020. It will also have to take additional safety measures, including steps to make electric cables less flammable.

The company will have to spend more than 380 billion yen ($3.47 billion) to meet the requirements to extend the operation of the three reactors. This sum doesn't include the costs of building new facilities to respond to terrorist attacks required under the new stricter safety standards.

The amount of money involved could have covered the entire cost of building a 1,000-megawatt nuclear power plant before the Fukushima disaster.

Still, Kansai Electric Power claims the massive investment makes economic sense. It said it plans to also seek license renewal for the No. 1 and No. 2 reactors at its Oi nuclear power plant, which will reach the 40-year legal lifespan in three years.
Of the 11 reactors it owns, the utility has decided to decommission only the two oldest--the No. 1 and No. 2 reactors at the Mihama plant.
Before the 2011 accident, Kansai Electric Power promised local communities that it would replace the aging Mihama No. 3 reactor with a new one. This promise seems to have played a role in its decision to keep the Mihama No. 3 unit running.
The license renewals offer no respite from concerns about the situation in areas around Wakasa Bay in Fukui Prefecture, which are dotted with many aging reactors.
Instead of making decisions only from a business point of view, the utility should opt to decommission these reactors to lower the risk of nuclear accidents.
The NRA's stance toward the issue is also questionable.
The three reactors at the Takahama and Mihama plants faced decommissioning unless their licenses were renewed before the expiration of the 40-year term.
The NRA gave precedence to the inspections of these reactors for license renewal and allowed the utility to delay required earthquake-resistance tests for important equipment until after the completion of the planned work.
These actions indicate the nuclear regulator tried to complete the license renewal review process before the expiry dates kicked in.
The pools for storing spent nuclear fuel at the nuclear plants operated by Kansai Electric Power are close to reaching their capacity.
The utility says it will build an interim storage facility outside Fukui Prefecture. But there is no workable and specific plan to realize this idea.
The utility is acting in an irresponsible manner by deciding to extend the operation of these aging reactors without solving the key problem.
The catastrophic accident at the Fukushima plant has radically changed the Japanese public's perceptions of nuclear power generation.
It is hard to believe that continued use of old reactors will open up a new energy future for this nation.
Kansai Electric Power should stop to reconsider whether extending the operation of these reactors is really necessary.

November 16, 2016

Another operation approval of aging nuclear reactor contradicts 40-year rule

http://mainichi.jp/english/articles/20161116/p2a/00m/0na/019000c

The Nuclear Regulation Authority (NRA) has allowed Kansai Electric Power Co. to continue running the No. 3 reactor at its Mihama Nuclear Power Station in Fukui Prefecture beyond the 40-year limit.

- 【Related】Japan regulator OKs another nuclear reactor to run beyond 40-yr limit
- 【Related】Another aging reactor passes safety checks to operate beyond 40 yrs
- 【Fukushima & Nuclear Power】

This is the third nuclear reactor in the country that will have been allowed to continue to operate beyond the 40-year limit -- following the No. 1 and 2 reactors at the Takahama plant also in Fukui Prefecture.
The move contradicts rules stipulating that nuclear reactors should be decommissioned after being operated for 40 years, in principle.
It had been viewed as extremely difficult to extend the lifespan of Mihama's No. 3 reactor because of its old design and difficulties in improving the reactor's quake resistance as the plant operator is required to largely increase the estimate of the scale of the maximum earthquake that could hit the plant.
As such, the NRA once hinted that it would discontinue examinations of the reactor to see if it meets the new regulatory standards.
However, Kansai Electric Power spent 165 billion yen on measures to enhance the safety of the reactor.
The NRA increased its personnel to accelerate the examination of the plant, and managed to approve the continuation of its operation by the deadline.
Six aging nuclear reactors across the country are set to be shut down and decommissioned. Their operators voluntarily decided to decommission these reactors, whose outputs are small, considering the units' cost-benefit performance.
However, if power companies apply for permission to extend the lifespan of nuclear reactors, the NRA will almost certainly grant permission.
The rules limiting the operation of a nuclear reactor to 40 years, in principle, was established with the aim of reducing Japan's reliance on atomic power stations following the outbreak of the Fukushima nuclear crisis in March 2011. Both the NRA and power companies should go back to the fundamentals of the rules.

Niigata mayor vs governor?

November 21, 2016

New mayor in Niigata willing to restart nuclear plant

http://www.asahi.com/ajw/articles/AJ201611210053.html

THE ASAHI SHIMBUN
KASHIWAZAKI, Niigata Prefecture--An independent candidate who has called for a conditional restart of one of the world' largest nuclear plants was elected mayor of this coastal city in northwestern Japan on Nov. 20.
Masahiro Sakurai, 54, gained 30,220 votes, compared with 16,459 for Eiko Takeuchi, 47, who opposed a resumption of operations at the Kashiwazaki-Kariwa nuclear power plant.
Sakurai's victory could lead to a showdown with Niigata Governor Ryuichi Yoneyama over the nuclear power plant operated by Tokyo Electric Power Co. Yoneyama, who won the governor's election in October, has taken a tough stance against restarting the nuclear plant.
The plant's site covers part of Kashiwazaki and the neighboring village of Kariwa. All seven of the plant's reactors have remained idle over the past few years.
"I will gradually but surely reduce the number of reactors in the nuclear power plant," Sakurai told reporters after the election. "But I recognize the value of resuming operations."

Takeuchi, who was backed by the Japanese Communist Party and the Social Democratic Party, was against restarting reactors there.
Voter turnout for the mayoral election was 64.06 percent, a slight decrease from 64.93 percent in the previous election.
TEPCO, operator of the crippled Fukushima No. 1 nuclear plant, is eager to restart reactors at the Kashiwazaki-Kariwa plant.
During the election campaign, Sakurai said he would "approve a restart of the halted nuclear plant if safety is confirmed and certain conditions are fulfilled."
One condition is the construction of a road that residents can use for evacuation in case of an emergency at the nuclear plant. Sakurai also promised to start decommissioning older reactors at the plant.

Has Fukushima quake shaken restart plans?

November 22, 2016

Earthquakes rattle Japan's plan to restart more nuclear reactors

http://www.beyondnuclear.org/home/2016/11/22/earthquakes-rattle-japans-plan-to-restart-more-nuclear-react.html

The Shinzo Abe government's plan to restart nuclear power in Japan was shaken to its core with a 7.4 magnitude earthquake that struck on November 21, 2016 (the date here in the U.S.) just off the coast of the destroyed Fukushima Daiichi atomic reactors. Fukushima Daiichi is also the site of a huge radioactive waste tank farm that continues to expand from an on-again off-again radioactive cooling water treatment system for the three still unrecovered melted reactor cores. Little is presently known about how the hastily built tank farm has fared during the earthquake.
The four-unit Fukushima Daini nuclear power complex just seven miles south of Fukushima Daiichi temporarily lost cooling to Daini's Unit 3 spent fuel pool raising concerns for the overheating of high-level nuclear waste configured as 2400 used fuel rods being stored underwater. Fukushima Daini remains shutdown and barred from power operations along with 38 operable units in Japan following the March 11, 2011 8.9M earthquake and catastrophic tsunami. Only two of the nation's nuclear reactors have successfully returned to power operations amid intense public and political opposition that continues to grow.
Tuesday morning's 7.4M earthquake struck around 6 am (JST) 31 miles off the east coast. The large earthquake set off coastal tsunami warnings for several hours, eventually measuring up to a sea level rise of 55 inches. A second 5.5M earthquake struck shortly after with its epicenter on land just 7 miles from Fukushima Daini with another tsunami warning. Aftershocks continue to jolt the area with officials concerned that another major quake can be expected within the week.
During times of natural disaster and national security threats, nuclear power is more a dangerous societal liability than an asset. All of the reactors' safety systems and their nuclear waste cooling systems are 100% reliant upon offsite electrical grid power during normal operations. If the electric grid is disturbed by disaster or sabotage, nuclear power plants automatically shut down and emergency electrical power

systems kick in to service a subset of priority reactor safety and cooling systems. If those systems fail or are disabled, nuclear power stations typically have 4 to 8 hours of back-up battery power to prevent a meltdown. Cooling capability to thousands of tons of high-level nuclear waste (irradiated fuel rods) initially rely upon the same off-site electrical power. Since the 9/11 World Trade Center aircraft attacks and the 3/11 Fukushima nuclear disaster, reactor spent fuel pools with high-density storage of nuclear waste are being equipped with make-up water systems should a loss of power threaten to boil off the water filled pools. Each pool containing up to 700 to 1000 tons of thermally hot and highly radioactive nuclear waste can overheat, boil off and catch fire without cooling.
The Beyond Nuclear Facebook page posted live stream coverage broadcasted from Japan during the tsunami warning.

First meeting between TEPCO and Niigata Governor

November 24, 2016

Niigata Governor, Tepco execs to meet Tuesday

http://www.japantimes.co.jp/news/2016/11/24/business/niigata-governor-tepco-execs-meet-tuesday/#.WDgC032Dmos

JIJI
Tokyo Electric Power Company Holdings Inc. said Thursday that its first meeting with new Niigata Gov. Ryuichi Yoneyama will be held at the Niigata Prefectural Government's offices in Niigata next Tuesday.
The meeting, initially scheduled for last Tuesday, was canceled by the magnitude-7.4 earthquake that coincidentally struck off Fukushima Prefecture the very same day.
At the meeting with Tepco Chairman Fumio Sudo and President Naomi Hirose, Yoneyama plans to convey his cautious attitude toward restarting the Kashiwazaki-Kariwa nuclear power plant, informed sources said.
Yoneyama was elected governor last month. At a news conference Thursday, he said he will clarify his stance that "unless a thorough review of the (March 2011) accident at Tepco's Fukushima No. 1 nuclear plant is conducted, the talks on a restart (of Kashiwazaki-Kariwa) can't get started."
As for the review of the crisis by the prefectural government's technical panel, Yoneyama said: "We can't proceed with the review if Tepco doesn't give us information. We'd appreciate its cooperation."
The Tepco officials, for their part, want the governor's support to restart the giant plant, which straddles Kashiwazaki and the town of Kariwa, because it is critical to the utility's survival.
"We'll sincerely deal with the issue without shutting down discussion," Yoneyama told the prefectural assembly.

People worried about continuing to run old reactors

November 27, 2016

Fukushima aftershock renews public concern about restarting Kansai's aging nuclear reactors

http://www.japantimes.co.jp/news/2016/11/27/national/fukushima-aftershock-renews-public-concern-restarting-kansais-aging-nuclear-reactors/#.WDqAuX2Dmos

by Eric Johnston
Staff Writer

KYOTO – The magnitude-7.4 aftershock that rocked Fukushima Prefecture and its vicinity last week, more than five years after the mega-quake and tsunami of March 2011, triggered fresh nuclear concerns in the Kansai region, which hosts Kansai Electric Power Co.'s Mihama plant in Fukui Prefecture..

The aftershock came as the Nuclear Regulation Authority approved a two-decade extension for Mihama's No. 3 reactor on Nov. 16, allowing it and two others that have already been approved to run for as long as 60 years to provide electricity to the Kansai region.

Residents need to live with the fact that they are close to the Fukui reactors, which are at least 40 years old. Despite reassurances by Kepco, its operator, and the nuclear watchdog, worries remain over what would happen if an earthquake similar to the one in 2011, or even last week, hit the Kansai region.

Kyoto lies about 60 km and Osaka about 110 km from the old Fukui plants. Lake Biwa, which provides water to about 13 million people, is less than 60 km away.

In addition to Kepco's 40-year-old Mihama No. 3, reactors 1 and 2 at the Takahama nuclear power plant in Fukui are 42 and 41 years old, respectively.

In the event of an accident, evacuation procedures for about 253,000 residents of Fukui, Shiga, and Kyoto prefectures who are within 30 km of the plants would go into effect.

But how effective might they be?

The majority does not live in Fukui. Just over half, or 128,500, live in neighboring Kyoto, especially in and around the port city of Maizuru, home to a Self-Defense Forces base. Another 67,000 live in four towns in Fukui and about 58,000 live in northern Shiga Prefecture.

Plans call for Fukui and Kyoto prefecture residents to evacuate to 29 cities and 12 towns in Hyogo Prefecture and, if facilities there are overwhelmed, to Tokushima Prefecture in Shikoku. Those in Shiga are supposed to evacuate to cities and towns in Osaka Prefecture.

In a scenario put together by Kyoto Prefecture three years ago, it was predicted that tens of thousands of people would take to available roads in the event of an nuclear accident. A 100 percent evacuation of everyone within 30 km of a stricken Fukui plant was estimated to take between 15 and 29 hours, depending on how much damage there was to the transportation infrastructure.

But Kansai-based anti-nuclear activists have criticized local evacuation plans as being unrealistic for several reasons.

First, they note that the region around the plants gets a lot of snow in the winter, which could render roads, even if still intact after a quake or other disaster, much more difficult to navigate, slowing evacuations even further.

Second is the radiation screening process that has been announced in official local plans drawn up by Kyoto and Hyogo prefectures.

While automobiles would be stopped at various checkpoints along the roads leading out of Fukui and given radiation tests, those inside would not be tested if the vehicle itself has radiation levels below the standard.

If the radiation is above standard, one person, a "representative" of everyone in the car, would be checked and, if approved, the car would be allowed to continue on its way under the assumption that the others had also been exposed to levels below standard. This policy stands even if those levels might be more dangerous to children than adults.
Finally, there is the question of whether bus drivers would cooperate by going in and out of radioactive zones to help those who lack quick access to a car, especially senior citizens in need of assistance.
None of the concerns about the evacuation plans is new, and most have been pointed out by safety experts, medical professionals and anti-nuclear groups.
But with the NRA having approved restarts for three Kansai-area reactors that are over 40 years old, Kansai leaders are responding more cautiously to efforts to restart Mihama No. 3 in particular.
"It is absolutely crucial that local understanding for Mihama's restart be obtained," said pro-nuclear Fukui Gov. Issei Nishikawa in July, after a local newspaper survey showed that only about 37 percent of Fukui residents agree with the decision to restart old reactors.
Shiga Gov. Taizo Mikazuki, who is generally against nuclear power, was even more critical of the NRA's decision to restart Mihama.
"There are major doubts about the law that regulates the use of nuclear reactors more than 40 years old. The central government and Kepco need to explain safety countermeasures to residents who are uneasy. People are extremely uneasy about continuing to run old reactors," the governor said earlier this month.
Kansai Perspective appears on the fourth Monday of each month, focusing on Kansai-area developments and events of national importance with a Kansai connection.

Governor Mitazono: "A mere publicity stunt" before the election?

November 29, 2016

Governor under fire as Sendai nuclear reactor likely to restart

http://www.asahi.com/ajw/articles/AJ201611290066.html

THE ASAHI SHIMBUN

KAGOSHIMA—Anti-nuclear activists are castigating Governor Satoshi Mitazono, saying the politician has retreated from his campaign promises regarding the planned restart of a nuclear reactor in the prefecture.
Despite stressing that he would take a hard look at safety issues, Mitazono's actions on Nov. 28 indicate that Kyushu Electric Power Co. will be allowed to restart the No. 1 reactor at its Sendai plant on Dec. 8 as was expected.
"What he had done over the past months now appears to be a mere publicity stunt," said Yukio Taira, chief of a confederation of labor unions in Kagoshima Prefecture.
Taira withdrew his candidacy in the governor's race in July after he and Mitazono agreed on many policy measures toward a temporary halt of operations at the nuclear plant in Satsuma-Sendai.
Mitazono on Nov. 28 submitted to the prefectural assembly a budget proposal for establishing an expert panel on nuclear power generation--a centerpiece of his campaign pledges.

“I will make a comprehensive judgment on how to respond when the panel releases its findings of the utility’s reports on ‘special checks,’” Mitazono told the assembly session, referring to the reactor restart plan.
However, given that a governor does not have the legal authority to order a halt, the No. 1 reactor will probably already be running by the time those findings are released.
The assembly is expected to vote on the budget request for the panel on Dec. 16. Kyushu Electric is scheduled to release the outcome of its special checks in early January.
The utility agreed to carry out the additional checks in response to the new governor's concerns. These inspections, including checking bolts fastened on barrels containing nuclear waste, are nothing new and have been done in the past, according to Kyushu Electric.
Two reactors at the Sendai plant were the first in the nation to go online under new nuclear safety regulations set up after the 2011 nuclear disaster in Fukushima Prefecture.
The No. 1 reactor has been shut down for maintenance since October. The No. 2 reactor is scheduled to be taken offline in December for a routine inspection.
Mitazono, a former TV journalist, was elected on campaign promises to take a “strong response regarding a reactor restart if the envisaged committee deems the plant unsafe.”
Concerns over the safety of the nuclear complex arose when roads and other infrastructure were damaged in a series of powerful quakes that began rattling neighboring Kumamoto Prefecture in April.
After gaining support from anti-nuclear groups, Mitazono won the race against the incumbent, who was seen as friendlier toward nuclear power generation.
But after he took office, Mitazono appeared to back off from his campaign promises.
He did request an “immediate halt” of plant operations to Michiaki Uriu, president of Kyushu Electric, in late August and early September.
After the company refused the governor’s requests, Mitazono decided not to pursue the issue, saying a governor does not have the legal authority to demand a halt to operations.
He tried to assuage public concerns about the safety of the plant, citing the extra special checks the utility promised to conduct.
Taira said Mitazono has rejected repeated requests for a meeting with him and other anti-nuclear activists. They have asked Mitazono to quickly establish the expert panel for possible action to counter Kyushu Electric’s reactor restart plans. But the governor did not reply.
Mitazono also did not submit a budget request for the expert panel in the September session.
When asked by reporters, Mitazono merely kept saying he would establish the panel “as soon as possible.”
“He is breaking the campaign promise if he allows the resumption of the plant without obtaining the conclusion of the panel,” Taira said.
According to one source, the governor told an informal gathering of members of the Liberal Democratic Party, the largest group in the assembly, that he shares the LDP’s direction in nuclear power policy.
(This article was written by Takeshi Nakashima and Sei Iwanami.)

Sendai No.1 to restart before all checks are completed

December 7, 2016

Another reactor to return online in Japan
https://www3.nhk.or.jp/nhkworld/en/news/20161207_05/

A Japanese nuclear power plant operator plans to restart one of its reactors on Thursday after regular inspections.

Kyushu Electric Power Company says the Number One reactor at its Sendai plant in Kagoshima Prefecture will return online if no problem arises.

The reactor was taken offline in October for the checks.

The operator conducted additional inspections by request from Kagoshima Governor Satoshi Mitazono to see whether strong earthquakes that hit nearby Kumamoto Prefecture in April affected the reactor.

Before the inspections, Mitazono had asked the operator to halt the reactor immediately, citing growing concerns among residents.

The utility rejected the request, but decided to conduct the additional checks.

Inspections will continue after the restart, with all procedures to be completed by January 6th.

Mitazono has not expressed his views on the restart.

He also has not set up a panel of experts that will discuss the safety of the reactor. He says the panel will be launched after the prefectural assembly approves a budget on December 16th.

Some people are urging the governor to make his stance clear before the reactor returns online.

In August last year, the reactor became the first one to return online under new government guidelines introduced after the 2011 nuclear accident in Fukushima.

Sendai goes back online

December 8, 2016

Sendai reactor goes back online
https://www3.nhk.or.jp/nhkworld/en/news/20161208_30/

Operators have powered on a nuclear reactor at a plant in western Japan on Thursday night after 2 months of inspections.

Officials at Kyushu Electric Power Company say workers have begun pulling control rods out of the Number One reactor at their Sendai plant in Kagoshima Prefecture.

The reactor has been offline since October. Before that, it operated for 14 months as the first reactor in the country to go online under new regulations following the Fukushima Daiichi nuclear disaster.

The utility says it found no abnormalities during its regular and special inspections.

The special checks were added at the request of Kagoshima Governor Satoshi Mitazono, who took office in July. He asked the utility to see if strong earthquakes that occurred at nearby Kumamoto Prefecture in April had affected the plant.

Officials say they expect the reactor to reach criticality on Friday and begin transmitting electricity to the grid on Sunday. They also expect the plant to resume commercial operations in early January.

A group opposing the restart held a rally on Thursday outside the facility. Group leader Yoshitaka Mukohara said a proposed prefectural panel should first give a judgment before the reactor is brought online.

Governor Mitazono had promised to set up an expert panel to look into the reactor's safety, but it has yet to be launched. Mukohara urged the governor to stick to his position.

Kyushu Electric to reactivate Sendai reactor as governor OK'd

December 8, 2016 (Mainichi Japan)

FUKUOKA (Kyodo) -- Kyushu Electric Power Co. will reactivate a reactor Thursday in the southwestern Japanese prefecture of Kagoshima, the utility said Wednesday after the local antinuclear power governor gave a de facto green light last week.

The No. 1 reactor at the Sendai nuclear power complex is one of the five reactors that have been restarted under Japan's strict safety regulations set following the 2011 Fukushima meltdowns. After resumption in August 2015, it has been suspended for regular checkups since Oct. 6.

The company plans to pull rods to control nuclear fission for the No. 1 reactor from fuel at 9:30 p.m. Thursday, resume power generation on Sunday and return to commercial operation of the unit Jan. 6 after an inspection by the Nuclear Regulation Authority.

Kagoshima Gov. Satoshi Mitazono was elected in July on an antinuclear platform. But he told a prefectural assembly session Dec. 1, "I have no legal power (to decide) on the restart of the reactor," which is interpreted as permitting the restart.

In addition to the regular checks, 10 kinds of special checks are being conducted on the No. 1 reactor at the governor's request following the massive earthquakes in the adjacent prefecture of Kumamoto in April, according to the company.

The Sendai complex's No. 2 reactor is also scheduled to be suspended for regular checks from Dec. 16 to Feb. 27.

Sendai No.1 goes back online (2)

December 9, 2016

Kyushu Electric fires up Kagoshima reactor after governor gives OK

http://www.japantimes.co.jp/news/2016/12/09/national/kyushu-electric-fires-kagoshima-reactor-governor-gives-grudging-nod/#.WEqg832Dmos

Kyodo
FUKUOKA – Kyushu Electric Power Co. restarted a nuclear reactor in Kagoshima Prefecture on Thursday after the prefectural governor, who is opposed to nuclear power, effectively permitted the move last week.
Reactor No. 1 at the Sendai nuclear power complex is one of five reactors to have been reactivated under stricter safety regulations adopted in the wake of the 2011 Fukushima reactor meltdowns. Following resumption in August 2015, its operation had been suspended for a regular checkup since Oct. 6.
The utility pulled out control rods from the reactor at around 9:30 p.m. The reactor is expected to achieve criticality by Friday morning and to start power generation from Sunday. Commercial operation is set to resume from Jan. 6.
Kyushu Electric on Tuesday notified Kagoshima Gov. Satoshi Mitazono of the planned restart of the reactor and was not requested to suspend it this time, it said.
Mitazono, who was elected in July on an anti-nuclear platform, asked the utility in August and September to immediately suspend operation of the plant. Reactor No. 1 came to a halt in October for a regular checkup.
The Sendai complex's reactor No. 2 is scheduled to be suspended for regular checks from Dec. 16 to Feb. 27.
Mitazono had told the prefectural assembly earlier this month that he had no legal power to decide whether to restart the reactor, paving the way for the latest move.
On Thursday, however, Mitazono said that he will take "strong action, regardless of the reactor's operation," if an experts' committee, which he plans to set up to examine safety at the plant, finds any safety problems.
Some 30 local residents and anti-nuclear group members gathered in front of the Sendai plant Thursday morning to protest the reactivation.

December 9, 2016

Sendai nuclear reactor restarts as governor stays quiet

http://www.asahi.com/ajw/articles/AJ201612090049.html

THE ASAHI SHIMBUN
SATSUMA-SENDAI, Kagoshima Prefecture--Kyushu Electric Power Co. restarted a reactor at its nuclear plant here on Dec. 8, drawing protests from anti-nuclear activists and a look of resignation from the man they helped to elect governor.

The procedure to remove control rods to allow nuclear fission in the No. 1 reactor at the Sendai plant started at 9:30 p.m., and the plant is expected to generate electricity for commercial use in early January.
The No. 1 reactor had been shut down for maintenance since Oct. 6.
The reactor is the first to be restarted after undergoing a routine checkup based on tighter safety standards adopted in light of the 2011 disaster at the Fukushima No. 1 nuclear power plant.
Groups of protesters, including local residents, rallied against the restart and held placards in front of the Sendai plant Dec. 8.
The resumption of operations was particularly harsh for the anti-nuclear activists because they thought they had elected a leader who would shut down the plant.
But Kagoshima Governor Satoshi Mitazono kept his voice low and avoided giving any direct responses to media questions about the restart.
"The nuclear plant will remain here whether it is restarted or not," Mitazono said earlier on Dec. 8.
The governor also said the prefectural government will soon organize a third-party committee that will examine the safety of the Sendai plant.
During the governor's race in July, Mitazono indicated he would take a tough stance against the Sendai plant.
After he took office, he twice asked Kyushu Electric for an "immediate halt" to plant operations.
But Mitazono later toned down his words, repeatedly saying he has no legal authority to have the reactor restarted or not.
The No. 1 reactor was restarted as scheduled.
(This article was written by Shuhei Shibata and Takeshi Nakashima.)

Niigata governor rejects restart

January 5, 2017

Niigata governor rejects restarts in 1st meet with TEPCO execs

http://www.asahi.com/ajw/articles/AJ201701050067.html

THE ASAHI SHIMBUN
NIIGATA--Niigata Governor Ryuichi Yoneyama met Jan. 5 with top executives of Tokyo Electric Power Co. (TEPCO) for the first time, reiterating his opposition to restarting the Kashiwazaki-Kariwa nuclear power plant.
"It will be difficult to approve the restart as long as (the causes of) the accident at the Fukushima No. 1 nuclear power plant are not verified. In the present circumstances, I cannot accept the restart," Yoneyama told Fumio Sudo, chairman of Tokyo Electric Power Co. Holdings Inc., and Naomi Hirose, president of the company.
It was the first time for Yoneyama to meet with TEPCO executives since he assumed the post of Niigata governor last October. The talks were held in the Niigata prefectural government office.
Yoneyama, noting that it will take several years for the Niigata prefectural government to verify the causes of the 2011 nuclear disaster, asked the TEPCO executives to provide more information and other forms of cooperation.
In response, Sudo said, "The priority is to hear voices of local residents."

This seemed to suggest that TEPCO will not restart the Kashiwazaki-Kariwa nuclear power plant as long as the Niigata governor continues to resist the move.
A council of experts of the Ministry of Economy, Trade and Industry announced late last year that the costs for dealing with the aftermath of the Fukushima nuclear disaster will almost double to 21.5 trillion yen ($185 billion) from 11 trillion yen initially estimated in 2013.
To help cover the amount, TEPCO planned to restart two reactors at the Kashiwazaki-Kariwa to generate 100 billion yen in annual profits. But that now looks difficult, given Yoneyama's firm stance on the issue of restarts.
(This article was written by Yoichi Yonetani and Yuko Matsuura.)

Gov., TEPCO execs discuss restart of nuclear plant
https://www3.nhk.or.jp/nhkworld/en/news/20170105_21/

The governor of Niigata Prefecture has met executives from Tokyo Electric Power Company over restarting a nuclear power plant in the prefecture.

Ryuichi Yoneyama, who took office last October, has taken a cautious stance on restarting the utility's Kashiwazaki-Kariwa plant.

Yoneyama has insisted that the plant should not be put back online until after an investigation into the cause of an accident in Fukushima and its effects on human health. He also said verification of the effectiveness of an evacuation plan for a possible nuclear accident must be completed before a resumption.

On Thursday, Yoneyama met TEPCO executives, including Chairman Fumio Sudo and President Naomi Hirose, for the first time after 2 postponements of their meetings.

Sudo said TEPCO is ready to sincerely respond to the governor's calls. He added that as opinions of local people are most important for the company, the harsher the opinions, the better for TEPCO.

Sudo also said the firm wants to reform its current management system.

The governor said he's not sure how long the verification process will take, but assumes it will probably be several years. He expressed determination to do all he can to accomplish the verification.

"Several years"

January 5, 2017

‘Several years’ needed to restart Kashiwazaki-Kariwa plant: Niigata governor

http://www.japantimes.co.jp/news/2017/01/05/national/governor-says-restart-nuclear-plant-niigata-take-several-years/#.WG-v432Dmos

Kyodo

Restarting the world’s largest nuclear power plant will likely take “several years,” the governor of Niigata Prefecture said Thursday, highlighting the difficulty of concluding the nuclear disaster reviews sparked by the triple core meltdown of March 2011.

Tokyo Electric Power Company Holdings Inc., better known as Tepco, has been trying to reactivate the Kashiwazaki-Kariwa nuclear plant, the world’s largest by generation capacity, to generate much-needed revenue to offset ballooning costs and redress claims stemming from the 2011 nuclear disaster.

“There can be no discussions about a restart without reviewing” factors including the cause of the Fukushima nuclear disaster and evacuation plans for residents, Niigata Gov. Ryuichi Yoneyama said in his first talks with Tepco executives since assuming office in October.

Restarting reactors remains a sensitive issue in Japan following the crisis at the Fukushima No. 1 nuclear plant, a triple meltdown triggered by the Great East Japan Earthquake and ensuing tsunami that wrecked the coast of the Tohoku region in March 2011. Stricter safety standards were introduced after the crisis.

“I expect it will take several years to review” all the factors, Yoneyama told Tepco President Naomi Hirose and Chairman Fumio Sudo at the Niigata Prefectural Government’s offices.

The prefectural government plans to set up independent panels to probe the Fukushima disaster and its health impact, as well as arrangements for evacuating residents in the event of another disaster.

Hirose remained confident, however, that both sides will find common ground, telling reporters after the meeting that he had the impression that Tepco and the prefectural government “can continue to have positive discussions.”

Yoneyama has expressed his intention to visit the plant, as well as the Fukushima No. 1 plant.

Sudo told the governor that the utility will “earnestly address” the concerns of the prefectural government and community. After the meeting, he told reporters that local consent must “take priority.”

“As an operator, we must be prepared,” he said, suggesting that it will take a long time before the plant is restarted.

With total costs related to the 2011 disaster, including for compensation and decommissioning, likely to reach around ¥22 trillion ($189 billion), Tepco is speeding up its turnaround efforts, aiming to reform its nuclear power and electricity transmission businesses.

Yoneyama’s meeting with the Tepco executives was initially scheduled for November but postponed following a strong earthquake off the coast of Fukushima and the detection of bird flu in Niigata.

Safety measures approved for Ohi plant

January 10, 2017

Nuclear watchdog approves safety measures for Ohi

https://www3.nhk.or.jp/nhkworld/en/news/20170110_25/

Japan's nuclear watchdog has basically approved new safety measures for the 2 reactors at the Ohi nuclear plant in Fukui Prefecture, central Japan.

The operator, Kansai Electric Power Company, drafted the measures under the guidelines that were introduced after the Fukushima Daiichi accident in 2011.

Officials of the Nuclear Regulation Authority will now examine the safety procedures. They are expected to complete their assessment by the end of March.

12 reactors at 6 nuclear plants in Japan will then have passed the screening by the nuclear agency.

Kansai Electric plans to finish the necessary work and equipment tests by the end of September for restarting the reactors. But it will also need to obtain local consent.

The assessment process for the 2 reactors was resumed in November last year. It had been suspended for 9 months because older reactors were given priority.

No.3 and No.4 Genkai reactors pass muster

January 18, 2017

Two nuclear reactors in Saga Prefecture pass safety checks

http://www.japantimes.co.jp/news/2017/01/18/national/two-nuclear-reactors-saga-prefecture-pass-safety-checks/#.WH9fS32Dmot

Kyodo, JIJI
Two nuclear reactors in Saga Prefecture passed a key state safety assessment Wednesday, but uncertainty remains over whether operator Kyushu Electric Power Co. will win local support to bring them back online amid lingering safety concerns.
The No. 3 and No. 4 units of the Genkai plant are among many reactors in limbo after the tougher safety requirements were introduced in the wake of the Fukushima No. 1 nuclear power plant disaster in 2011.
To restart the Genkai No. 3 and No. 4 units, Kyushu Electric needs approval from the Nuclear Regulation Authority for detailed designs of equipment and procedures for dealing with severe accidents. The reactors are expected to restart in April or later.
The government has been pushing for reactor restarts as nuclear power is regarded as a key energy source even after the Fukushima disaster. But the process has been slow, partly due to safety concerns.
As for the resumption of the Genkai reactors, the city of Imari, which sits within a 30-km radius of the plant, has expressed concerns over evacuation preparations.
The Fukushima disaster led the central government to expand the areas around nuclear plants that should prepare for evacuation to 30 km from 10 km.

The 30-km areas around the Kyushu Electric plant, which faces the Genkai Sea, includes municipalities in Saga Prefecture, neighboring Fukuoka and Nagasaki prefectures, and 17 islands where about 20,000 people live.
In an emergency, residents on the islands would evacuate by ship. But critics say measures for safe evacuation in bad weather must be established.
While there are more than 40 commercial reactors across the country, only two are now operating — the No. 1 reactor at Kyushu Electric's Sendai plant in Kagoshima Prefecture and the No. 3 reactor at Shikoku Electric Power Co.'s Ikata plant in Ehime Prefecture.
The Sendai plant's No. 2 unit is operable, but is currently undergoing regular checkups.
Two reactors at Kansai Electric Power Co.'s Takahama plant in Fukui Prefecture were also restarted last year after clearing safety hurdles. But a court injunction in connection with safety issues shut them down with no clear timeline for a restart.

Genkai plant reactors' safety measures certified
https://www3.nhk.or.jp/nhkworld/en/news/20170118_15/

Japan's nuclear regulator has officially announced that safety measures for 2 reactors at the Genkai nuclear plant meet government requirements introduced after the 2011 Fukushima Daiichi accident.

The Nuclear Regulation Authority on Wednesday compiled an assessment approving restarts of the No.3 and 4 reactors at the plant in Saga Prefecture, western Japan. The facility is run by Kyushu Electric Power Company.

The regulator has been hearing from the public after compiling in November a draft assessment that had taken more than 3 years.

An NRA secretariat official at a meeting of the agency on Wednesday referred to strong earthquakes that took place last year in Kumamoto, near Saga Prefecture.

The official said some criticized the draft for failing to reflect the lessons of Kumamoto, but added that the government regulations require that the plant can function even during such quakes.

The official also said the operator checked the impact of the quakes and is taking necessary measures. The draft was approved on Wednesday with some of its wording revised.

The Genkai is to be the 2nd nuclear plant of Kyushu Electric to go back online, following the restarted Sendai plant. The Genkai facility is the 5th in the country whose safety measures have received NRA approval.

Detailed checks for quake resistance design and local consent are still needed. The reactors are expected to be back online this summer at the earliest.

Other issues are evacuation plans for elderly and challenged people as well as those living on 17 small islands near the plant in the event of a nuclear accident. Experts say the prefectural government and relevant municipalities must review their evacuation plans.

2 online - 10 have passed the "safety" tests

January 18, 2017
Operational status of Japan nuclear plants
https://www3.nhk.or.jp/nhkworld/en/news/20170118_19/

Japan's nuclear regulator has so far approved safety measures for 10 reactors at 5 plants. Two of these reactors are online as of January 18th.

There are a total of 42 reactors at 16 nuclear power plants across Japan. That number excludes reactors set to be scrapped.

Twenty-six reactors are now being checked for compliance with regulations introduced after the 2011 Fukushima Daiichi nuclear disaster.

The 10 reactors that have cleared checks include 2 at the Genkai nuclear power plant, which were approved on Wednesday.

The others are: the Sendai No.1 and 2 reactors in Kagoshima Prefecture; the No.3 reactor at the Ikata plant in Ehime Prefecture; and the Takahama No.3 and 4 reactors in Fukui Prefecture.

They also include 3 reactors allowed to operate beyond the basic operational limit of 40 years. They are the Takahama No.1 and 2 reactors and the No. 3 at Mihama nuclear plant in Fukui.

The reactors now online are the Sendai No.1 and the Ikata No.3.

Operation of the No. 3 and 4 reactors at the Takahama plant was suspended after residents of a nearby prefecture filed a lawsuit.

The 3 aging reactors need additional safety measures before restarts. Their operator estimates it will take around 3 years for those reactors to go back online.

Worrying review for Onawaga No.2

January 18, 2017

1,130 cracks, 70% rigidity lost at Onagawa reactor building

http://www.asahi.com/ajw/articles/AJ201701180054.html

THE ASAHI SHIMBUN

Plans to resume operations at the Onagawa nuclear power plant's No. 2 reactor have taken a hit, as the building sustained 1,130 cracks in the walls and lost an estimated 70 percent of structural rigidity in the massive 2011 earthquake.

Tohoku Electric Power Co. revealed the extent of the damage at a Nuclear Regulation Authority review meeting on Jan. 17 to investigate plans to bring the power station in Miyagi Prefecture back online.

Tohoku Electric plans to extensively reinforce the damaged No. 2 reactor building. It is seeking to bolster the quake-resistance of the reactor to pass the stricter safety regulations on nuclear plants instituted by the NRA in the aftermath of the Fukushima nuclear crisis, triggered by the disaster.

However, that may be a long way off, as the nuclear watchdog said that it must inspect the cracks and the plans before the utility can proceed with the reinforcement project.

As with all nuclear power stations in the nation, the facility, which straddles the town of Onagawa and Ishinomaki city, went offline after the Great East Japan Earthquake and tsunami sparked the nuclear disaster.

A tremor of 607 Gals was recorded at the No. 2 reactor building when the magnitude-9.0 earthquake struck, but the structure was only built to withstand jolts of up to 594 Gals, according to Tohoku Electric. (Gal is a unit of acceleration used to describe how violently something shakes.)

A later architectural investigation found a total of 1,130 cracks on its walls, with 734 of them found on the top third-floor section. There were more cracks in the upper levels of the building as that part swayed the most during the earthquake.

The difference in the ways the uppermost section rocked compared to the lower portion when hit by aftershocks suggested that the structural rigidity of the third floor was down to 30 percent of what it was when the reactor began operating in 1995, according to the utility.

The lower section of the building, which covers two above-ground floors and three basement levels, was estimated to have lost 25 percent of its structural rigidity.

Structural rigidity assesses a building's ability to withstand earthquakes and other stresses from outside without being distorted.

(This article was written by Takashi Sugimoto and Masanobu Higashiyama)

Kashiwazaki-Kariwa restart: More lies from TEPCO

February 15, 2017

TEPCO admits error in screening report

https://www3.nhk.or.jp/nhkworld/en/news/20170215_18/

Japan's Nuclear Regulation Authority is demanding an explanation from Tokyo Electric Power Company.

TEPCO has admitted to submitting inaccurate information from calculations 3 years ago on plans for restarting two of its nuclear reactors in Niigata Prefecture.

The regulator is in the final stages of screening the No.6 and 7 reactors at TEPCO's Kashiwazaki-Kariwa plant.

The reactors must meet new government requirements introduced after the 2011 Fukushima disaster.

Regulators gathered on Tuesday for discussions with TEPCO about buildings at the plant to be used as headquarters in an emergency.

TEPCO officials admitted one of the buildings lacked the necessary quake-resistance in all 7 of the company's tests.

They had earlier said that the building had failed 5 of the 7 tests. They said they would not use the building.

They blamed the discrepancy on a failure by the civil engineering department to convey test results to the equipment design department.

The regulators noted the lack of coordination between TEPCO departments on the impact of soil liquefaction on breakwaters.

They called the mistakes unacceptable, and they're demanding that TEPCO provide details and countermeasures.

Kashiwazaki-Kariwa restart: More lies from TEPCO (2)

February 15, 2017

TEPCO gave inaccurate explanations about seismic capacity of nuke plant

http://mainichi.jp/english/articles/20170215/p2a/00m/0na/014000c

Tokyo Electric Power Co. (TEPCO) has revealed that it had explained that the seismic capacity of a quake-absorbing structure called an "important anti-seismic building" at its Kashiwazaki-Kariwa Nuclear Power Plant in Niigata Prefecture was higher than it actually was, now saying that it "cannot withstand all types of shaking."

TEPCO made the revelation at a Nuclear Regulation Authority (NRA) safety screening session on the plant's No. 6 and 7 reactors on Feb. 14. The "important anti-seismic building" is supposed to serve as a frontline base in the event of a nuclear accident. The NRA demanded TEPCO give detailed explanations about how and why it provided the wrong information, saying harshly, "We cannot overlook this."

According to the NRA and other sources, of the so-called "standard earthquake vibrations," the strongest seismic shaking the important anti-seismic building is assumed to withstand, TEPCO had said that the structure would not be able to withstand some types of seismic shaking. But the utility reversed its previous explanations at the latest meeting, saying, "It cannot withstand all types of shaking." TEPCO said that it had given the wrong explanation because the facts had not been conveyed from its section that analyzed the seismic capacity of the building in 2014 to the division in charge of attending safety screening session meetings.

A TEPCO official apologized at the meeting, saying, "We are sorry that our information sharing was insufficient."

Key Niigata nuclear plant building may not be quake-proof

http://www.asahi.com/ajw/articles/AJ201702150042.html

THE ASAHI SHIMBUN

Tokyo Electric Power Co. has revealed that a key building at its Kashiwazaki-Kariwa nuclear power plant may not be able to withstand even half of the assumed strongest seismic shaking, contrary to its earlier assurances.

TEPCO's disclosure came Feb. 14 during a screening by the Nuclear Regulation Authority (NRA) for the restart of the No. 6 and No. 7 reactors at the nuclear power plant in Niigata Prefecture, which is the world's largest.

The utility became aware of the possibility in 2014, but the information was not shared within the company. TEPCO reported to the NRA that the building can withstand temblors of 7, the highest category on the Japanese seismic intensity scale.

The building is designed to serve as an on-site emergency headquarters in the event of a severe accident, such as one caused by an earthquake.

An earthquake that occurred off the Chuetsu region of Niigata Prefecture in 2007 badly damaged the Kashiwazaki-Kariwa plant.

In response, TEPCO constructed the building in question in 2009. At that time, it said the structure could withstand the assed biggest earthquake motions that are 1.5 times stronger than those described in the Building Standards Law.

In 2014, the utility checked the building's anti-quake capabilities again. It found that it may not be able to withstand horizontal movements triggered by even half the anticipated strongest earthquake, and that it could collapse into the side of an adjacent building.

That information was not conveyed to the company's division in charge of the NRA's screening, and thus escaped notice from NRA inspections.

Takafumi Anegawa, managing executive officer of TEPCO, apologized, saying, "We did not conceal the possibility. The in-house liaison was insufficient."

An NRA official said, "Information is not shared in the company. Lessons from the accident at the Fukushima No. 1 nuclear power plant are not utilized."

Governor likely to OK Sendai restart

Governor likely to OK Sendai plant operation

https://www3.nhk.or.jp/nhkworld/en/news/20170222_33/

The governor of Kagoshima in western Japan is expected to approve the continued operation of a nuclear plant in the prefecture. Experts have found no irregularities at the facility following last year's strong

earthquakes.

Governor Satoshi Mitazono had called for the operation of the Sendai nuclear plant to be suspended after a series of earthquakes centered in nearby Kumamoto Prefecture.

He noted public concern and also asked for an inspection of the plant.

Kyushu Electric Power Company officials rejected his call to halt operations, but they carried out a special inspection. They say they found the quakes caused no abnormalities.

Last Thursday, an expert panel set up by the prefecture also reported that the quakes left no effects on the plant.

Mitazono said on Wednesday that there is currently no need for strong measures against the plant. He said he will remain vigilant if troubles arise.

There were mixed reactions to Mitazono's decision.

A man in his 70s says the governor may have found that he cannot prevail over the central government in his anti-nuclear battle. He says there was no other choice but to continue operating the plant.

A woman in her 30s says she wanted the governor to stick to the anti-nuclear policy he pledged in the campaign.

She says she wants him to ensure that Kagoshima is a place where children will be able to live safely, now and in the future.

Oi restart still need local consent

February 23, 2017

EDITORIAL: Local consent needed despite OK to restart Oi nuclear plant

http://www.asahi.com/ajw/articles/AJ201702230032.html

The Nuclear Regulation Authority on Feb. 22 published a draft safety inspection report saying measures taken at the Nos. 3 and 4 reactors of Kansai Electric Power Co.'s Oi nuclear power plant in Fukui Prefecture meet the new stricter anti-disaster standards.
In 2014, however, the Fukui District Court ordered the operator to keep the two reactors offline, raising serious questions about their safety.

Some 160,000 people in Fukui, Kyoto and Shiga prefectures reside within 30 kilometers from the plant. It is also questionable whether local residents can be evacuated quickly and smoothly if a serious accident occurs at the plant.

In a recent Asahi Shimbun survey, 57 percent of the respondents expressed their opposition to the restart of offline nuclear reactors, nearly double the number of those who supported the idea.

Come next month, six years will have passed since the catastrophic accident broke out at the Fukushima No. 1 nuclear power plant. Many Japanese remain unconvinced of the safety of nuclear reactors.

Kansai Electric Power is hoping to bring the two reactors back on line as early as this summer. But we find it difficult to support the plan.

There are multiple faults around the Oi plant. The biggest worry cited in the district court ruling was the possibility that a stronger earthquake than assumed could seriously damage the reactors or the spent fuel pool.

The electric utility has since appealed the ruling. But the company has also raised the estimated maximum ground acceleration that could occur in an earthquake at the location.

The utility will spend 122 billion yen ($1.07 billion) on measures to enhance the safety of the plant.

But Kunihiko Shimazaki, a seismologist and former acting chairman of the NRA, has warned against the plan. Using observation data about the powerful earthquakes that hit areas around Kumamoto Prefecture in April last year, he has argued that the utility's calculation method may have underestimated the biggest potential shaking of a quake at the location.

After reviewing the data, the NRA dismissed Shimazaki's argument, with Chairman Shunichi Tanaka calling it "groundless."

But the scientist's warning has deepened anxiety among local residents.

The spent fuel pools at Kansai Electric Power's three nuclear power plants including Oi are almost filled to the brim.

The utility says it will build an interim storage facility outside Fukui Prefecture around 2030 so that used fuel rods can be removed from the pools.

But the company has yet to map out a specific and workable plan to build such a facility.

In January, a large crane toppled in strong winds at the utility's Takahama nuclear power plant, also in Fukui Prefecture, damaging the roofs of two buildings.

The accident occurred as the company failed to notify the contractor operating the crane of a storm warning, and the contractor failed to fold up the crane in advance.

The lesson of the Fukushima nuclear accident is that maximum possible safety measures should be taken to guard against the risks posed by natural phenomena. It came as a dire warning about underestimating such risks.

Even the Fukui prefectural government, which has been keen to support Kansai Electric's plan to bring reactors back online, has expressed skepticism about the utility's trustworthiness.

"It is difficult to place sufficient confidence in the company's operations of nuclear plants," the deputy Fukui governor has said.

The focus of the utility's efforts to restart the reactors will shift to gaining local support for the plan.

The company has stuck to the position that only the governments of Fukui Prefecture and the town of Oi, where the plant is located, have the de facto "right to consent" to its plan under a safety agreement between the operator and the local governments.

A severe accident, however, could cause damage in wide areas in the Kansai region, for example, by polluting Lake Biwa in Shiga Prefecture, the largest lake in Japan.

The utility should not proceed with the plan to restart the reactors without obtaining support from areas where local residents would have to be evacuated in the event of a major accident.
We demand again that the company gain consent to the plan at least from all local governments within 30 km from the plant, including those in Kyoto and Shiga prefectures.
--The Asahi Shimbun, Feb. 23

February 22, 2017
Ohi nuclear plant restart draft assessment ready
https://www3.nhk.or.jp/nhkworld/en/news/20170222_18/

Japan's nuclear regulator has taken a step further toward restarting the Ohi nuclear power plant in Fukui Prefecture, on the Sea of Japan coast. The restart will take place next autumn at the earliest.

At a meeting on Wednesday, the Nuclear Regulation Authority unanimously approved its draft assessment of the plant's No.3 and No.4 reactors.

The assessment says safety measures set forth by the plant's operator, Kansai Electric Power Company, meet new government requirements introduced after the Fukushima Daiichi nuclear accident in March 2011.

The NRA said the utility has raised its estimates of possible quakes and tsunami in response to the regulator's earlier request for improvements.

It also said the planned introduction of equipment designed to prevent hydrogen explosions is also appropriate.

The regulator plans to invite the public to express their opinions for a month starting on Thursday before it gives official approval.

The Ohi plant will be the 6th plant whose safety measures have received the regulator's approval.

Kansai Electric is planning to complete necessary work to fulfill the safety measures by May. It is also necessary to conduct equipment tests and obtain local consent before putting the reactors back online.

A lawsuit over whether to approve the plant's restart is under way. The utility has appealed a district court ruling in 2014 that rejected the restart.

Kashiwazaki-Kariwa: TEPCO must resubmit restart papers

March 1, 2017

TEPCO told it must re-submit papers to pass NRA screening

http://www.asahi.com/ajw/articles/AJ201703010074.html

THE ASAHI SHIMBUN

The nation's nuclear watchdog, incensed at more blundering by Tokyo Electric Power Co., ordered it to re-submit documents for the restart of two reactors at the Kashiwazaki-Kariwa nuclear power plant after checking them again for accuracy.

The Nuclear Regulation Authority also summoned TEPCO's president to its office and gave him a dressing-down for failing to reveal information that could have compromised safety at the plant.

The NRA's action Feb. 28 followed revelations in mid-February that a key building at the facility may not be able to withstand anything like the strong earthquake shaking it is supposed to. This fact came to light in 2014 but was not reported to the NRA until last month.

TEPCO said that the information was not shared within the company, and as a result, was not conveyed to its division in charge of NRA screenings.

It was the first time for the NRA to summon TEPCO President Naomi Hirose to its office as part of the screening process for the restart of reactors.

“TEPCO needs to learn from other electric power companies, but its stance is insufficient. As the company lost public trust due to the accident (at the Fukushima No. 1 nuclear power plant in March 2011), it needs to make much greater efforts than others. But it is not doing so,” said NRA chairman Shunichi Tanaka.

Hirose acknowledged that TEPCO needs to work harder to regain society's trust, saying, "We are taking that fact seriously.”

He said TEPCO had shown "insufficient humility and displayed arrogance."

Hirose stated that the company intends to learn its lesson and will re-submit documents so that the plant passes the screening process.

To get to that point, the top management of TEPCO will have to check several thousand pages of documents. As drastic changes may have to be made, it is inevitable that the NRA screenings will be prolonged.

In 2013, TEPCO applied to the NRA for screenings so it can restart the No. 6 and No. 7 reactors at the Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture.

The screenings entered the final stage in 2016. But this coincided with big changes in policies over the designs of quake-resistant capabilities of buildings and measures for sea walls to deal with liquefaction.

Then, this year, it was learned that TEPCO failed to report to the NRA for three consecutive years that a key building, which is expected to serve as an on-site emergency headquarters in the event of a severe accident, may not be able to withstand even half of the assumed strongest seismic shaking.

The upshot of the series of problems meant that the NRA wasted time for discussions.

But the NRA is also miffed that TEPCO seems unable to decide its basic policies in a determined manner.

(This article was written by Hiroshi Ishizuka and Masanobu Higashiyama.)

26 reactors have applied for restart

March 13, 2017

Applications For 26 Nuclear Plants Being Considered Related To Japan Restarts
http://www.nucnet.org/all-the-news/2017/03/13/applications-for-26-nuclear-plants-being-considered-related-to-japan-restarts

13 Mar (NucNet): Japan's Nuclear Regulation Authority (NRA) has accepted applications for 26 nuclear power plants at 16 sites in relation to the restart of reactors following the introduction of new safety and security standards after the March 2011 Fukushima-Daiichi accident, the Japan Atomic Industrial Forum (Jaif) said. The applications are at different stages such as public comment, volcanic issues, geographical features and various design-related safety issues. Tokyo Electric Power Company (Tepco), which owns and operates the Fukushima-Daiichi nuclear site, is planning to restart the seven boiling water reactor units at its Kashiwazaki Kariwa station in Niigita Prefecture, western Japan. Jaif said examinations at the facility are "generally in their final stages". There remain, however, a number of points of contention that need to be resolved including issues related to an emergency response area in the main anti-earthquake building and an emergency response area within the Unit-5 reactor building. Japan's Kyodo news agency said recently that Tepco, has been trying to reactivate the Kashiwazaki Kariwa plant, the world's largest by generation capacity, to generate "much-needed revenue" to offset rising costs and redress claims stemming from the 2011 accident.

First research reactor to restart soon

March 19, 2017
First research reactor to restart in April
https://www3.nhk.or.jp/nhkworld/en/news/20170318_10

A laboratory at a university in western Japan will restart its research nuclear reactor in April after meeting safety standards.

It will be the first research reactor in Japan to go back online under stringent regulations introduced by the government in the wake of the 2011 Fukushima Daiichi nuclear accident.

Kindai University in Higashi-Osaka said on Friday that the reactor has passed a series of checks by Japan's nuclear regulator.

The Nuclear Regulation Authority gave in-principle approval for the restart of the reactor in May last year. The university subsequently made further adjustments to protect against fire, tornados and other risks. The small reactor has a maximum output of just 1 watt, and is used exclusively for academic purposes.

The head of the university laboratory, Tetsuo Ito, said he will do his best to ensure students and researchers can use it as soon as possible.

High Court backs restart of Takahama

March 28, 2017
High court allows restart of Takahama reactors
https://www3.nhk.or.jp/nhkworld/en/news/20170328_24/

The Osaka High Court has nullified a lower court injunction that suspended operations of 2 nuclear reactors in central Japan.

The No.3 and No.4 reactors at the Takahama plant in Fukui Prefecture have been offline since the Otsu district court issued the order in March last year.

The Otsu court upheld claims filed by residents of Fukui's neighboring prefecture of Shiga that Kansai Electric Power Company had failed to fully explain the plant's safety.

Its injunction was the first to halt an online reactor.

Kansai Electric appealed to the Osaka High Court, claiming it has put in place tougher safety measures than required under new regulations introduced after the 2011 accident at the Fukushima Daiichi nuclear plant.

The high court decision on Tuesday allows the reactors to go back online.

Kansai Electric plans to begin procedures to restart the reactors, including the transfer of nuclear fuel, after explaining the situation to local governments in Fukui Prefecture.

It's expected to take more than a month for the reactors to resume operation.
See :
https://www3.nhk.or.jp/nhkworld/nhknewsline/nuclearwatch/courtapprovesrestartoftakahamareactors/

Higher court backs restart of halted Takahama reactors

March 28, 2017 (Mainichi Japan)

http://mainichi.jp/english/articles/20170328/p2g/00m/0dm/063000c

OSAKA (Kyodo) -- A Japanese high court on Tuesday revoked a lower court order to halt two nuclear reactors at the Takahama plant in central Japan, accepting an appeal by Kansai Electric Power Co. against the first injunction ever issued in the country to shut operating reactors.
But it is unlikely that the operation of other nuclear reactors in Japan will be resumed soon due to pending legal matters, analysts say.
The decision, made by the Osaka High Court, legally allows Kansai Electric to resume operating the Nos. 3 and 4 reactors at the nuclear power plant on the Sea of Japan coast in Fukui Prefecture. The two reactors have been idled for around a year.

The higher court said that quake-resistance standards were not overestimated under tougher regulations set following the 2011 Fukushima nuclear disaster and that necessary measures have been taken to prevent significant damage of the reactor core.
The latest decision bodes well for Prime Minister Shinzo Abe's government, which has been promoting the restart of nuclear reactors in a bid to bolster the economy by cutting the cost of fossil fuels and exporting nuclear technology abroad.
Yoshihide Suga, the government's top spokesman, said at a press conference in Tokyo, "We want Kansai Electric to put top priority on safety and make every effort to obtain understanding from the local government and others involved."
Kansai Electric President Shigeki Iwane said at a news conference in Osaka that his company has yet to decide when to restart the operation of Takahama's Nos. 3 and 4 reactors, pledging to "make safety our top priority."
Iwane also expressed eagerness to push down electric charges as soon as possible after the resumption of the two reactors.
A group of residents in neighboring Shiga Prefecture who won the landmark injunction from the Otsu District Court in March last year are expected to consider countermeasures, including filing a special appeal with the Supreme Court.
Amid widespread concern about the safety of nuclear power following the 2011 Fukushima meltdowns, the residents in Shiga filed a request with the district court in January 2015, seeking an order halting the two reactors at the plant.
On March 9, 2016, the district court ordered operation of the two nuclear reactors to be halted, casting doubts about the utility's safety measures and Japan's post-Fukushima nuclear regulations set by the Nuclear Regulation Authority.
Last July, Kansai Electric filed an appeal against a district court decision rejecting its request to suspend the injunction order.
In Tuesday's decision, the Osaka High Court determined that the post-Fukushima safety measures were "not unreasonable" because they were devised on the basis of the "latest scientific and technical knowledge" that reflects lessons learned from the nuclear disaster.
The utility has criticized the injunction, claiming it was not an objective judgment based on scientific knowledge. It also says the injunction is costing the utility 200 million to 300 million yen ($1.8 million to $2.7 million) more per day to generate power from other fuel.
Kansai Electric removed nuclear fuel from the Takahama reactors between August and September last year given the prolonged court battle.
As of Tuesday, only three of Japan's 42 commercial reactors nationwide are now operating -- the Nos. 1 and 2 reactors at Kyushu Electric's Sendai plant in Kagoshima Prefecture, southwestern Japan, and the No. 3 reactor at Shikoku Electric Power Co.'s Ikata plant in Ehime Prefecture, western Japan, according to the Agency for Natural Resources and Energy.
On Thursday, the Hiroshima District Court is set to rule on an appeal filed to halt the operation of the No.3 reactor at the Ikata power plant, the first ruling since it resumed operations in August last year.

Court rejects injunction against Ehime reactor

March 30, 2017

Court refuses injunction against reactor
https://www3.nhk.or.jp/nhkworld/en/news/20170330_25/

A Japanese court has turned down a request by residents for a halt to operations of a nuclear reactor in western Japan.

The Hiroshima District Court ruled on Thursday that local residents are in no specific danger of suffering serious radiation damage from the No. 3 reactor at the Ikata nuclear power plant in Ehime Prefecture.

4 people were asking for an injunction, saying the reactor is at risk of a serious accident from a major earthquake.

The reactor's operator, Shikoku Electric Power Company, rejected their concerns, saying it took safety measures based on the maximum size of a possible quake predicted for the area.
Presiding Judge Shigeyuki Yoshioka said the firm worked out its assessment based on a meticulous geological survey.

The judge ruled that there is nothing unreasonable about the Nuclear Regulation Authority's decision that the reactor meets its requirements.

The reactor was restarted last August after passing scrutiny by the agency based on stricter requirements introduced following the 2011 Fukushima Daiichi nuclear power plant accident.

One of the four residents, Kenta Tsunasaki, called the court's decision regrettable. He said he will keep speaking out against nuclear stations.

Shikoku Electric Power Company said in a statement that the court's decision is reasonable. The firm said it will keep working to ensure safety.

District court rejects request to temporarily halt Ikata nuke plant
http://www.asahi.com/ajw/articles/AJ201703300062.html

By YUKI KUBOTA/ Staff Writer
March 30, 2017 at 18:35 JST

HIROSHIMA--The district court here on March 30 rejected a request for a temporary injunction halting operations of the No. 3 reactor at the Ikata nuclear power plant in Ehime Prefecture, upholding the operator's anti-seismic designs.
The main point of contention in the closed court sessions was if the basic earthquake ground motion figure used by Shikoku Electric Power Co., the plant operator, was appropriate as the basis for its anti-seismic design for the reactor.
The four plaintiffs, who are residents of Hiroshima and Matsuyama, argued that the Ikata plant is located in the region that is vulnerable to a potentially massive Nankai Trough earthquake. The plant also faces a second quake risk because it is located close to the Median Tectonic Line, the longest fault system in Japan.

Based on those circumstances, the plaintiffs argued that the maximum 650 gals, a measure of ground acceleration, used by Shikoku Electric as the basic earthquake ground motion, was an underestimation when compared to the figures used for safety inspections of other nuclear plants that have been made stricter following the 2011 accident at the Fukushima No. 1 nuclear power plant.
However, the Hiroshima District Court ruled that Shikoku Electric used reliable measures in calculating the basic earthquake ground motion. The court also ruled that there were no irrational points in the decision made by the NRA to approve the safety screening for the Ikata reactor based on the new standards.
The temporary injunction request, filed on March 11, 2016, the fifth anniversary of the Great East Japan Earthquake, was rejected because the court ruled that the rights of the plaintiffs were not likely to be violated by the safety measures.
The ruling follows a decision on March 28 by the Osaka High Court that overturned a ruling in March 2016 by the Otsu District Court that issued a temporary injunction against the No. 3 and No. 4 reactors at the Takahama nuclear plant in Fukui Prefecture.
Other residents have submitted requests for similar temporary injunctions against the Ikata plant in the Matsuyama and Oita district courts as well as the Iwakuni branch of the Yamaguchi District Court.
The plaintiffs in the Hiroshima case have also filed a separate lawsuit with the Hiroshima District Court seeking to halt operations of the No. 1 to No. 3 reactors at the Ikata plant. No ruling has yet been made on that lawsuit.

Japan court dismisses request to halt reactor in Ehime

http://mainichi.jp/english/articles/20170330/p2g/00m/0dm/072000c

March 30, 2017 (Mainichi Japan)
HIROSHIMA (Kyodo) -- A Japanese district court Thursday dismissed a request from local residents to order the halt of a nuclear reactor, which restarted last year, at the Ikata power plant in western Japan.
The decision by the Hiroshima District Court came two days after the Osaka High Court revoked a lower court order halting two reactors at the Takahama plant in Fukui Prefecture. In that case, the high court accepted an appeal by the plant's operator against the first injunction ever issued in Japan to stop an operating reactor.
The No. 3 reactor is one of only three of Japan's 42 commercial reactors nationwide now operating. The two others are the Nos. 1 and 2 reactors at Kyushu Electric's Sendai plant in Kagoshima Prefecture, southwestern Japan.
In response to Thursday's ruling, the plaintiffs plan to appeal the decision to the Hiroshima High Court, while Shikoku Electric Power Co. welcomed the ruling which supported its claim that it had ensured safe operation of the reactor on the opposite side of the Seto Inland Sea from Hiroshima.
Shikoku Electric has been operating the reactor since last August.
In the ruling, Presiding Judge Shigeyuki Yoshioka said there were "no irrationalities" in stricter safety regulations introduced after the 2011 Fukushima nuclear disaster.
The court said quake and tsunami estimates by Shikoku Electric were appropriately set based on the safety regulations.
The court said there is a need to prudently review the rationality of the quake estimate. But it said such highly technical matters should be examined by seismologists and officials of the Nuclear Regulation Authority, and not determined by courts.

The most contentious points in the case included whether the post-Fukushima nuclear regulations set by the regulatory body are appropriate, and whether the estimate of seismic ground motion, a key factor in a reactor's quake-resistance design, was credible.
During the court hearings, the plaintiffs argued that Shikoku Electric underestimated the potential magnitude of an earthquake that could hit the plant, which lies above the epicenter of the anticipated Nankai Trough mega-quake.
Amid widespread concern about the safety of nuclear power in the wake of the 2011 Fukushima meltdown, four residents of Matsuyama, Ehime Prefecture, and the city of Hiroshima, which lies about 100 kilometers from the plant, filed a request with the Hiroshima court in March last year, seeking an order to halt the No. 3 reactor.
If the Ikata plant were to be severely damaged like the Fukushima Daiichi nuclear plant was in 2011, nuclear substances could spread and contaminate the Seto Inland Sea, affecting Hiroshima on the other side of the sea, the plaintiffs asserted.
Supporters expressed their anger over the ruling, calling it "unjust" and saying that coming from the atomic-bombed city of Hiroshima, they will "not give up" the fight.
Similar lawsuits and other injunctions seeking suspension of the No. 3 reactor at the Ikata plant have been filed with other district courts in the nearby city of Matsuyama, Yamaguchi, which lies southwest of Hiroshima, and Oita, which lies to the west of Ikata.

Restart of Osaka University reactor

April 13, 2017

University in Osaka restarts research reactor

https://www3.nhk.or.jp/nhkworld/en/news/20170412_26/

A university in Osaka has restarted its nuclear reactor designed for research for the first time in 3 years. The restart will allow the school to recommence practical training.

It's the first research reactor in Japan to go back online under more stringent regulations introduced by the government after the 2011 Fukushima Daiichi accident. 21 other similar facilities remain offline.

The reactor at Kindai University's Atomic Energy Research Institute has a maximum output of 1 watt, the lowest in Japan.

Due to the stricter safety requirements, the university hasn't been able to use the reactor since it was taken offline in 2014 for scheduled inspections.

After implementing measures under the new regulations, the institute restarted the reactor on Wednesday afternoon. It achieved criticality in about 25 minutes.

Experts say education in nuclear power engineering is vital to keep reactors in Japan running and to

decommission them.

They say the offline state of Japan's research reactors has made it harder to encourage students to study nuclear engineering.

Apart from Kindai University's facility, only 2 other research reactors in Japan have so far passed government screening to be restarted.

Kaswahiwazaki-Kariwa: 2019

April 15, 2017
Tepco's latest plan for Kawashiwazaki-Kariwa plant envisions restart in 2019
http://www.japantimes.co.jp/news/2017/04/15/national/tepco-aims-restart-kawashiwazaki-kariwa-nuclear-plant-2019/#.WPIDWGekKos

JIJI
Tokyo Electric is now aiming to restart the Kawashiwazaki-Kariwa nuclear plant in Niigata Prefecture in April 2019, sources say.
The company plans to include the goal in its financial outlook under a reconstruction program, the sources said Friday.
Restarting the giant plant is considered important to Tokyo Electric Power Company Holdings Inc.'s ability to recover from the triple meltdown at the Fukushima No. 1 nuclear plant in March 2011.
But the prospects for rebooting the plant are dim because it is opposed by Niigata Gov. Ryuichi Yoneyama.
The reconstruction plan is also expected to include Tepco's commitment to pursuing integration with other companies in some areas.
Tepco is expected to draw up the new plan and file for government approval as early as this month.

Evacuee mums fight restart

April 23, 2017
Mothers who fled Fukushima fallout raise voices against Genkai plant restart in Saga
http://www.japantimes.co.jp/news/2017/04/23/national/mothers-who-fled-fukushima-fallout-raise-voices-against-genkai-plant-restart-in-saga/

Kyodo

SAGA – A group of mothers who evacuated from the Kanto region to Fukuoka Prefecture after the 2011 Fukushima nuclear crisis is ramping up protests against efforts to restart the Genkai nuclear plant in neighboring Saga.

After meeting with Minister of Economy, Trade and Industry Hiroshige Seko on Saturday, Saga Gov. Yoshinori Yamaguchi is expected to approve the restart of two reactors in the town of Genkai as early as Monday.

Earlier this month, four of the moms gathered for a meeting in Itoshima in Fukuoka and discussed plans to send the city a document and an inquiry conveying their opposition.

As they racked their brains to deliver effective expressions, the meeting lasted for around six hours until their children returned home from school.

Three of the moms moved to Itoshima after becoming worried their children would be adversely affected by exposure to the fallout spewed by the triple core meltdown at the Fukushima No. 1 plant in Fukushima Prefecture in March 2011. The plant is run by Tokyo Electric Power Company Holdings Inc.

"I wanted to go far away for the sake of my unborn child," said 39-year-old Fumiyo Endo, the leader of the group.

But the place she relocated to was within 30 km of the Genkai plant run by Kyushu Electric Power Co.

In March, she attended a meeting of residents to get explanations about the restart but was concerned whether safety would be ensured by sheltering indoors as instructed should an accident occur.

She also felt angry after hearing a utility official say that restarting the plant is necessary "for a stable supply of power." She said it sounded as if the utility did not care about human lives.

But she did not decide to leave Itoshima because she wanted to keep living there, to stay close to the sea and mountains.

Another member of the group said it was important to keep resisting.

"It is significant to protest against nuclear plants near the plant sites," said photographer Nonoko Kameyama, 40.

Kameyama, a mother of three, has published a photo book of mothers hoping to bring about a society without nuclear power plants.

A day after attending the residents' meeting, Endo and other members called the Saga Prefectural Government to urge it to reject the restart.

When asked by a prefectural official during the call what the name of their group was, they came up with an impromptu title: "Mothers Who Want to Save Children's Lives." Dozens of people have recently joined in response to its Facebook post.

The group has submitted petitions to Saga Gov. Yamaguchi and Itoshima Mayor Yuji Tsukigata.

"Resuming operations only makes residents feel unsettled and we cannot see a bright future," said Endo. "We want our leaders to understand such feelings."

Yamaguchi is expected to approve the Genkai restart as early as Monday, after meeting with METI chief Seko on Saturday.

"The central government has shown a strong determination to work on nuclear energy policy in a responsible manner," Yamaguchi said Saturday, adding he wants to convey his decision "as early as possible."

The government is pushing for reactor restarts despite the triple core meltdown at Fukushima No. 1, saying nuclear energy is Japan's key energy source.

In January, reactor Nos. 3 and 4 at the Genkai plant passed the tougher safety requirements introduced in the wake of the Fukushima crisis. On Feb. 24, a majority of the Genkai Municipal Assembly voted in favor of restarting the plant.

Genkai plant: Saga governor OKs restart

April 24, 2017

Saga governor agrees to Genkai reactor restart

https://www3.nhk.or.jp/nhkworld/en/news/20170424_23/

The governor of Saga Prefecture, southwestern Japan, has announced his approval of a plan to restart 2 nuclear reactors in the prefecture.

Governor Yoshinori Yamaguchi told reporters on Monday that the Number 3 and 4 reactors at the Genkai nuclear plant would be scheduled for restart. It is the fourth such approval granted by a prefectural government after meeting the country's new safety standards put into place after the March 2011 nuclear disaster.

Genkai Town, the power plant's host municipality, also gave its approval last month.

But the reactors will not be restarted until this fall at the earliest.

The Nuclear Regulation Authority must give its approval for the restart and carry out required inspections.

Governor agrees to Genkai reactor restart

https://www3.nhk.or.jp/nhkworld/en/news/20170424_25/

The governor of Saga Prefecture, southwestern Japan, has announced his approval for a plan to restart two nuclear reactors within the prefecture.

Governor Yoshinori Yamaguchi told reporters on Monday that the Number 3 and 4 reactors at the Genkai nuclear plant would be scheduled for restart. It is the fourth such approval granted by a prefectural government after meeting the country's new regulations. These were put into place after the March 2011 nuclear disaster.

Genkai Town, the host municipality of the power plant, had given its approval earlier, as well as the Saga prefectural assembly.

Yamaguchi said the restart decision required much consideration. He said he felt he had no choice but to approve the plan.

The reactors will not be restarted until this fall, at the earliest.

The Nuclear Regulation Authority must give its approval for the restart and carry out required inspections.

Saga governor green-lights restart of Genkai nuclear plant

https://mainichi.jp/english/articles/20170424/p2g/00m/0dm/067000c

Saga Gov. Yoshinori Yamaguchi on Monday consented to restart two nuclear reactors at the Genkai power plant in the southwestern Japan prefecture, a process expected to result in them coming back online as early as this summer.

The governor's decision for the Nos. 3 and 4 reactors at the Kyushu Electric Power Co. plant in the town of Genkai is likely to elicit strong reactions from municipalities and residents opposed to their reactivation amid widespread concerns about a major nuclear accident following the 2011 Fukushima nuclear crisis.

"After deeply thinking it over, as it was a grave decision to make, I have reached the conclusion that (the restart) is inevitable under the present circumstances," the governor said at a press conference. He also said dependence on nuclear power "cannot be helped to some extent" from the standpoint of securing energy supply.

The reactors in January passed tougher safety requirements that were introduced in the wake of the nuclear disaster. Monday's decision comes after the prefectural government consulted with the heads of municipalities within the prefecture and local residents over whether to approve the restart.

The town of Genkai, which hosts the power station, gave its consent last month. And on April 13, the prefectural assembly adopted a resolution approving the reactors' restart.

Of the eight municipalities within a 30-kilometer radius of the seaside plant, the city of Imari in Saga, and the cities of Iki, Matsuura and Hirado in neighboring Nagasaki Prefecture have opposed the restart.

In Tokyo, the central government's top spokesman said Monday that the government will continue to seek acceptance from local authorities in and around the site.

"We feel it is important that the governor's understanding has been gained regarding the restart of these reactors," Chief Cabinet Secretary Yoshihide Suga told a press conference.

Even though Japan was hit by the nuclear disaster following a massive earthquake and tsunami that devastated the country's northeast in March 2011, the government is pushing for reactors to be restarted as nuclear power is regarded as a key energy source.

All four reactors at the Genkai plant had stopped operating by December 2011 in the wake of the Fukushima accident. Kyushu Electric has decided to decommission the aging No. 1 reactor.

Other than gaining local approval, restarting a nuclear reactor requires getting a green light on safety provisions, and conducting an inspection before the restart.

Currently, out of 45 commercial reactors in the country, only three reactors -- the Nos. 1 and 2 reactors at Kyushu Electric's Sendai plant in Kagoshima Prefecture, and the No. 3 reactor at Shikoku Electric Power Co.'s Ikata plant in Ehime Prefecture, western Japan -- are in operation.

In 2009, the Genkai plant's No. 3 reactor began generating power using MOX fuel, which is created from plutonium and uranium extracted from spent fuel. In June 2016, the Fukuoka High Court upheld a ruling that the utility can continue with its plan to use MOX fuel at the reactor.

The use of the fuel had been controversial even before the 2011 nuclear crisis as it is more radioactive than uranium fuel, which is widely used at the nation's nuclear power plants.

See also : http://www.japantimes.co.jp/news/2017/04/24/national/saga-governor-green-lights-restart-genkai-nuclear-reactors/

Takahama: Nuclear fuel loaded

May 1, 2017
Nuclear fuel loaded into reactor at Takahama plant
https://www3.nhk.or.jp/nhkworld/en/news/20170501_15/

Workers have finished loading nuclear fuel into a reactor at the Takahama power plant in central Japan.

Kansai Electric Power Company says work to place all 157 units of nuclear fuel into the No. 4 reactor was completed on Monday morning with no problems. The fuel includes 4 units of MOX fuel, a mixture of plutonium extracted from spent nuclear fuel and uranium.

In March, the Osaka High Court scrapped an injunction issued by a lower court a year earlier that suspended operations of the No. 3 and No. 4 reactors at the plant in Fukui Prefecture.

Kansai Electric plans to restart the No. 4 reactor in mid-May if operations such as raising the temperature and pressure inside the reactor and conducting checks go without a hitch.

The utility says workers at the plant will use extra caution when performing the tasks.

In February of last year, radioactive cooling water leaked from the reactor during preparations for a restart. 3 days after being put back online, the reactor automatically shut down as workers were trying to generate power and send it to the grid.

The plant operator says it will begin putting nuclear fuel into the No. 3 reactor in mid-May and restart it in early June.

Protest at Takahama plant

May 8, 2017
About 200 people protest restarting of Fukui nuclear reactor outside plant
https://mainichi.jp/english/articles/20170508/p2a/00m/0na/006000c#cxrecs_s

TAKAHAMA, Fukui -- Approximately 200 people protested outside the gates of Kansai Electric Power Co. (KEPCO)'s Takahama Nuclear Power Plant here on May 7, to voice their opposition to the planned restarting of the plant's No. 4 reactor in mid-May.

- 【Related】Utility seeks to restart two reactors in Fukui from mid-May
- 【Related】High court backs restart of halted Takahama reactors

As police officers patrolled outside the gates from the morning onward, anti-nuclear protesters from groups based in Fukui Prefecture and the Kansai region turned up from cities such as Kyoto and Kobe, with some holding placards.
From about midday onward, the protesters began to shout out slogans such as "An earthquake-prone country like Japan does not need nuclear plants," and "We are against the restarting (of the reactor),"

while beating small drums. Also, a letter demanding a stop to the restarting of operations was handed over to a KEPCO employee.
Tetsuen Nakajima, former secretary-general of an anti-nuclear group based in the city of Obama in Fukui Prefecture, stated, "Please do not restart operations." In addition, participants also gathered in downtown Takahama, where they carried out a demonstration.
Further protests are also scheduled to take place between May 8 and 12 in other Fukui prefectural cities such as Obama, Tsuruga and Sabae, which will oppose the restarting of the reactor at the Takahama plant.
In addition to the No. 4 reactor, KEPCO also plans to restart the plant's No. 3 reactor, in early June.

Who wants to restart Hamaoka?

May 13, 2017
Mayors near Hamaoka nuclear plant say wider consensus needed for reactor restarts

https://mainichi.jp/english/articles/20170513/p2a/00m/0na/013000c

The Hamaoka Nuclear Power Plant, idled for five years and now guarded by a 22-meter-tall tsunami wall, is seen on May 12, 2016. Omaezaki, Shizuoka Prefecture, is seen in the background. (Mainichi)
Seven heads of 11 Shizuoka Prefecture municipalities located within a 30-kilometer radius of Chubu Electric Power Co.'s Hamaoka Nuclear Power Plant said in a recent Mainichi Shimbun survey that they believe restarting the currently idled nuclear reactors requires agreement from not only the host prefecture and host city but also other municipalities around the plant.
As May 14 marks the sixth year after the Hamaoka nuclear plant suspended operations upon a request from the then government of Prime Minister Naoto Kan, the Mainichi Shimbun surveyed the Shizuoka Prefecture governor and mayors of 11 prefectural municipalities in the "Urgent Protective Action Planning Zone" (UPZ) around the plant. UPZs cover areas within a radius of 30 kilometers of a nuclear plant.
While no legal framework has been set up regarding the scope of municipal consensus necessary to restart operations at a nuclear station, requests have been growing for a broader agreement among municipalities -- not just the host prefecture and host municipality -- in the wake of the Fukushima nuclear disaster.
Shizuoka Gov. Heita Kawakatsu, who is running for re-election in the gubernatorial race scheduled for June, has argued for the need to hold a referendum over the restart of the Hamaoka plant and has expressed a positive view of involving the 11 mayors in decisions regarding the matter. Consequently, the issue could become a key point in the upcoming gubernatorial election.
The Mainichi asked Gov. Kawakatsu and 11 municipal mayors in a multiple-choice form about the scope of local consensus over the Hamaoka plant restart. Five mayors said agreement from all 11 municipalities in the UPZ was necessary, one favored gaining consensus from four municipalities located within a 10-kilometer radius of the plant and another mayor wanted agreement from all municipalities in Shizuoka Prefecture. The mayor of Omaezaki, the host city of the Hamaoka plant, said restarting the idled nuclear plant only required the city's agreement.
Shigeki Nishihara, the mayor of Makinohara, neighboring Omaezaki, said consensus from municipalities in the UPZ was necessary. He commented that local governments (in that area) "have a responsibility to secure their residents' safety." Meanwhile, Yasuo Ota, the mayor of the town of Mori, who picked

"agreement from all municipalities in Shizuoka Prefecture" to restart the Hamaoka plant, told the Mainichi, "It is necessary to hear broad opinions when it comes to gaining consensus over nuclear power as a national energy policy."
While the remaining four mayors checked "other" in the survey, most of them expressed their view of involving the national government in deciding the scope of local consensus.
Gov. Kawakatsu stressed that it is not an appropriate time to make a decision over the scope of local consensus and repeated that a referendum over the issue of the Hamaoka plant is necessary from the standpoint of popular sovereignty.
No local government heads surveyed were actually in favor of restarting the Hamaoka nuclear plant, even under right conditions such as with approved safety measures. Three city mayors said they were against restarting the plant. Seven local government chiefs chose "other" in the question, while the remaining two said they "cannot judge at the moment."
The Nuclear Regulation Authority's screening process of the Hamaoka nuclear plant has been prolonged as the No. 3 and No. 4 reactors being screened are the same "boiling-water type" reactors as the ones at the devastated Fukushima No. 1 Nuclear Power Plant. Furthermore, the estimated maximum ground motion at the Hamaoka nuclear station is likely to be raised because it is located directly above the hypocenter of a potential Nankai Trough megaquake.

Takahama No.3 about to restart

May 14, 2017

Nuclear fuel being loaded into Takahama reactor
https://www3.nhk.or.jp/nhkworld/en/news/20170513_14/

Workers have begun loading nuclear fuel into a reactor at the Takahama power plant in Fukui Prefecture in central Japan.

Kansai Electric Power Company began loading on Saturday the 157 nuclear fuel units needed to restart the No. 3 reactor. The company says it will work around the clock through Tuesday to finish the work.

The fuel includes 24 units of MOX fuel, a mixture of plutonium and uranium.

In March, the Osaka High Court scrapped an injunction issued by a lower court that suspended operations of the No. 3 and No. 4 reactors at the Takahama plant.

Kansai Electric completed loading nuclear fuel into the No. 4 reactor earlier this month. It is preparing to restart the reactor on Wednesday.

The company plans to restart the No. 3 reactor in early June.

TEPCO's nuclear plans (2)

12.05.2017_No94 / News in Brief

Tepco Recovery Plan Includes Search For Partners, Restart Of Kashiwazaki Kariwa

http://www.nucnet.org/all-the-news/2017/05/12/tepco-recovery-plan-includes-search-for-partners-restart-of-kashiwazaki-kariwa

12 May (NucNet): Tokyo Electric Power Company (Tepco) said on 11 May 2017 that it will look for partners for its nuclear business as part of a recovery plan that could see it restart Units 6 and 7 at the Kashiwazaki Kariwa nuclear station in Niigata Prefecture, western Japan, by March 2020 at the earliest. The move would be the first step towards getting all seven boiling water reactor (BWR) units at the station back online by March 2026, the company said. Units 1, 6 and 7 at Kashiwazaki Kariwa have been shut since shortly after the March 2011 Fukushima-Daiichi accident, while units 2, 3 and 4 have been shut since an earthquake in Niigata Prefecture in July. The plan, which needs government approval, is part of an updated Tepco turnaround strategy aimed at generating operating profit of nearly 500 billion yen (€4bn, $4.4bn) in the fiscal year ending March 2026, a substantial increase from the 226 billion yen operating profit expected for the fiscal year that ends in March 2018. Tepco also needs to fund decommissioning and remediation costs at Fukushima-Daiichi. Those costs have been put by Tepco at around $770m a year, although various estimates have differed widely. Tepco said it aims to set up joint ventures for nuclear power and power grid operations to streamline its business and bolster earnings. Its search for an industrial partner includes plans to introduce “safe and low-cost” light-water reactors at the Higashi Dori nuclear station in Aomori Prefecture, northern Japan. Tepco plans to build two reactors at the site, where Tohoku Electric Power Company already owns a single 1,067-MW BWR. All reactors in Japan were ordered shut following the Fukushima-Daiichi accident. To restart, they must meet a series of regulatory requirements and receive local government consent. Of 42 operable reactors in the country, three are operating and another four are close to restarting.

Restart protest

May 17, 2017

Reactor restart protested

https://www3.nhk.or.jp/nhkworld/en/news/20170517_29/

Dozens of people have gathered in front of the Takahama nuclear power plant to protest the restart of its No.4 reactor.

About 70 local residents and others from nearby prefectures marched outside the complex, some carrying banners and placards.

They handed over a petition to an official from the operator, Kansai Electric Power Company, demanding that the restart be halted and the plant be decommissioned.

A resident says he opposes the restart as there is a possibility that a huge earthquake could occur near the plant.

A civic group chief says it may be impossible to halt the plant's operations immediately, but he hopes their continued campaign will help reduce accidents or trouble at the plant.

Takahama restarted

May 17, 2017
Takahama nuclear reactor restarted
https://www3.nhk.or.jp/nhkworld/en/news/20170517_28/

One of the reactors at Takahama nuclear plant in the central Japanese prefecture of Fukui has been restarted for the first time in 15 months.

Plant workers began pulling control rods out of the No.4 reactor at 5 PM on Wednesday.

It runs on MOX fuel, which is a mixture of plutonium extracted from spent nuclear fuel and uranium.

The reactor is to reach criticality, a self-sustained nuclear reaction, in about 13 hours by around 6 AM on Thursday. The operator, Kansai Electric Power Company, plans to start power generation and transmission to the grid on Monday next week.

The power utility plans to resume commercial operations with the reactor in mid-June.

Wednesday's restart brought the number of reactors operating in Japan to 4, including 2 reactors at Sendai plant in Kagoshima Prefecture and one at Ikata plant in Ehime Prefecture.

Takahama's No.4 reactor was reactivated in February of last year, but shut down automatically due to a glitch that occurred 3 days after the restart.

A district court later issued an injunction that suspended operations of the No.4 and No.3 reactors of the Takahama plant, but the Osaka High Court nullified the injunction in March this year.

Controversial Reactor Restarted

https://www3.nhk.or.jp/nhkworld/nhknewsline/nuclearwatch/controversialreactorrestarted/

A controversial nuclear reactor in central Japan has been restarted. A local court had previously banned its operation.
The Kansai Electric Power Company has put the No.4 reactor at its Takahama plant back online.
The facility passed stricter regulations, introduced after the 2011 Fukushima nuclear disaster.
The reactor runs on what's called MOX fuel. It's created by reprocessing spent fuel from nuclear reactors.
Last year, a district court ordered a suspension of operations. It said Kansai Electric hadn't given sufficient explanation of how it would deal with or prevent accidents.
But in March, a higher court overturned the decision. It said that the company had introduced the necessary measures against earthquakes and tsunamis.
The utility says it wants to resume commercial operations next month. At the moment Japan has 3 other reactors online.

May 17, 2017

Takahama reactor to restart on Wednesd
https://www3.nhk.or.jp/nhkworld/en/news/20170517_16/

The operator of the Takahama nuclear power plant in central Japan will soon restart its No.4 reactor for the first time in 15 months.

Kansai Electric Power Company says it will start removing the control rods from the reactor at around 5 PM on Wednesday, if no problems are found in the final inspection on the rods for containing nuclear fission.

The power utility began the process of restarting No.3 and No. 4 reactors at the plant in Fukui Prefecture after the Osaka High Court scrapped, in March, an injunction by a lower court that ordered their suspension.

The No. 4 reactor has been offline since February last year, when it shut down automatically due to a glitch.

If the process goes as scheduled, the No. 4 reactor is to reach criticality by Thursday morning, and start power generation and transmission to the grid on Monday next week.

Kansai Electric plans to resume commercial operations with the reactor in mid-June.

The reactor uses MOX fuel, which is a mixture of plutonium extracted from spent nuclear fuel and uranium.

It is the 4th reactor to go online, after 2 reactors at Sendai nuclear plant in Kagoshima Prefecture, and one at Ikata nuclear plant in Ehime Prefecture.

Kansai Electric also plans to restart the No.3 reactor in early June.
May 14, 2017

Two more: Safe enough to be restarted

May 24, 2017

Nuclear regulator adopts Ohi plant assessment

https://www3.nhk.or.jp/nhkworld/en/news/20170524_19/

Japan's nuclear regulator has paved the way for the restart of 2 nuclear reactors at the Ohi power plant on the Sea of Japan coast.

The Nuclear Regulation Authority has adopted a report stating that safety measures at the plant in Fukui Prefecture meet new requirements set after the 2011 Fukushima Daiichi nuclear crisis.

The NRA had been receiving public comment in February and March on the draft assessment of the plant's No.3 and No.4 reactors.

It says it has amended some expressions in the final document as a result.

The plant in Ohi Town is the 6th nuclear plant to gain regulatory approval for new safety measures.

Operator Kansai Electric Power Company says it will complete safety-related work by July. But the utility still needs regulatory approval for equipment design. It also needs local consent to restart.

Observers say a restart before winter is unlikely.

The Fukui District Court had ruled against restarting the Ohi plant reactors 3 years ago. The utility is appealing the ruling.

However, the town and prefectural governments could decide whether to agree to a restart before the matter is resolved in court.

A former regulator has told the appeal court that the utility could have underestimated the maximum potential size of an earthquake.

Kansai Electric rejected this statement, saying its examinations were detailed and its assessments conservative.

2 more nuclear reactors in Japan clear regulator's safety review

May 24, 2017 (Mainichi Japan)
https://mainichi.jp/english/articles/20170524/p2g/00m/0dm/072000c

TOKYO (Kyodo) -- The Nuclear Regulation Authority formally confirmed Wednesday that two reactors on the Sea of Japan have met the country's post-Fukushima safety standards, paving the way for their restart possibly this fall.
The authority gave its final approval to a screening report submitted by Kansai Electric Power Co. on the Nos. 3 and 4 reactors at Oi plant in Fukui Prefecture, bringing the number of reactors that have met the standards introduced after the 2011 nuclear accident at the Fukushima Daiichi plant to 12 at six power stations.
For the restart, Kansai Electric still has to pass on-site pre-operational checks by the authority and obtain approval from the Fukui prefectural government.
The utility said in a statement it will "make utmost effort for the early restart of nuclear plants whose safety has been confirmed by gaining the understanding of local residents."
Although the government of Prime Minister Shinzo Abe has been promoting the restart of nuclear reactors, most of them remain offline amid safety concerns among local residents following the Fukushima disaster triggered by a massive earthquake and tsunami.
The nuclear safety watchdog gave the green light to the restart of the reactors despite a pending lawsuit filed by local residents seeking to block the resumption of operations. Kansai Electric has appealed a Fukui District Court ruling in 2014 which banned it from running the two reactors due to safety concerns.
Seismologist Kunihiko Shimazaki, a former commissioner of the NRA, has warned that the authority may have underestimated quake hazards at the Oi plant.
Kansai Electric applied for the screening of the two reactors at the Oi plant in July 2013. With Wednesday's approval, all of its seven nuclear reactors at three power stations for which the utility has sought screening have cleared the safety standards.
Of the seven, the No. 4 reactor at Takahama plant in Fukui restarted operation on May 17, while the No. 3 reactor of the same plant is expected to get back online in early June.

Issue of local approval ignored

June 5, 2017
EDITORIAL: Support of areas within 30-km zone vital for reactor restarts
http://www.asahi.com/ajw/articles/AJ201706050017.html

Several more offline nuclear reactors are now on track to be restarted in the coming months despite lingering safety concerns among residents living in surrounding areas.
Kyushu Electric Power Co. plans to restart two reactors at its Genkai nuclear power plant in Saga Prefecture as the prefecture’s governor and the mayor of Genkai, the town where the plant is located, gave their consent to the utility’s plan this spring.
Kansai Electric Power Co. is going through the process of restarting two reactors at its Oi nuclear plant in Fukui Prefecture, which effectively passed the regulatory inspections by the Nuclear Regulation Authority in May. The company will now seek the approval of its plan by the Fukui governor and the mayor of Oi, the town hosting the plant.

Many local government chiefs and residents within 30 kilometers of these nuclear plants have voiced opposition to the planned reactor restarts. Local governments inside the 30-km zone are required to craft plans for the evacuation of local residents in the event of a serious nuclear accident.

But the electric utilities have turned a deaf ear to their voices. That's because the operators of nuclear plants only ask for the approval of the host municipalities and prefectures when they seek to bring offline reactors back on stream.

If reactors are brought back online through the same procedures as those used before the catastrophic accident that hit the Fukushima No. 1 nuclear power plant in 2011, it will be difficult for people living in areas around nuclear plants not to feel anxiety.

We strongly urge the operators of nuclear plants to widen the definition of the "local communities" involved in the approval process so that at least the entire 30-km zone is covered.

NO DIFFERENCE IN DAMAGE CAUSED BY NUCLEAR ACCIDENT

There is no legal basis for the rights of the host local governments to approve plans to operate nuclear power plants. They are mainly based on safety agreements between the local governments and the plant operators, which include a provision concerning "advance consent" by the local governments.

Last summer, Yoshikazu Tsukabe, mayor of Imari, a city of 55,000 located within 30 km of the Genkai plant, unequivocally expressed his opposition to Kyushu Electric Power's plan to bring the reactors back online.

When Tsukabe visited Minami-Soma, a city in Fukushima Prefecture within 30 km of the crippled Fukushima plant, in 2013, it hit home to him that there is no difference in the seriousness of damage that the host municipalities and areas around them would suffer when a major nuclear accident occurs.

Then, Tsukabe asked Kyushu Electric Power to conclude a safety agreement with Imari including an advance consent provision similar to the ones it has with the host municipalities. But the company refused his request.

"No matter how strongly we oppose (the utility's plan to restart the reactors), we are left out in the cold," Tsukabe says.

"But we are nevertheless forced to face the risk of a serious accident. That's too unfair," he adds indignantly.

The mayors of three cities in Nagasaki Prefecture, which are located near the Genkai plant, have also voiced their opposition to the utility's plan. But even the governor of the neighboring prefecture has no right to grant consent to such a plan.

Since 2015, reactors at the Sendai (Kagoshima Prefecture), Ikata (Ehime Prefecture) and Takahama (Fukui Prefecture) have been restarted only with the consent of the host municipalities and prefectures. Kyoto and Shiga prefectures, which are adjacent to Fukui Prefecture, have been demanding that they, too, be involved in the process of local approval.

The city of Hakodate, Hokkaido, has filed a lawsuit seeking a court injunction to stop the ongoing construction of the Oma nuclear power plant in Aomori Prefecture, which is located 23 km from the city across the sea. The suit effectively asks why an area near a nuclear power plant that could be damaged if an accident occurs at the plant is not regarded as a concerned "local community."

VIGILANT LOCAL COMMUNITIES FOR BETTER SAFETY

Asahi Shimbun editorials have called for widening the scope of the local communities that have the right to grant consent to plans to restart nuclear reactors. That's because we believe that the safety of nuclear reactors would improve if more local governments are involved in their safety checks as part of the consent process. That would also boost local residents' confidence in the safety of the reactors in their areas.

The administration of Prime Minister Shinzo Abe has argued that the Nuclear Regulation Authority's inspections are enough to confirm the safety of reactors. The administration claims the nuclear watchdog checks the safety of reactors according to the strictest nuclear regulatory standards in the world.
But Japan's new nuclear safety standards, introduced after the Fukushima disaster, cover only four of the five levels of "defense in depth" advocated by the International Atomic Energy Agency. The fifth level is mitigation of the radiological consequences of off-site releases of radioactive materials.
It is, so to speak, the last line of defense against a full-scale nuclear disaster in the event of failure of the four preceding levels of defense resulting in massive releases of radioactive materials into the environment. Specifically, it involves evacuating local residents to protect them from exposure to radiation.
Following the accident at the Fukushima plant, the central government made it mandatory for local governments inside the 30-km zone to develop plans for the emergency evacuation of local residents in such situations.
If so, the local governments should be given the right to call a stop to a plan to restart a reactor. They should be allowed to take the step when, instead of relying totally on the central government for confirming the safety of the reactor, decide that the safety of the reactor in question and the effectiveness of the evacuation plan are not sufficiently ensured.
Making such a decision requires expertise. It would help to set up a task force of experts as Niigata Prefecture has done. The prefectural government has been making its own efforts to investigate the Fukushima nuclear disaster with the help of experts.

DIET SHOULD DISCUSS THE ISSUE

Most local governments hosting nuclear power plants take a dim view of the proposal to widen the scope of the local approval program.
The host local governments have been receiving great fiscal and economic benefits from having nuclear plants, including state subsidies based on three laws related to power sources and job creation.
These prefectures and municipalities are concerned that an increase in the number of local governments with the right of consent would make it harder to operate reactors.
Toshiyuki Kanai, a professor at the University of Tokyo specializing in local government operations, argues that the original aims of safety agreements between utilities and local governments should be recalled.
In the 1960s, local governments hosting nuclear plants started seeking safety agreements with the plant operators to prevent them from concealing information about accidents and problems. In these moves, they tried to enhance local residents' safety and sense of security by ensuring their own right to get the operators to listen to what they have to say, if necessary.
"If there is a local government concerned about the safety of a reactor, a wide range of local communities around it should join together to have discussions on the source of the concern," says Kanai. "That would also help the host local government."
Kanai points to the need to establish a system that ensures there is no difference in the benefits host local governments receive whether the reactors are operating or not. This is necessary for allowing host local governments to make neutral judgments about the safety of reactors.
It is the duty of the central government to devise such a system.
The Abe administration has been staying away from the issue of local consent. Economy, Trade and Industry Minister Hiroshige Seko has said the scope of the local governments allowed to give their consent to reactor plans should not be uniformly determined by the central government.

But the administration should not continue neglecting the rift between the two sides--nuclear plant operators and the host local governments versus local governments in surrounding areas. It should not simply let utilities restart reactors without paying serious attention to objections from surrounding local governments.
There are possible ways to deal with the issue, including legally requiring utilities to obtain the consent of all local governments within the 30-km zone as a condition for restarting a reactor.
Six years after the Fukushima calamity, the Diet should start a serious debate on the issue as one of the important challenges concerning nuclear safety that has remained unaddressed.

And now five

June 6, 2017

Takahama No.3 reactor restarted
https://www3.nhk.or.jp/nhkworld/en/news/20170606_23/

Another reactor in Fukui Prefecture, central Japan, has been restarted, bringing to 5 the total number of Japanese reactors currently in operation.

The No.3 reactor at Takahama nuclear plant came online after Kansai Electric Power Company workers completed pulling out its control rods at 2 PM on Tuesday.

The reactor runs on MOX fuel, which is a mixture of plutonium extracted from spent nuclear fuel and uranium.

Takahama's No.3 and No.4 reactors were stopped following a court injunction issued in March last year.

But after a higher court decision this March to nullify the injunction, the No.4 reactor was restarted last month.

Kansai Electric says the No.3 reactor will reach criticality, a self-sustained nuclear reaction, early on Wednesday. It expects to start power generation and grid transmission on Friday.

The utility plans to notify the government of cuts in electric bills after resuming commercial operations with the reactor in early July.

Reactors currently in operation besides Takahama No.3 and No.4 are 2 at the Sendai plant in Kagoshima Prefecture and one at the Ikata plant in Ehime Prefecture.

Saga court dismisses residents request

June 13, 2017

Court dismisses request to halt restart of Saga reactors
http://www.japantimes.co.jp/news/2017/06/13/national/crime-legal/court-nixes-request-halt-restart-saga-reactors/#.WUA32NykJLM

Kyodo
SAGA – A district court on Tuesday dismissed a request from about 230 local residents for an injunction to stop the restart of two reactors at Kyushu Electric Power Co.'s Genkai nuclear power plant in Saga Prefecture over safety concerns.
The Saga District Court handed down the ruling concerning reactors 3 and 4 at the complex as the utility prepares for their restart this summer or later, having secured the necessary consent of the governor of Saga and the mayor of Genkai. The town hosts the four-reactor power station.
Reactors 3 and 4 have cleared Nuclear Regulation Authority screenings that were based on safety standards revamped after the Fukushima nuclear disaster triggered by the March 2011 earthquake and tsunami.
In Tuesday's decision, presiding Judge Takeshi Tachikawa said the new safety standards are "reasonable." The court has found no issues with earthquake resistance or steps taken against serious accidents and does not see any specific danger of radiation exposure at the plant, he added.
The focus of the lawsuit, filed by the residents in July 2011, was whether the operator has adequate measures in place against earthquakes. The plaintiffs argued that serious accidents could occur due to degradation in piping.
"The court is supposed to help the weak, but the ruling is based on economics and politics," said Hatsumi Ishimaru, 65, who leads the group of residents. "We will continue to fight until we stop the nuclear plant."
The plaintiffs said they will immediately appeal the decision to the Fukuoka High Court.
Kyushu Electric said in a statement it considers the latest decision "appropriate" and will continue to try to ensure safety at the plant.
The ruling may inject momentum into the government's policy to restart nuclear plants that have fulfilled the new safety standards.
While declining to comment on the court decision itself, Chief Cabinet Secretary Yoshihide Suga said the government respects the Nuclear Regulation Authority's judgment that the reactors meet the new safety standards.
Tuesday's ruling followed a series of court decisions rejecting similar suits seeking to halt the operations of nuclear power plants.
In March, the Osaka High Court overturned a lower court order to halt two nuclear reactors at the Takahama plant in Fukui Prefecture, while in the same month the Hiroshima District Court dismissed a request by local residents to order the halt of a nuclear reactor that was restarted last year at the Ikata plant in Ehime Prefecture.
Of the more than 40 commercial reactors nationwide, five are currently in operation. At the Genkai plant, the No. 1 unit is set to be decommissioned due to aging.

TEPCO's new board

June 23, 2017

New Tepco chief reaffirms Fukushima commitment, but underscored need for plant restarts
http://www.japantimes.co.jp/news/2017/06/23/business/corporate-business/new-tepco-chief-reaffirms-fukushima-commitment-underscored-need-plant-restarts/#.WU6G4FFpyos
by Shusuke Murai
Staff Writer
Dealing with the aftermath of nuclear disaster at Fukushima No.1 power plant remains the most important mission for Tokyo Electric Power Company Holdings Inc., Tomoaki Kobayakawa, Tepco's new president, said Friday, but he also stressed the need to restart nuclear plants for the sake of continuing the utility's business.
"To fulfill responsibilities over (disaster in) Fukushima is the fundamental (policy) for our company, and that will never change at all," Kobayakawa, the former chief of the Tepco's electricity retail arm, said at a news conference at the firm's headquarters in Tokyo.
Kobayakawa officially took the helm as head of the ailing power giant after the reshuffle of top management was approved at a shareholder's meeting earlier on Friday.
Struggling financially amid ballooning costs for dealing with the aftermath of the nuclear accident caused by the devastating earthquake and tsunami in 2011, Tepco is effectively under control of the state with the state-backed Nuclear Damage Compensation and Decommissioning Facilitation Corp. holding the majority of its shares.
Ten of 13 board directors were replaced with new members, including honorary chairman of Hitachi Ltd. Takashi Kawamura. Kawamura was appointed the new chairman to back Kobayakawa.
Under the new board, Tepco will proceed with the new revitalization program it mapped out in May. The plan includes reactivating Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture, so as to make up for the estimated ¥22 trillion cost of dealing with damage, including decommissioning of Fukushima No.1 and compensation for disaster-hit areas.
"I believe securing safety and gaining the understanding of local people are our utmost priorities" in order to reactivate the nuclear plant, Kobayakawa said.
In October 2016 in the Niigata gubernatorial election, voters elected doctor and lawyer Ryuichi Yoneyama, whose anti-nuclear stance is firmly against any restart of Kashiwazaki-Kariwa plant, over a pro-nuclear candidate from the Liberal Democratic Party.
At the shareholder's meeting in Tokyo's Shibuya Ward earlier Friday, which was attended by about 1,200 people, some expressed diverse opinions on the company's intention to restart nuclear power plants.
One suggested that restarting a nuclear power plant could be a "ray of hope" that stands as the symbol of recovery from the disaster, while another claimed Tepco's financial recovery will "never be possible" without reactivating ceased plants.
Others were concerned about the firm's plan to continue its nuclear power business.
One shareholder called the proposed restart of the Kashiwazaki-Kariwa plant as "a long-shot gamble" repeatedly saying that the Niigata plant is "good-for-nothing", and that it has only caused the utility to incur costs of ¥680 billion for safety measures.

Another shareholder urged the utility to abandon its plan to reactivate Fukushima No.2 and Kariyazaki-Kariwa, and open them for engineers worldwide to use as research centers for decommissioning technologies.
These proposals were turned down at the end of the three-hour meeting after facing opposition from board members.

Inspection starts at Kashiwazaki-Kariwa

July 27, 2017

Inspection starts at nuclear plant in Niigata
https://www3.nhk.or.jp/nhkworld/en/news/20170727_25/
Japan's Nuclear Regulation Authority has started an on-site inspection at a nuclear power plant in Niigata Prefecture regarding the restart of two of its reactors.

NRA chairman Shunichi Tanaka visited Tokyo Electric Power Company's Kashiwazaki-Kariwa plant on Thursday to interview officials there.

The regulator is in the final stages of screening the No.6 and 7 reactors at the plant. The reactors must meet new government requirements introduced after the 2011 Fukushima nuclear disaster.

Tanaka has been stressing that unless the regulator is convinced the reactors will be operated safely, it will not allow their restart.

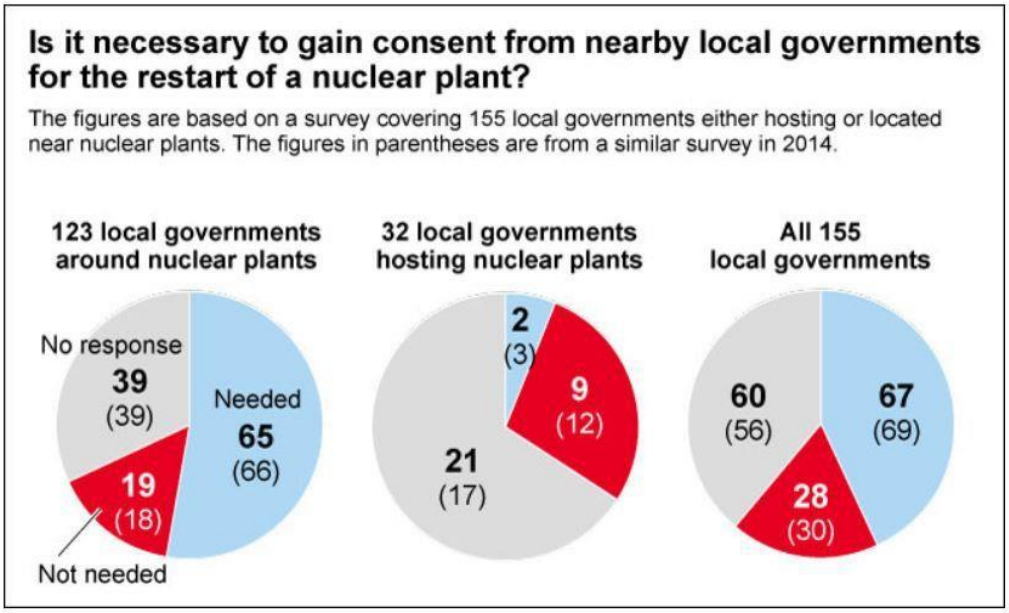
Tanaka told plant chief Chikashi Shitara that TEPCO is different from other operators in that it caused the accident.

He added that he may ask quite candid questions. He said before making a conclusion on the restart of Kashiwazaki-Kariwa plant, the regulator needs a different sense of conviction than when it screened other plants.

Shitara responded that he wants to explain how officials at the plant have been coping with the restart after the nuclear accident.

The regulator is to interview executives and workers at the plant through Friday.

Who should have a say about restarts?



The Asahi Shimbun

August 22, 2017

Municipalities near nuclear plants want say over restarts

THE ASAHI SHIMBUN

http://www.asahi.com/ajw/articles/AJ201708210035.html

More than half of municipalities within a 30-kilometer radius of nuclear power plants insist their approval must be sought for restarts, but only 6 percent of local governments that host such facilities agree.

The finding that 53 percent of municipalities require prior consultations came in a survey by The Asahi Shimbun undertaken two years after a reactor at the Sendai nuclear plant in Kagoshima Prefecture went back online in August 2015, the first to do so under new, more stringent nuclear regulations adopted in the aftermath of the 2011 Fukushima disaster.

The mayor of Hitachiomiya, Ibaraki Prefecture, said local governments beyond host communities "need" to have a say over restarts as the central government revised its nuclear emergency guidelines in 2012 to require municipalities within the 30-km radius to have evacuation plans in place in the event of a serious accident.

Before the Fukushima accident, only local governments within 8-10 km of a nuclear power plant had to do so.

The mayor of Misato, Miyagi Prefecture, said his town's approval should be sought for a restart because a "local government not receiving economic benefits can make a levelheaded judgment on the pros and cons of resumed operations."

Host communities receive grants and subsidies from the central government, in addition to taxes and other revenue sources related to power generation.

In the survey, The Asahi Shimbun contacted the heads of 155 local governments that either host or are situated within a 30-km radius of the 16 nuclear plants across the nation, excluding the crippled Fukushima No. 1 nuclear plant. The figure includes the prefectural government of Hokkaido and 20 other prefectural authorities that host plants.

As things stand, there are no legal steps that an operator of a nuclear facility must take, such as winning the consent of a host municipality or the prefectural government, before a plant's restart.

The Sendai nuclear plant went back online after operator Kyushu Electric Power Co. got the go-ahead only from Satsuma-Sendai, which hosts the plant, and Kagoshima Prefecture for a resumption of operations.
The survey found that Mihama, home to Kansai Electric Power Co.'s Mihama nuclear plant, was against the notion of asking nearby municipalities for their approval for a restart.
"Only a host community has a history of contributing to the safe operation of a nuclear plant," the mayor said.
Of all the local governments, 61 heads called for legal procedures to be adopted with respect to restarts. All these calls came from municipalities located in areas surrounding nuclear power plants, except for one.
"As long as nuclear energy has been promoted as a state program, the central government should take responsibility for setting the legal framework for a restart," said the mayor of Makinohara, Shizuoka Prefecture.
The mayor of Imari, Saga Prefecture, echoed a similar view.
"Things remain ambiguous because no legal procedures are in place," the mayor said. "The government is reluctant to enshrine the steps into law because that will make restarts harder. However, the central government should also listen to what people in municipalities beyond host communities have to say."
The survey also found that calls for plant operators to gain the consent of the municipalities within a 30-km radius of a proposed restart have somewhat abated among 35 local governments, where nuclear plants have resumed operations.
Ten heads sided with this view in the current survey, down from 13 in the previous survey in autumn 2014.
Another 10 leaders called for setting up legal procedures for restarts, compared with 14 in the last survey.
Apart from the Sendai nuclear plant, Ikata in Ehime Prefecture and Takahama in Fukui Prefecture are currently operating.
Municipalities situated close to facilities that are expected to go back online in the near future are now taking a more clear-cut stance on nuclear energy issues.
Representatives from cities around the Genkai nuclear plant in Genkai, Saga Prefecture, formed a group to present a united front against moves to resume its operations, which is expected this winter.
Although the mayors of Hirado and Matsuura, both in Nagasaki Prefecture, did not take a stance in the 2014 survey, they joined the municipalities against the restart in the latest poll, bringing municipalities opposed to the restart to four, or half of the eight local governments within a 30-km radius of the facility.
The Genkai town hall and the Saga prefectural government have already agreed to resuming plant operations.
(This article was written by Natsuki Okamura, Rei Inoue and Yusuke Fukui.)

NRA getting tougher on TEPCO?

August 30, 2017

NRA chair ties nuke plant restart to TEPCO taking lead on Fukushima decommissioning
https://mainichi.jp/english/articles/20170830/p2a/00m/0na/017000c
Tokyo Electric Power Co. (TEPCO) must take the lead on decommissioning reactors at the disaster-stricken Fukushima No. 1 nuclear plant if it wants reactors at another of its plants to pass safety

inspections, Nuclear Regulation Authority (NRA) Chairman Shunichi Tanaka told the Mainichi Shimbun in an Aug. 29 interview.

- 【Related】TEPCO begins extending ice wall to reduce tainted water in Fukushima
- 【Related】Highly radioactive water leak at Fukushima No. 1 nuke plant

"TEPCO must do things based more on its own judgment," and not depend so much on the government and other organizations, said Tanaka, whose term as NRA chairman comes to a close on Sept. 18 this year. Tanaka added that the No. 6 and 7 reactors at TEPCO's Kashiwazaki-Kariwa nuclear plant in Niigata Prefecture would only pass NRA safety screenings if the utility took the initiative in the Fukushima decommissioning. The reactors must pass the inspections before they can be restarted.
The NRA was to summon TEPCO Chairman Takashi Kawamura and President Tomoaki Kobayakawa on Aug. 30 to sound the executives out about the utility's intentions regarding the reactor decommissioning at the Fukushima No. 1 plant and ideas about safety, among other issues.
"We want to confirm whether the top people at TEPCO are aware of their responsibility for the Fukushima No. 1 plant accident, and if they are resolved to deal with it properly," Tanaka told the Mainichi. He had earlier expressed concerns that the utility has so far proven unable to process radioactive tritium-contaminated water, and that the water continues to collect at the plant.
"If TEPCO is unable to finalize the decommissioning of the Fukushima reactors, it is simply not qualified to restart the Kashiwazaki-Kariwa plant," Tanaka has said. TEPCO submitted a written response to Tanaka's position on Aug. 25, but the document did not include a concrete plan to deal with the contaminated water.
Tanaka pointed out during the Mainichi interview that there were people and industries such as the fishery sector that could be impacted by the water issue, saying, "TEPCO likely can't reveal anything because there are people on the receiving end of this. More than concrete plans, we are asking TEPCO management about their ideas on safety."

Restart TEPCO reactors?

September 6, 2017

Nuclear regulator prepares to OK TEPCO reactors
https://www3.nhk.or.jp/nhkworld/en/news/20170906_25/

Japan's nuclear regulators will decide next week whether to certify the safety of reactors at a nuclear plant in Niigata Prefecture. This would bring the plant, run by the Tokyo Electric Power Company, one step closer to restarting the reactors.

The Nuclear Regulation Authority has been interviewing TEPCO managers about safety measures for the No.6 and No.7 reactors at the Kashiwazaki-Kariwa plant.

One of the regulators at a meeting on Wednesday agreed with TEPCO that putting the plant back into regular operation is a way of taking responsibility for the 2011 nuclear accident in Fukushima.

Another asserted that the Fukushima accident had helped improve TEPCO's safety awareness.

But other members of the regulating authority were skeptical. One asked whether TEPCO's promise alone was sufficient for deciding that the plant is ready to restart.

The regulators meet again next Wednesday to decide whether to draft documents that would effectively certify that the reactors have cleared safety screening procedures.

They would be the first of TEPCO's reactors to get the go-ahead for a restart since the Fukushima meltdown. They would also be the first boiling water reactors -- the same as those in the crippled Fukushima plant -- to pass screening.

Niigata Governor Ryuichi Yoneyama has indicated he will not permit a restart of the reactors until the investigation into the Fukushima accident is completed.

Trust TEPCO again?

September 7, 2017

NRA doubts TEPCO's safety vow in Niigata, plans legal move
http://www.asahi.com/ajw/articles/AJ201709070026.html
By MASANOBU HIGASHIYAMA/ Staff Writer
The Nuclear Regulation Authority, skeptical of Tokyo Electric Power Co.'s promise to put safety ahead of profits, plans to gain legal assurances before allowing the embattled utility to start operating nuclear reactors again.
TEPCO has applied to restart two reactors at its Kashiwazaki-Kariwa plant in Niigata Prefecture, which would be the first run by the company since the disaster unfolded at its Fukushima No. 1 nuclear plant in March 2011.
Although NRA members agreed that the No. 6 and No. 7 reactors at the Kashiwazaki-Kariwa plant passed new regulations on technological aspects, they could not agree on whether the company has learned its lessons about safety management since the triple meltdown at the Fukushima plant.
To ensure TEPCO will put safety at the forefront of its operations, the NRA is considering holding the utility legally responsible for completing the entire decommissioning process of the Fukushima No. 1 nuclear plant.
The regulator expects to draft a checklist to verify the Kashiwazaki-Kariwa plant's safety and other steps before it makes a final decision on whether to allow TEPCO to restart the reactors. The next meeting is scheduled for Sept. 13.
The NRA had previously determined that 12 reactors at six nuclear plants met new nuclear reactor regulations shortly after completion of their technological examinations.
The NRA also finished its technological examinations of the No. 6 and No. 7 reactors, the newest ones at the Kashiwazaki-Kariwa plant.
The plant has seven reactors, making it one of the largest nuclear power stations in the world. The two reactors that TEPCO wants to put online each has a capacity of 1.36 gigawatts.
TEPCO has said the resumption of the reactors are needed to turn around its business fortunes.

But NRA commissioners are reluctant to allow TEPCO to bring the plant online based solely on the results of the technological screening.
After the chairman and president of the utility were replaced in June, the NRA summoned the new top executives in July.
The watchdog demanded that they give a written response to the regulator's position that TEPCO "is not qualified to operate the Kashiwazaki-Kariwa plant, given the seeming lack of determination and spotty track record to take the initiative in decommissioning (the Fukushima No. 1 plant)."
In August, the company submitted a paper to the NRA promising to "take the initiative in addressing the problem of victims of the nuclear disaster and to fulfill the task to decommission the plant."
The paper also said the company "has no intention whatsoever to place economic performance over safety at the (Kashiwazaki-Kariwa) plant."
Tomoaki Kobayakawa, the new president of TEPCO, called the paper a "promise to the public."
Although the NRA commissioners on Sept. 6 recognized TEPCO's commitment to safety to a certain degree, doubts remained.
Nobuhiko Ban, an NRA member who is a specialist on radiological protection, called for a system that would keep TEPCO committed to safety management in the future.
"Is it all right for us to take TEPCO's vow at face value?" he said.
The NRA then decided to consider legal ways to hold TEPCO accountable for safety issues.

TEPCO's Niigata nuclear plant set to clear screening to restart reactors
https://mainichi.jp/english/articles/20170906/p2a/00m/0na/016000c
September 6, 2017 (Mainichi Japan)
The Nuclear Regulation Authority (NRA) looks set to grant permission for Tokyo Electric Power Co. (TEPCO) to restart the No. 6 and No. 7 reactors at its Kashiwazaki-Kariwa Nuclear Power Plant in Niigata Prefecture, it has been learned.

- 【Related】Mayor to link reactor decommissioning to restarting 2 others at same TEPCO plant

At a meeting on Sept. 6, the NRA discussed whether or not TEPCO is fit to restart the plant -- with none of the meeting attendees ruling out the firm's eligibility. The technical screening process has almost finished, and the nuclear watchdog is set to compile a report stating that TEPCO has met the new safety standards.
This is the first time that TEPCO, which was behind the accident at the Fukushima No. 1 Nuclear Power Plant in 2011, has been forecasted to clear the new standards for nuclear power plants. In addition, it is set to be the first time for boiling water reactors, like the ones at Fukushima, to meet the necessary criteria.
For TEPCO, the restarting of the Kashiwazaki-Kariwa plant is a key way to recover earnings. However, Niigata Gov. Ryuichi Yoneyama wants to put priority on verifying the cause of the Fukushima disaster first, before giving a green light to the restart of the Kashiwazaki-Kariwa plant. According to Yoneyama, the verification process will take "three to four years," and therefore, the utility cannot expect an early restart, even if the reactors clear the NRA screening process.
In September 2013, TEPCO applied to have No. 6 and No. 7 reactors at its Kashiwazaki-Kariwa plant screened under the new standards. Consequently, the NRA set about checking the application intensively -- recognizing this as the model for boiling water reactor screenings.
During the screening process, multiple changes were made to given conditions such as the possibility of ground liquefaction in costal levees at the plant. Furthermore, it emerged in February this year that TEPCO had submitted false reports to the NRA about a quake-proof building, which would be used as the

command and control hub in case of an accident, even though company officials knew that the building was insufficiently earthquake resistant. As a result, the NRA summoned then TEPCO President Naomi Hirose, and asked him to overhaul the screening application form. Hirose complied and TEPCO resubmitted the form in June.
While conducting the screening, the NRA focused on the fact that TEPCO had caused a major accident (in 2011), and demanded that TEPCO submit its thoughts regarding plant safety, as well as its approach toward decommissioning the Fukushima plant.
The NRA also interviewed senior TEPCO executives including President Tomoaki Kobayakawa, twice, in what can be regarded as a much more stringent screening process than for any other nuclear plant.

Why has NRA changed its mind?

September 7, 2017

Nuclear regulator does dizzying U-turn on TEPCO reactor restart plans
https://mainichi.jp/english/articles/20170907/p2a/00m/0na/019000c
Tokyo Electric Power Co. (TEPCO), the utility responsible for the Fukushima No. 1 nuclear plant and its March 2011 triple meltdown, is aiming to get the reactors at its other power plants back on line.

- 【Related】TEPCO's Niigata nuclear plant set to clear screening to restart reactors
- 【Related】Mayor to link reactor decommissioning to restarting 2 others at same TEPCO plant
- 【Related】NRA chair ties nuke plant restart to TEPCO taking lead on Fukushima decommissioning

The Nuclear Regulation Authority (NRA), which must approve any restarts, had been holding to a very strict line on TEPCO applications. However, on Sept. 6 the NRA abruptly changed track, taking a more sympathetic attitude and indicating that the No. 6 and 7 reactors at the utility's Kashiwazaki-Kariwa nuclear plant in Niigata Prefecture would likely pass their safety inspections -- a prerequisite for restart approval.
Despite the NRA's suddenly sunny attitude, the prefectural government has not budged from its more cautious position. And TEPCO, which has made the Kashiwazaki-Kariwa plant a chief pillar of its business recovery plans, cannot flip the reactors' "on" switch without the prefecture's imprimatur, meaning the plant still has no clear restart schedule.
When the NRA summoned TEPCO President Tomoaki Kobayakawa and other top managers on July 10 this year to testify on the utility's competence to keep running nuclear plants, authority chairman Shunichi Tanaka was unequivocal and unforgiving.
"If TEPCO is unwilling or unable to finalize the decommissioning of the Fukushima (No. 1 station) reactors, it is simply not qualified to restart the Kashiwazaki-Kariwa plant," Tanaka told the executives, adding, "I don't see TEPCO showing any independent initiative whatsoever."
The NRA chairman was referring to the longstanding problems with contaminated water and radioactive waste disposal plaguing TEPCO's Fukushima plant decommissioning efforts. The utility tends to focus too much on trying to read the government's mind on any and all Fukushima issues -- an attitude that has long drawn NRA criticism.

When the NRA inspected the Kashiwazaki-Kariwa plant's No. 6 and 7 reactors, it added a new evaluation category to the usual technological checklist, though it was not part of the new safety standards: "eligibility." That is, TEPCO's eligibility to run a nuclear power plant at all. After all, it was one of TEPCO's plants that had succumbed to the worst nuclear disaster since Chernobyl. "TEPCO is different from other (power) companies," Tanaka had said.

TEPCO President Kobayakawa and Chairman Takashi Kawamura are also a source of NRA concern. The two had no role in the utility's response to the 2011 meltdowns, and Kobayakawa replaced a much more experienced hand in Naomi Hirose, a TEPCO managing director when the disaster struck. After his NRA dressing-down in July, Kobayakawa apparently visited the Fukushima disaster zone seven times.

However, there has been an apparent U-turn in Tanaka's stance. A document submitted on Aug. 25 to the NRA under Kobayakawa's name was sewn with phrases like, "We will carry the (Fukushima) reactor decommissioning through to the end," and other terms suggesting a determined TEPCO attitude. At the same time, the document was bereft of details on specific preparedness measures or progress benchmarks for the decommissioning work.

Nevertheless, when Kobayakawa again appeared before the NRA on Aug. 30, the body indicated its acceptance of TEPCO's position. Taking the contaminated water problem "as one example," Tanaka stated that he recognized TEPCO's lack of concrete countermeasure planning couldn't be helped under the circumstances. One NRA executive revealed to the Mainichi Shimbun, "**We avoided demanding a detailed (disposal measures) plan because we don't legally have that authority, and doing so could pose legal risks."**

Pro-TEPCO sentiment was on conspicuous display when the NRA met again on Sept. 6, including acting Chairman Toyoshi Fuketa's declaration that he "felt TEPCO's drive to pass on the lessons of the (Fukushima nuclear) accident."

Committee member Nobuhiko Ban stated that while the document the utility had submitted in the summer was a "declaration of intent," he was "concerned over whether this alone can constitute eligibility" to run a nuclear plant. However, Tanaka wrapped up discussion by saying that "circumstances are not such that we can deny (TEPCO's) eligibility."

Tanaka will leave his NRA post on Sept. 18 after completing his five-year term in the chairmanship, and at a post-meeting news conference he was asked if he had wanted to bring the TEPCO issue to a close while in office.

"I can't say that I've never felt that way," Tanaka replied.

Start of Rokkasho plant postponed again

September 14, 2017

Work to be delayed for nuclear recycling plant

https://www3.nhk.or.jp/nhkworld/en/news/20170914_14/

The planned completion of a nuclear fuel reprocessing plant in Aomori Prefecture is expected to be difficult by the first half of fiscal 2018, because of problems involving inflow of rainwater.

The Nuclear Regulation Authority indicated on Wednesday that the plant in Rokkasho Village, northeastern Japan, which is supposed to reprocess spent nuclear fuel, will not pass screening until its

safety is ensured for the entire facility. Passing the screening is a precondition for full-scale operation of the plant, which is a pillar of the government's nuclear fuel recycling program.

The decision will force the operator Japan Nuclear Fuel Limited to delay its plan to complete the plant as planned.

Last month, workers at the plant found that rainwater has been flowing through underground pipes into a building where an emergency power generator is installed. It was also revealed that the underground tunnel for the piping has not been inspected for 14 years.

The operator says it will present an inspection plan by the end of the current fiscal year in March 2018.

But observers say the screening process will likely be significantly extended. They say it will also take a long time to gain approval for detailed plant designs and to pass inspection, making it difficult to complete the plant as scheduled.

TEPCO eligible to operate nuke plants again...under conditions

September 14, 2017

Conditional approval of TEPCO's eligibility
https://www3.nhk.or.jp/nhkworld/en/news/20170913_34/
Japan's nuclear regulators have affirmed that Tokyo Electric Power Company is eligible to operate nuclear reactors again, but they have imposed some conditions.

The members of the Nuclear Regulation Authority made the decision at a meeting on Wednesday.

They have been debating whether or not to give the utility a green light to restart 2 reactors at the Kashiwazaki-Kariwa plant in Niigata Prefecture, central Japan.

TEPCO is the operator of the crippled Fukushima Daiichi plant.

During the meeting, a plan was put forth. According to the plan, TEPCO must express in its safety regulations its determination to tackle the decommissioning of the Fukushima Daiichi plant and its determination to prioritize safety over economic efficiency. In return, the regulators will certify that the company is eligible to operate nuclear reactors.

The plan also requires the industry ministry to make its intention to supervise the company clear.

At the meeting on Wednesday, the regulators agreed to certify that TEPCO is eligible to operate reactors as long as the industry ministry and the president of TEPCO agree to the provisions in the plan.

The regulators will compile a report that will effectively certify that TEPCO has their approval to restart the 2 reactors in Niigata.

NRA "too hasty" in giving OK to TEPCO

September 14, 2017

EDITORIAL: NRA too hasty in giving green light to TEPCO to restart reactors

http://www.asahi.com/ajw/articles/AJ201709140030.html

Although the Nuclear Regulation Authority has decided to give the green light to Tokyo Electric Power Co. to restart nuclear reactors, we question the fitness of the utility, which is responsible for the accident at the Fukushima No. 1 nuclear power plant, to manage nuclear facilities.

The NRA has been screening TEPCO's application to resume operations of the No. 6 and No. 7 boiling-water reactors at its Kashiwazaki-Kariwa nuclear plant in Niigata Prefecture.

The NRA on Sept. 13 acknowledged with conditions that TEPCO is eligible for operating nuclear plants after examining the company's safety culture and other issues.

The nuclear safety watchdog said it will make TEPCO incorporate a written pledge by TEPCO President Tomoaki Kobayakawa to secure safe operations into its safety code. Kobayakawa promised to put higher priority on safety than on profitability. The NRA made clear it also has the power to order TEPCO to suspend its reactor operations or rescind the utility's license if a serious violation is found.

Establishing an effective system to monitor the company's nuclear power operations to ensure their safety is one thing. Assessing the utility's fitness to operate reactors is another.

Why is the NRA in such a rush to make the decision when it still harbors doubts about TEPCO's eligibility to operate nuclear reactors?

Was the move in any way driven by a desire on the part of Shunichi Tanaka, chairman of the NRA, to settle the issue by the end of his five-year term, which is due to expire soon?

It is hard to deny the impression that the NRA has unnecessarily rushed into the decision, as it is clearly premature.

A corporate safety culture usually deteriorates in a five-stage process--with each marked, respectively, by overconfidence, complacency, disregard, danger and collapse.

TEPCO's safety culture was already collapsed before the 2011 nuclear disaster at the Fukushima No. 1 nuclear power plant, as indicated by a series of scandals involving the company's attempts to cover up safety problems and falsify data.

That's how TEPCO itself summed up the root causes of the catastrophic accident in a report published in 2013.

In an attempt to fix its corporate culture, TEPCO established an oversight committee, which includes independent members and regularly receives reports from the management team.

The utility has also published a somewhat self-congratulatory report on the effectiveness of measures it has taken.

It was revealed only last year, however, that the company's president at the time of the Fukushima accident told employees not to use the term "core meltdown" in describing what was unfolding.

It has also been disclosed that TEPCO had failed to inform the regulator that the earthquake resistance of a key facility at the Kashiwazaki-Kariwa plant was insufficient.
Only last month, it emerged that TEPCO had seriously delayed announcing that falling levels of underground water being pumped up at the Fukushima plant set off an alarm. The NRA bitterly criticized the delay, saying the suspicion that TEPCO was still in the habit of "covering up inconvenient facts and deceiving people" could not be avoided.
Why then, has the NRA concluded there is "no reason" to proclaim that TEPCO is unfit to operate nuclear reactors?
In the aftermath of the Fukushima disaster, many critics, both at home and abroad, pointed out that both the operators and regulators of nuclear plants in Japan focus too much on hardware, such as facilities and equipment.
All operators of nuclear plants in Japan, not just TEPCO, face the challenge of reforming the way they manage their organizations as well as the mind-set among their employees in order to foster and firmly establish a safety culture.
Even the more stringent reactor regulations imposed by the NRA after the triple meltdown in 2011 are not effective enough in this respect.
Evaluating a utility's fitness to operate nuclear plants is a new task for the NRA.
A special task force set up by the body started working on the criteria and procedures for such evaluations in July. The team is expected to produce an interim report on its work by the end of the year.
Here's how the NRA should tackle this challenge. It should first establish effective guidelines for eligibility assessments. Then, it should apply the guidelines to the screening of specific plans to restart reactors to ensure that a solid safety culture underpins the operations of all nuclear reactors.
--The Asahi Shimbun, Sept. 14

Editorial: Can resolve alone qualify TEPCO to operate nuclear reactors?

https://mainichi.jp/english/articles/20170914/p2a/00m/0na/019000c

Japan's Nuclear Regulation Authority (NRA) has judged that Tokyo Electric Power Company Holdings Inc. (TEPCO) is qualified, under certain conditions, to operate nuclear reactors.

- 【Related】Nuclear regulator defers giving safety OK for idle TEPCO reactors
- 【Related】Nuclear regulator does dizzying U-turn on TEPCO reactor restart plans
- 【Related】TEPCO's Niigata nuclear plant set to clear screening to restart reactors

The judgment comes in line with the nuclear watchdog's safety screening of the idled No. 6 and 7 reactors at TEPCO's Kashiwazaki-Kariwa nuclear plant in Niigata Prefecture.
Technical screening of the reactors has practically finished, and in the near future the NRA is expected to release a draft of screening documents indicating that the reactors have passed new safety standards implemented in the wake of the Fukushima nuclear disaster.
But when looking closely at the screening process, the foundation for the nuclear watchdog's decision appears flimsy, and we have to say that it lacks persuasiveness.
The NRA's decision to screen TEPCO on its qualifications to operate the reactors was an unusual step not clearly stipulated in the new safety standards. It stems from NRA Chairman Shunichi Tanaka's judgment that TEPCO, having caused the accident at the Fukushima No. 1 Nuclear Power Plant, is different from other power companies. It is understandable that an additional, high-level response is being sought from TEPCO.
In July this year, the NRA called in TEPCO officials including the utility's president Tomoaki Kobayakawa, and Tanaka put pressure on them, telling them, "If TEPCO is unwilling or unable to see through the

decommissioning of the Fukushima reactors, it is simply not qualified to operate a nuclear power plant." He requested that TEPCO take the initiative in tackling problems such as the accumulation of tainted water on the grounds of the Fukushima No. 1 nuclear plant.

In response, TEPCO last month submitted a document to the NRA in the name of the president. It stated that the company would "proactively face the parties involved and see through the decommissioning of the reactors," and that it would "deal with decommissioning at the Fukushima plant and safety improvements at the Kashiwazaki-Kariwa plant at the same time." Though the document displayed TEPCO's resolve, it contained no concrete measures on dealing with contaminated water or other such issues.

In spite of this, Tanaka and other officials at the NRA went straight ahead and accepted the document. They took the position that the effectiveness of TEPCO's resolve could be ensured by making the utility express it in nuclear plant safety stipulations, with which operators are obliged to comply.

However, there are no clear standards for evaluating the stance with which TEPCO is tackling decommissioning work and safety countermeasures. Even if the company states its subjective resolve in safety regulations, doubts remain about how much of a binding effect that will have on the utility's actual stance.

In screenings to date there have emerged several findings which cast doubt on TEPCO's fitness to operate reactors at the Kashiwazaki-Kariwa plant, including the discovery that the utility did not report to the NRA that the quake resistance of a seismic-isolated building that is supposed to serve as a base for handling accidents was not up to scratch.

Niigata Gov. Ryuichi Yoneyama has indicated that inspection of the disaster at the Fukushima No. 1 plant is a priority issue, and so even if the Kashiwazaki-Kariwa reactors pass screening, there are no immediate prospects of being able to restart them. So why is the NRA in such a hurry to reach a conclusion?

Tanaka's tenure as chairman of the NRA will expire this month. One might well think the NRA is rushing to clear reactivation of the reactors before he steps down. If things keep going the way they are, public trust in the NRA as a government nuclear watchdog will only decline.

What altered NRA's assessment of TEPCO?

September 18, 2017

NRA screening of Tepco's restart plan

https://www.japantimes.co.jp/opinion/2017/09/18/editorials/nra-screening-tepcos-restart-plan/#.Wb_OLMZpGos

The Nuclear Regulation Authority appears to be moving toward approving Tokyo Electric Power Company Holding Inc.'s bid to restart two of the idled reactors at its Kashiwazaki-Kariwa power plant in Niigata Prefecture — the same type of boiling water reactor (BWR) that suffered core meltdowns at its Fukushima No. 1 plant in 2011. Tepco sees the restart of reactors 6 and 7 at the Niigata plant as vital to its financial reconstruction. However, the way the NRA is wrapping up its safety screening of Tepco's plan seems less than convincing.

Even if the NRA gives it nod, it remains uncertain when the plant will be restarted given that Niigata Gov. Ryuichi Yoneyama says it will take "at least three to four more years" before making a judgment on whether to grant local consent to the restart, which he says will require a full review of the 2011 crisis. Instead of rushing to a decision, what's required of the NRA is a screening process that will be accountable to the public.

In a meeting last Wednesday, the NRA held off certifying the safety of the two Kashiwazaki-Kariwa reactors, as it had been widely expected to do, in the face of criticism that it has not sufficiently discussed whether Tepco, responsible for the 2011 disaster, is fit to operate a nuclear plant. It was believed that the NRA wanted to wrap up the screening while Chairman Shunichi Tanaka, who will leave the post this week, was still on board. Still, Tanaka told a news conference that the nuclear watchdog has reached a consensus that Tepco is qualified to run nuclear plants.

Just two months ago, Tanaka, in a meeting that was also attended by Tepco's top management, severely criticized the utility over the way it was approaching the task of cleaning up the mess of Fukushima No. 1, saying that a power company which "lacks the will to take the initiative" in decommissioning the crippled Fukushima plant "does not have the right to restart operations" of a nuclear power plant. While Tanaka urged the Tepco executives to submit a document detailing how the firm intends to dispose of radiation-contaminated water at Fukushima No. 1, the utility's reply delivered in August did not mention any concrete plans for disposing of the contaminated water that has built up there.

During a hearing in late August, however, the utility pledged its resolve to see the decommissioning process through to the end. This has reportedly gained the understanding of the NRA. The nuclear watchdog began wrapping up the screening of Tepco's bid at its meeting on Sept. 6 — in which participants reportedly gave positive comments about its plan, such as that the experience of the Fukushima catastrophe should serve as a plus for the company's operation of its other plants. Another participant was quoted as saying that Tepco's responsibility for the 2011 accident is one thing and its technological capacity to run nuclear plants is another.

At the last meeting, the NRA reportedly agreed that Tepco is fit to restart the reactors at Kashiwazaki-Kariwa — on condition that the utility state in its rules its determination to implement all new safety measures in running nuclear power plants. It's not clear how the doubts expressed so strongly in July about Tepco's qualifications as a nuclear plant operator have been dispelled by verbal pledges of its "determination" to follow safety rules and by writing them down in its safety rules.

More than six years after the meltdowns, the path to decommissioning Fukushima No. 1 still has a long way to go. Detailed conditions of the melted fuel debris inside the crippled reactors — the removal of which will pose the biggest hurdle to decommissioning the plant — remain unknown.

Just two years after the disaster broke out, Tepco filed for an NRA screening of its plan to reactivate the reactors at Kashiwazaki-Kariwa. Tepco is placing its hopes on resuming operation of the Niigata plant — the world's largest nuclear power station in terms of output capacity — as a key to restoring its financial bottom line, which has been battered by the massive costs of paying for the aftermath of the 2011 catastrophe.

At that time, Tepco said there was no problem with the earthquake resistance of an emergency response center at the Kashiwazaki-Kariwa plant. But even though it later learned that the emergency unit's quake resistance was insufficient, it failed to report this fact to the NRA for three years. It was only in June that the company submitted a revised application. **That alone brings into question Tepco's commitment to safety as a nuclear power plant operator. One wonders what altered the NRA's assessment of Tepco to determine that the utility is fit to run a nuclear plant.**

TEPCO to make legal safety pledge...

September 20, 2017

Tepco to make legal safety vow as it seeks restart of reactors at Kashiwazaki-Kariwa plant
https://www.japantimes.co.jp/news/2017/09/20/national/tepco-make-legal-safety-vow-seeks-restart-reactors-kashiwazaki-kariwa-plant/#.WcIzVcZpGos
Kyodo

The head of Tepco said Wednesday that the company will make a legal safety pledge — in response to a request by the nation's nuclear watchdog — as it seeks approval to restart reactors at its Kashiwazaki-Kariwa plant in Niigata Prefecture.
Tomoaki Kobayakawa, president of Tokyo Electric Power Company Holdings Inc., told the Nuclear Regulation Authority that the firm will work to build a culture of safety as it seeks the restart of undamaged but idled reactors 6 and 7 at the plant on the Sea of Japan coast.
The nuclear watchdog called for the pledge as part of the firm's legally binding reactor safety program because it operates the Fukushima No. 1 nuclear power plant, the site of a major nuclear disaster in the aftermath of the massive March 2011 earthquake and tsunami.
Tepco's promise will pave the way for the regulator's safety clearance for the two boiling-water reactors — the same type as the ones that suffered meltdowns in the 2011 disaster.
The regulator will soon compile a draft document for the two units which will serve as certification that the utility has satisfied new stricter safety requirements implemented since the nuclear disaster.
It will then consult the economy, trade and industry minister, who oversees the nuclear industry, to confirm that Tepco is fit to be an operator. It will also solicit comments from the public before formally giving clearance.
Even if the reactors clear the safety checks, local governments near the plant remain cautious. Niigata Gov. Ryuichi Yoneyama, for example, has said it will take "around three to four years" for the utility to win the required local consent for a restart.
The Nuclear Regulation Authority said last week that Tepco was qualified" as a nuclear plant operator, but that it wanted the utility to express its resolve to ensure safety in a legal document, not just in words.
Safety programs drawn up for reactors need to be approved by the regulator, which can demand a halt to nuclear power operations if it finds a grave violation.
"We intend to tackle the unending mission of improving the safety of nuclear power and to complete the decommissioning and compensation of the Fukushima No. 1 complex," Tepco's Kobayakawa said at the regulator's meeting on Wednesday. "We will also make efforts to maintain qualification" as an operator of nuclear reactors, he said.
Reactors 6 and 7 at the Kashiwazaki-Kariwa plant are the newest among the seven units at the plant. The complex is one of the world's largest nuclear power plants, with a combined output capacity of 8.2 million kilowatts.
For a reactor to be restarted, it first needs to clear the safety requirements introduced in the wake of the Fukushima nuclear crisis. Tepco filed for safety assessments of the two units in September 2013.
Tepco, which is facing massive compensation payments and other costs in the aftermath of one of the world's worst nuclear crises, has been desperate to resume operations of its idled reactors so it can reduce spending on costly fossil fuel imports for thermal power generation.

While some reactors run by other utilities have resumed operations by satisfying the new regulations, Tepco has been under close scrutiny by regulators over whether it is qualified to once again operate a nuclear power plant.

NRA approves safety mesures at Kashiwazaki-Kariwa Nos.6 and 7

October 4, 2017

NRA approves safety measures at TEPCO plant in Niigata
http://www.asahi.com/ajw/articles/AJ201710040031.html
By MASANOBU HIGASHIYAMA/ Staff Writer
Japan's nuclear watchdog on Oct. 4 approved Tokyo Electric Power Co.'s safety measures taken to restart two reactors in Niigata Prefecture, the first such approval for the company since the Fukushima nuclear disaster unfolded.
The Nuclear Regulation Authority confirmed the results of its screening on the technological aspects of the No. 6 and No. 7 reactors that TEPCO wants to bring online at its Kashiwazaki-Kariwa nuclear plant.
It was also the first time for the NRA to conclude that boiling-water reactors, the same type as those at TEPCO's crippled Fukushima No. 1 nuclear plant, met the new safety standards adopted after the meltdowns at the plant in 2011.
The NRA plans to hear opinions from the public about its judgment for 30 days before deciding on whether to make the approval official. It will also solicit the views of the minister of economy, trade and industry.
As one condition for official approval, the NRA is requiring the industry minister to oversee the utility's management policy concerning its initiative and responsibility for work to decommission the Fukushima No. 1 nuclear plant.
From now, the NRA will check equipment designs and security regulations, including how TEPCO will guarantee its promise that its priority is on safety, not economic benefits.
The NRA's screening process at the Kashiwazaki-Kariwa nuclear plant went beyond checking technological aspects of TEPCO's safety measures. Given TEPCO's history of mistakes and blunders, NRA members also discussed whether the utility was even eligible to operate nuclear power plants.
In response to the NRA's demands that TEPCO take full responsibility for decommissioning the Fukushima No. 1 plant, the utility in late August stressed that its stance of putting importance on safety is "a promise to the people."
The NRA then approved TEPCO's eligibility but attached some conditions.
In late September, however, it came to light that workers at the Fukushima No. 1 plant were erroneously setting water gauges to measure groundwater levels of wells around reactor buildings, which could cause leaks of highly contaminated water to the outside water.
Inspectors will face a formidable challenge in judging individual issues facing TEPCO based on security regulations.
However, even if TEPCO passes all of the screenings, it must win the consent of local governments to restart the reactors at the Kashiwazaki-Kariwa nuclear plant.
Niigata Governor Ryuichi Yoneyama has said that he will wait for three or four years to make decision on the restarts, until his prefectural government completes its own investigation into the cause of the 2011 nuclear disaster at the Fukushima No. 1 plant.

TEPCO reactors clear safety review for 1st time after Fukushima

https://mainichi.jp/english/articles/20171004/p2g/00m/0dm/054000c

TOKYO (Kyodo) -- Two reactors in Niigata Prefecture on the Sea of Japan coast run by the operator of the crippled Fukushima nuclear plant cleared government safety standards on Wednesday, becoming the first of the utility's idled units to pass tightened screening.

The Nuclear Regulation Authority endorsed at its meeting a draft document that serves as certification that Tokyo Electric Power Company Holdings Inc.'s Nos. 6 and 7 reactors at Kashiwazaki-Kariwa power station have met the new, stricter safety standards introduced after the Fukushima disaster.

The two reactors are the newest among the seven units at the Kashiwazaki-Kariwa plant. The complex is one of the world's largest nuclear power plants, with a combined output capacity of 8.2 million kilowatts.

Despite the effective approval by the nuclear regulator, the actual restart of the two reactors will likely be at least a few years away as Niigata Gov. Ryuichi Yoneyama says it will take "around three to four years" for the utility to win local consent for the resumption of operation.

Formal approval of the restart by the nuclear watchdog is expected after receiving public opinions and consulting with the economy, trade and industry minister to confirm that Tepco is fit to be an operator.

The clearance of the two units is likely to be a boost for the government of Prime Minister Shinzo Abe, which is keen to retain nuclear power generation despite Japan suffering the world's worst nuclear disaster since Chernobyl at the Fukushima Daiichi nuclear complex in March 2011, triggered by a massive earthquake and tsunami.

Tepco, facing huge compensation payments and other costs stemming from the Fukushima crisis, has been desperate to resume operation of its idled reactors so it can reduce spending on costly fossil fuel imports for non-nuclear thermal power generation.

It filed for safety assessments of the two idled reactors at Kashiwazaki-Kariwa plant in September 2013.

In addition to assessing technical requirements, the review focused on whether Tepco is qualified to once again operate a nuclear power plant as it struggles with work to scrap the Fukushima Daiichi complex, an effort expected to take until around 2051, and reduce contaminated water around the crippled plant where radiation levels remain high.

The two reactors are boiling-water reactors, the same as those that experienced meltdowns in the Fukushima crisis. No such types have previously cleared Japan's safety standards after the Fukushima disaster, partly as they are required to conduct major refurbishment to boost safety.

Under the new safety requirements, BWRs must be equipped with filtered venting systems so that radioactive substances will be reduced when gas and steam need to be released to prevent damage to containment vessels.

The venting facilities are not an immediate requirement for pressurized water reactors as PWRs are housed in containers larger than those of BWRs, giving more time until pressure rises inside the containers.

In the review, the regulator had questioned Tepco on its posture to ensure the safety of the units. The company last month agreed to a request from the regulator to include a safety pledge as part of its legally binding reactor safety program.

Safety programs drawn up for reactors need to be approved by the regulator and if it finds a grave violation, it can demand the utility halt nuclear power operations.

TEPCO's nuclear plant to clear NRA check

https://www3.nhk.or.jp/nhkworld/en/news/20171004_16/

Japan's nuclear regulator has taken a step further in allowing Tokyo Electric Power Company, or TEPCO, to restart its Kashiwazaki-Kariwa plant in Niigata Prefecture on the Sea of Japan coast.

The nuclear plant would be the first of those held by the operator of the crippled Fukushima Daiichi plant to soon be given the regulator's green light under the requirements introduced after the 2011 accident.

The commissioners of the Nuclear Regulation Authority on Wednesday unanimously adopted its draft assessment for the plant's No.6 and 7 reactors. The plant has 7 reactors.

The assessment says safety measures for the 2 reactors set forth by TEPCO meet the requirements.

The measures include introducing new equipment and procedures for use in case of severe accidents, such as leaks of radioactive substances from the plant's damaged containment vessel.

The reactors would also be the first of Japan's boiling-water-type reactors -- the same type as those that melted down at Fukushima Daiichi -- to get approval for restarting.

The regulator plans to invite the public to express opinions for a month starting on Thursday before it gives official approval.

Meanwhile, Niigata Governor Ryuichi Yoneyama has indicated that he will not decide on whether to give necessary consent for the restart before the prefecture's investigation into the 2011 accident is complete. The probe is expected to take 3 or 4 years.

In assessing the Kashiwazaki-Kariwa's restart, the regulator took the unusual step of looking into the eligibility of TEPCO as a nuclear plant operator.

In response, the firm promised to express determination for decommissioning the Fukushima Daiichi in the safety codes for the Kashiwazaki-Kariwa plant.

The commissioners also noted that a new emergency system to cool heated cooling water by using seawater is effective. They decided to include it in their regulation so that other boiling-water-type reactor operators take a similar measure.

They say the new system is more effective than ventilation that releases gas outside to lower inner pressure of reactors.

Outside the building in Tokyo where the NRA meeting was held, about 30 activists protested the decision. They said TEPCO is not qualified to run nuclear reactors and that the Fukushima Daiichi crisis is not over.

NRA should explain its decision

October 4, 2017

NRA questioned TEPCO's fitness to run plant
https://www3.nhk.or.jp/nhkworld/en/news/20171004_29/

Japan's nuclear regulator interviewed executives of Tokyo Electric Power Company in July after the utility's corporate culture was called into question.

The Nuclear Regulation Authority took the unusual step of looking into whether TEPCO was qualified to restart another nuclear plant.

The operator kept quiet about the meltdowns at its Fukushima Daiichi plant for more than 2 months after the accident in March 2011. It has also been criticized for giving misleading information about the ability of emergency facilities at its Kashiwazaki-Kariwa plant in Niigata Prefecture to resist earthquakes.

During the interview of executives, Shunichi Tanaka, the NRA's chairman at the time, criticized TEPCO. He said it wouldn't be qualified to operate a nuclear plant unless it showed its determination to decommission the Fukushima reactors and to produce results. He also asked TEPCO to respond in writing.

In a statement submitted in August, TEPCO said it was tackling the matter and expressed its resolve to complete the decommissioning.

But the document failed to outline any concrete plans. Despite that, the NRA decided to recognize TEPCO as a qualified nuclear plant operator. But it was on condition that TEPCO make clear in its safety code that it was resolved to decommission the Fukushima plant and prioritize safety over economic efficiency in its operation.

Now that the regulator has effectively judged that TEPCO's Kashiwazaki-Kariwa plant has met the new safety requirements, observers say the regulator should give the public an understandable explanation of its screening process.

Restart still nowhere in sight

October 5, 2017

Despite NRA's OK, restarting reactors in Niigata Pref. still nowhere in sight
https://mainichi.jp/english/articles/20171005/p2a/00m/0na/016000c
Irrespective of Japan's nuclear watchdog giving a green light to restarting two idled reactors at a nuclear power plant in Niigata Prefecture operated by Tokyo Electric Power Company (TEPCO) Holdings Inc., there are no clear prospects in sight as to when they will be reactivated as the utility has to win approval by the host prefecture and city.

- 【Related】TEPCO reactors clear safety review for 1st time after Fukushima

"I'm in no position to object to the screening done by the state. In return, the (safety) verification that the prefectural government is going to carry out is not something to be objected to by the state," Niigata Gov. Ryuichi Yoneyama told reporters on Oct. 4 following the Nuclear Regulation Authority (NRA)'s endorsement of a draft document that says the No. 6 and No. 7 rectors at TEPCO's Kashiwazaki-Kariwa Nuclear Power Plant meet new safety standards. The NRA now bears grave responsibility as it has

effectively approved the utility responsible for the worst nuclear accident in Japanese history to operate a nuclear power station again.
Yoneyama's "safety verification" refers to the three-point check proposed by the governor. Yoneyama, who assumed office after winning the 2016 gubernatorial election for the first time with the backing of the Japanese Communist Party and other anti-nuclear power groups, remains cautious about restarting idled nuclear reactors, saying that unless the following three points are examined by the prefectural government -- the cause of the Fukushima nuclear disaster, potential effects on people's livelihoods as well as health in case of an accident and safe evacuation measures -- he cannot even accept to have a discussion on the restart.
The reason Yoneyama attaches importance to these verification points is because he believes that the NRA's screening focuses on the nuclear plant's hardware such as the safety of buildings and equipment but disregards the potential effects on local residents' livelihoods and their health should an accident occur or the legitimacy of evacuation plans. As local residents' sense of distrust of nuclear plants and TEPCO still remain strong, the governor has no choice but to be cautious about allowing the utility to restart the reactors.
At the same time, two out of three committees tasked to work on the verification were just launched in September, and discussions on concrete subjects for examination have not started. In addition, the selection of members for the general overview board, which is supposed to organize the three committees, has not been completed.
Gov. Yoneyama has indicated his intention to make a decision on the restart of the nuclear plant a key issue in the next gubernatorial election scheduled for 2020, meaning that the timing of restarting the idled reactors is absolutely nowhere in sight.
Meanwhile, Masahiro Sakurai, mayor of the nuclear plant host city of Kashiwazaki, who was previously more moderate toward nuclear power policies than Yoneyama, has hardened his stance after it was learned that TEPCO failed to report to the NRA about the inadequate earthquake resistance of a building supposed to work as a hub in a nuclear accident. In July this year, Sakurai told TEPCO to re-evaluate its business model of having seven nuclear reactors concentrated at the Kashiwazaki-Kariwa plant as a condition for approving the restart of the No. 6 and 7 reactors. He emphasized during a news conference on Oct. 4 that he would be "demanding TEPCO submit plans to decommission the No. 1 to No. 5 reactors within two years."

Government is involved in nuclear matters whether it wants it or not

October 5, 2017
EDITORIAL: Tokyo must face up to its duty in legal process for nuclear restarts
http://www.asahi.com/ajw/articles/AJ201710050032.html
Tokyo Electric Power Co. Holdings Inc. was the culprit of an unprecedented disaster at the Fukushima No. 1 nuclear power plant in 2011.
The utility remains busy to this day cleaning up after the mess.
Let us ask: should TEPCO be allowed to reactivate part of its fleet of idled nuclear reactors?
The central government has the responsibility to provide explanations to the public and to seek to gain their understanding. It should not proceed with nuclear restarts without fulfilling that duty and without serious debate.

The Nuclear Regulation Authority has approved a draft of its safety screening results for two of the seven reactors at the Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture, which TEPCO is hoping to bring back online. The nuclear watchdog's document says the reactors conform to technical standards. The development means the central government procedures for allowing the reactors to go back online have turned the corner. That also defines a milestone that could accelerate the recent trend for a "return to nuclear power."

TOKYO LEAVING IT ALL UP TO OTHERS

The administration of Prime Minister Shinzo Abe has taken the stance that, if the NRA approves a nuclear reactor's conformity with regulation standards, the central government will respect that decision and allow the reactor to go back online upon gaining the understanding of hosting communities.

But something important is missing from that approach.

Decisions on nuclear restarts, in essence, should not all be left up to the NRA and local governments to make. The central government should be making such decisions from an overall perspective by taking into account a variety of factors, including the risk of accidents, safety measures and social need.

TEPCO's Kashiwazaki-Kariwa plant, of all nuclear power plants across Japan, stands out by the large number of serious issues that have to be addressed.

For example, will survivors of the Fukushima disaster accept the restarts? Will it be possible to ensure safety, including by working out emergency evacuation plans, and erase concerns among the residents of neighboring areas?

In calling for restarts of the Kashiwazaki-Kariwa reactors, officials have placed so much emphasis on a need to make money to cover the expenses of dealing with the aftermath of the Fukushima disaster. Be that as it may, are the restarts really necessary for ensuring a stable power supply and for keeping electricity rates at low levels, as they claim?

And how precisely is the government planning to lower its dependence on nuclear energy on the basis of remorse over the Fukushima disaster?

These questions are on the minds of many members of the public, including those in Fukushima and Niigata prefectures. The central government has to address those questions.

The NRA is only responsible for technical checks by experts on the safety of nuclear power-generating facilities. This time around, the NRA took a special step, applicable only to TEPCO, in trying to decide if the utility is "qualified" to operate nuclear reactors.

That very step taken shows a flawed nature of the current procedures for nuclear restarts.

The NRA discussed, among other things, if TEPCO has sufficiently improved its culture of safety and its cliquish mold, and if a need to assign considerable labor and cash to the decommissioning of the Fukushima No. 1 reactors will not leave safety measures neglected at the Kashiwazaki-Kariwa plant.

The NRA was right in doing so, but it ended up giving the green light on the basis of the TEPCO president's mere oath of determination that the utility will hold itself responsible for safety, even though the NRA had yet to delve deeply enough into the issues of TEPCO's management structure and organizational administration. That decision could only be described as slapdash.

NEED FOR OVERALL REVIEW OF PROCEDURES

As things now stand, the procedures for allowing a nuclear reactor to be restarted are all left up to the NRA, local governments in areas hosting the nuclear plant and the power utility operating the plant. The whole setup must be reviewed and redesigned into a mechanism that allows the central government to take ample responsibility.

The Abe administration emphasizes that the NRA screening standards are the most stringent in the world. The NRA itself, however, has reiterated that the standards only amount to minimum requirements.

The Abe administration, before everything else, should stop trying to create the impression that the NRA has fully guaranteed safety.

Emergency evacuation plans are not covered by the NRA screenings. The central government should have a hand in the matter.

There are also problems in the roles of the central and local governments.

Once the NRA procedure is over, the focus of attention shifts to whether prefectural and municipal governments in the area hosting the nuclear plant will grant their approvals for a reactor restart. That procedure, however, is only based on safety agreements with the power utility operating the plant.

In view of the serious nature of the damage that would result from a severe accident, the approval procedure should be given a legal status, along with direct involvement of the central government.

There is need for creating a system whereby all local governments within a 30-kilometer radius of a nuclear plant, which are obligated to develop emergency evacuation plans, consult with the central government, discuss a broad range of issues including effectiveness of the plans and the need for a restart, and decide whether to allow a reactor to go online.

The central government has said whether to restart individual nuclear reactors is a managerial decision on the part of power utilities, thereby staying away from coming to the fore.

The use of atomic energy, however, is a "national policy implemented by the private sector," which has been bolstered by a number of policy incentives. The central government is therefore not allowed to just remain leaving it all up to nuclear plant operators.

TEPCO, of all utilities, has come under de facto central government ownership because it could no longer pay damages for the Fukushima disaster and clean up radioactive substances out of its own resources. The industry ministry is controlling TEPCO's management policies.

The central government should assume the responsibility jointly with TEPCO for addressing questions and concerns over the planned nuclear restarts.

OPPORTUNITY FOR RETHINKING NUCLEAR ISSUE

When the Kashiwazaki-Kariwa reactors formally pass NRA screenings in the near future, that is expected to have a major impact on the future of nuclear energy in Japan.

All the 12 nuclear reactors that have so far passed NRA screenings represent pressurized-water reactors located in western Japan. The reactors at the Kashiwazaki-Kariwa plant will be the first boiling-water reactors--of the same type as the crippled reactors at the Fukushima No. 1 plant--to pass the screenings. That is likely to prime the pump and boost a trend for restarting more reactors in eastern Japan in the coming years.

Reactivation of the Kashiwazaki-Kariwa reactors would also revive a picture of the "pre-Fukushima" years in the greater Tokyo region, wherein major power consumption areas enjoyed benefits at the cost of pushing the risk of nuclear power generation on provincial areas.

Scars of the Fukushima disaster have yet to be healed more than six years after the tragic event. A majority of the public remains critical of the use of atomic energy.

Amid those circumstances is the growing list of completed check marks toward nuclear restarts, with the central government remaining ever elusive on the responsibilities it would have to assume.

We cannot afford to let such a situation just continue on. It is up to our entire society to face up to the issue of nuclear power generation.

Political parties should clearly set out their stances on the issue during campaigning for the Oct. 22 Lower House election. That would prompt debate in the Diet, which would, in turn, give the public an opportunity to rethink the matter.

The question of the restarts of the Kashiwazaki-Kariwa nuclear reactors should be a trigger for such a development.

"TEPCO's nature of covering up the truth remains unchanged"

October 5, 2017
Environmental economics expert questions clearing of TEPCO reactors in safety review
https://mainichi.jp/english/articles/20171005/p2a/00m/0na/005000c#cxrecs_s
The Nuclear Regulation Authority (NRA) has endorsed a draft document certifying that the No. 6 and 7 reactors at the Kashiwazaki-Kariwa power station in Niigata Prefecture operated by Tokyo Electric Power Company Holdings Inc. (TEPCO) have met new safety standards introduced after the Fukushima disaster -- paving the way for the reactors to be restarted.
This move, however, has been questioned by Kenichi Oshima, a professor in environmental economics at Ryukoku University. Below is a summary of his comments.

- 【Related】TEPCO reactors clear safety review for 1st time after Fukushima

* * * * *
In an assessment of whether the No. 6 and 7 reactors at the Kashiwazaki-Kariwa Nuclear Power Plant meet new safety criteria, TEPCO, which was responsible for the Fukushima nuclear disaster, was also screened over whether it was qualified to resume nuclear power plant operations. The NRA gave TEPCO a "passing grade" in the assessment, but TEPCO's nature of covering up the truth remains unchanged, and I have serious misgivings about the NRA certifying reactivation.
During screening by the NRA, it emerged that TEPCO had exaggerated the quake resistance of a quake-proof building that would be used as the command and control hub in case of an accident at the Kashiwazaki-Kariwa Nuclear Power Plant. In addition, the company has continued to take an irresponsible attitude in a lawsuit residents filed over the disaster at the Fukushima No. 1 Nuclear Power Plant, saying that it was not possible to predict the Great East Japan Earthquake and tsunami (that triggered the plant meltdowns). In the assessment, TEPCO basically just declared, "We'll do things properly." How does that enable the NRA to judge that the company is qualified as a nuclear power operator? I'm left doubtful.
Under its rehabilitation plan, TEPCO says that it will be able to cover the costs of handling the Fukushima nuclear disaster if the Kashiwazaki-Kariwa plant goes back into operation. But two successive governors of Niigata have taken a cautious approach toward reactivation, and if the feelings of prefectural residents are taken into consideration, there's probably no way this (reactivation) can be permitted. I imagine that unless TEPCO faces the reality that reactivation of the Kashiwazaki-Kariwa Nuclear Power Plant is difficult, it will find its management in disarray.

Restart: Are we talking about safety?

October 8, 2017
NRA's nod for a Tepco nuclear plant restart
https://www.japantimes.co.jp/opinion/2017/10/08/editorials/nras-nod-tepco-nuclear-plant-restart/#.WdyRpDtpGos

The Nuclear Regulation Authority's effective go-ahead last week for restarting two reactors in Niigata Prefecture came just a few months after the departing NRA chief, Shunichi Tanaka, called Tokyo Electric Power Holdings Co. unfit to run a nuclear power station. He said Tepco lacks the will to take the initiative in decommissioning the crippled Fukushima No. 1 plant, where three reactors suffered core meltdowns in the mega-disaster of March 2011.

While restarting reactors 6 and 7 at the giant Kashiwazaki-Kariwa plant on the Sea of Japan coast is not expected to take place anytime soon — due to opposition from the local governor, whose consent will be needed — it must be scrutinized whether the nuclear watchdog carefully assessed Tepco's qualifications as a nuclear plant operator after seeming to question its fitness so severely as recently as July.

Exposed to a tightening business environment due to liberalization of the power retail market, Tepco sees the restart of the Kashiwazaki-Kariwa plant as crucial to rebuilding the company's finances, which were battered by the massive cost of decommissioning the Fukushima No. 1 plant and paying damages to residents affected by the disaster — which will reach an estimated ¥16 trillion. The government believes that reopening the Niigata plant will help Tepco in its compensation efforts and measures to cope with severe accidents. But that should not factor in the safety screening before bringing the idled reactors back online.

The NRA's approval for reactivating the Kashiwazaki-Kariwa reactors was the first given to a plant run by Tepco, which continues to struggle in the fight to clean up the mess from the triple meltdowns at Fukushima No. 1 after the plant was flooded in a giant tsunami and lost emergency power supply to cool the reactors. It was also the first NRA nod — under a revamped safety standard following the 2011 crisis — for restarting a boiling-water reactor, the same type as used at Fukushima No. 1.

In screening Tepco's bid to restart the Kashiwazaki-Kariwa plant, the NRA focused on whether the power company responsible for the Fukushima debacle was fit to run a nuclear power plant. During a session in July, then-NRA chief Tanaka appeared to doubt that, telling Tepco executives that a company which cannot demonstrate its resolve and achievement to decommission the Fukushima No. 1 plant was not qualified to restart another nuclear plant.

That changed after Tepco told the nuclear watchdog in August that it was determined to follow through on the decommissioning of Fukushima No. 1. During NRA's sessions held in September, Tanaka said the experience of the Fukushima No. 1 disaster will be a plus for Tepco in its nuclear power plant operation and that the watchdog had reached a consensus that Tepco is qualified to restart the Kashiwazaki-Kariwa plant, setting the stage for the approval given last Wednesday. Toyoshi Fuketa, who took over as NRA chief after Tanaka stepped down Sept. 18, said the NRA ultimately made its judgment solely on the basis of whether Tepco is technologically capable of restarting a nuclear plant. **It would be unfortunate if the NRA's apparent turnaround was driven by its desire to reach a conclusion on the sensitive matter in time for Tanaka's exit.**

It is questionable whether the NRA's decision properly addresses people's concern over the safety of nuclear power — as indicated by media surveys that show a major portion of respondents are still opposed to restarting the reactors idled in the wake of the 2011 disaster. Six years later, nuclear energy remains a politically contested issue. While the administration of Prime Minister Shinzo Abe has pushed for the restart of idled reactors once they have cleared the NRA's screening, the new party launched by Tokyo Gov. Yuriko Koike — which is poised to be the main contender to Abe's ruling coalition in the

upcoming Lower House snap election — is calling in its campaign platform for a phaseout of nuclear power by 2030.

Power companies seek to reactivate their idled nuclear reactors to save on the huge cost of fuel imported to operate their thermal power plants. Tepco reportedly stands to gain up to ¥200 billion in annual profit by restarting the two reactors at the Kashiwazaki-Kariwa plant.

It's not clear, however, whether continued reliance on nuclear power will be a sustainable model for the power industry. In many other countries, nuclear power is becoming a costly business due to surging construction and maintenance costs. Power companies in Japan, now exposed to greater competition through electricity retail deregulation, will not be immune to this change.

Pace of restart approval not likely to increase in near future

November 8, 2017
NRA: Reactor restart approval pace unlikely to speed up
http://www.asahi.com/ajw/articles/AJ201711080019.html
REUTERS
The pace of approvals for nuclear reactor restarts in Japan, where most plants remain shut following the Fukushima disaster, is unlikely to pick up in the coming years, the new head of Japan's nuclear regulator said in an interview on Tuesday.
The comments from Nuclear Regulation Authority (NRA) Chairman Toyoshi Fuketa suggest Japan may not make headway in meeting its electricity generation targets. By 2030, the country was expecting nuclear to power about one-fifth of its generation. However, utilities are having difficulty grappling with tougher rules on protecting reactors from natural disasters in the earthquake-prone country.
Following the Fukushima nuclear disaster in 2011, the world's worst since Chernobyl in 1986, the NRA was set up in 2012 to draft new safety standards that have been described as among the world's toughest. Since then, 12 reactors at six nuclear plants have passed the safety requirements needed to restart, but only four reactors are currently operating. One more reactor that resumed operations after meeting the requirements has been shut down for scheduled maintenance.
Most of the approvals have been for reactors in western Japan and not on the east coast where Tokyo Electric Power Co.'s Fukushima No. 1 nuclear power plant was located. The plant suffered multiple reactor meltdowns after an earthquake on the northeast coast caused a tsunami that swamped the site.
"We have accumulated experience in safety reviews, but comparatively speaking, many of the plants in eastern Japan that we are reviewing now have difficult natural conditions," Fuketa, 60, said in the interview. "It's doubtful the pace of approvals would quicken."
A majority of Japanese oppose nuclear power after Fukushima and restarts are a delicate political issue rather than just a matter of meeting technical safety requirements.
When asked if he could place a number of how many reactors may be approved for a resumption of operations in the next five years, Fuketa said: "I honestly do not know."
About a dozen other reactors are going through safety checks as part of a relicensing process under the new rules.

Fuketa is known for taking tough positions during safety reviews of reactors and has been instrumental in directing the clean-up of the wrecked Fukushima plant.
Japan's government set an energy mix plan in 2015 that forecasts relying on nuclear power to generate between 20 to 22 percent of the country's electricity in 2030. That requires having about 30 reactors operating by then.
Japan's nine regional power utilities and a wholesaler, Japan Atomic Power Co., have 42 nuclear reactors for commercial use, with a total generating capacity of 41,482 megawatts.

Tokai 2: So many uncertainties

November 25, 2017

Prospect uncertain for Tokai No. 2 nuke plant restart despite extension application
https://mainichi.jp/english/articles/20171125/p2a/00m/0na/012000
Even as Tokai No. 2 nuclear plant operator Japan Atomic Power Co. seeks Nuclear Regulation Authority (NRA) permission to extend the life of the station's sole reactor by 20 years, there appears no prospect the plant can be restarted in the foreseeable future.

- 【Related】Utility files application to extend operating period of Tokai nuclear reactor for 20 years
- 【Related】Japan to require new cooling system for boiling water reactors

Japan Atomic is seeking to add to the reactor's 40-year operational lifespan in order to restart the plant in Tokai, Ibaraki Prefecture. However, the company has not determined how it can fund the massive cost of necessary safety upgrades, while it also remains to be seen if local governments around the plant will consent to reactivation.
The NRA estimates that safety measures, including the construction of a coastal levee to protect the plant from a massive tsunami, will cost the utility some 180 billion yen.
Additionally, terror countermeasures will cost the operator some 100 billion yen.
All of Japan Atomic's reactors are currently offline, and it is relying heavily on base fees from five major power companies with which the company has electric power sales contracts. Therefore, the firm cannot easily invest large sums in safety measures. The firm believes the Tokai No. 2 plant could be restarted relatively easily, but if it is not, and the firm continues to have no electricity to sell, Japan Atomic's financial future will be in jeopardy.
To prevent this, Japan Atomic needs loan guarantees from other power companies so that it can borrow from banks the enormous amounts of cash needed to implement safety measures at the plant.
However, Japan Atomic's largest customer, Tokyo Electric Power Company (TEPCO) Holdings, Inc., is already on the hook for about 16 trillion yen to decommission the crippled Fukushima No. 1 nuclear plant and pay compensation to those affected by the nuclear disaster. TEPCO Holdings could come under fire from the public if it guaranteed loans for another company at the same time as TEPCO itself must cover the cost of dealing with the nuclear disaster.
Some TEPCO insiders point out that if the restart of the Tokai No. 2 plant was delayed, TEPCO's power purchase contract would not pay, and that any loan guarantees for Japan Atomic would also be highly risky.

Moreover, it remains unclear whether Japan Atomic can gain consent for reactivation from the local communities hosting the plant. The firm is holding talks with a consultative body comprising six municipalities within 30 kilometers of the Tokai No. 2 station to review their nuclear power plant safety agreement.
Japan Atomic offered to sign an agreement on Nov. 22 with all six municipalities, including Tokai, that would effectively give these local bodies the right to approve or disapprove the plant's reactivation.
Nuclear plant restarts since the outbreak of the Fukushima nuclear disaster have managed to gain consent from the local prefectural government as well as municipalities concerned. However, there is a possibility that local bodies in a broader area will require Japan Atomic to seek their approval for a Tokai No. 2 plant reactivation, depending on the content of the new agreement.
About 1 million people live within 30 kilometers of the Tokai No. 2 plant -- making it the most heavily populated such zone in the country. Local bodies in this zone are struggling to work out evacuation plans for local residents in case of a nuclear accident.

November 24, 2017

Utility files application to extend operating period of Tokai nuclear reactor for 20 years
The Japan Atomic Power Co. (JAPC) filed an application with the Nuclear Regulation Authority (NRA) on Nov. 24 for permission to extend the operating period of a nuclear reactor for 20 years beyond the 40-year limit.

- 【Related】Nuclear plant operator to request 20-year extension for boiling water reactor
- 【Related】Japan to require new cooling system for boiling water reactors
- 【Related】TEPCO's Niigata nuclear plant set to clear screening to restart reactors

The reactor at JAPC's Tokai No. 2 Power Station in Tokai, Ibaraki Prefecture, is the fourth nuclear reactor for which a request for such an extension has been filed with the nuclear power regulator.
Kansai Electric Power Co. earlier applied with the NRA for permission for a 20-year extension of the operating periods for its Mihama nuclear plant's No. 3 reactor and No. 1 and 2 reactors at its Takahama power station, both in Fukui Prefecture, and the nuclear watchdog has approved the extension for all three units.
Moreover, the Tokai No. 2 plant's reactor is the only boiling water reactor -- the same type as those at the tsunami-ravaged Fukushima No. 1 plant -- for which a 20-year extension of the operating period is being sought.
The Tokai No. 2 atomic power station is set to reach the 40-year limit in November 2018.
Under the amended Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors, nuclear reactors must be decommissioned after being in operation for 40 years in principle. However, the operating period can be extended by up to 20 years as an exception if certain conditions are met.

Fului agrees to restart Ohi plant (Nos.3 &4 reactors)

November 27, 2017

Fukui governor agrees to restart of 2 reactors

https://www3.nhk.or.jp/nhkworld/en/news/20171127_15/

The governor of Fukui Prefecture in central Japan has given the nod to bringing 2 reactors at a local nuclear power plant back online.

Governor Issei Nishikawa announced his decision on the Ohi plant at a news conference on Monday.

The plant's operator, Kansai Electric Power Company, says it hopes to restart the No.3 reactor in mid-January and the No.4 reactor in mid-March.

The 2 reactors on the Sea of Japan have already cleared screening by Japan's nuclear regulator.

The host town of Ohi and the Fukui prefectural assembly have already given their consent.

Nishikawa said he agreed to the restart after thorough consideration, based on the views of the town and the assembly.

As a reason for his decision, he said a prefectural expert's panel has confirmed the engineering safety of the plant.

He also cited the operator's plan to choose candidate sites for the interim storage of spent nuclear fuel within next year. He added that the central government has pledged to be actively involved in the process.

Fukui has demanded that such facilities be built outside the prefecture.

Nishikawa's nod comes as a trial continues at a high court on a request by local residents not to restart the reactors. A lower court in 2014 ordered Kansai Electric not to restart them, citing insufficient safety measures.

Five reactors at 3 nuclear power plants have been brought back online in Japan under new government regulations introduced after the 2011 Fukushima nuclear crisis.

Including the Ohi plant, 9 reactors at 5 plants have gained consent for restart by their local host governments.

Fukui gives OK to restart of Kansai Electric's Oi nuclear plant

http://www.asahi.com/ajw/articles/AJ201711270046.html

THE ASAHI SHIMBUN

FUKUI--Kansai Electric Power Co. has cleared all hurdles toward restarting two reactors at its Oi nuclear power plant early next year after gaining the consent of the prefectural governor here Nov. 27.

The utility plans to resume operations of the No. 3 and No. 4 reactors in January and March, respectively.

"I have agreed to the restart after taking into account the position of the Oi town government and Fukui prefectural assembly, as well as the response by the central government and the operator of the plant concerning our request to have an interim storage site for spent nuclear fuel to be built outside the prefecture," Governor Issei Nishikawa told reporters here the same day.

Nishikawa signed off on Kansai Electric's request following similar moves by the town government of Oi, which hosts the Oi nuclear plant, the town assembly and the prefectural assembly.
In response to the governor's request concerning the storage site, Shigeki Iwane, president of Kansai Electric, has already pledged to offer a proposed alternative site next year.
Industry minister Hiroshige Seko, too, vowed that the central government will be involved in drawing up the plan.
Nishikawa pushed for the construction of the interim storage facility outside the prefecture as a condition to agreeing to the restart of the Oi plant.
Five reactors are now operating in Japan after clearing new nuclear regulations established in the aftermath of the 2011 Fukushima nuclear disaster.
Two of the reactors are at Kansai Electric's Takahama plant in Fukui Prefecture.
The Fukui District Court, citing safety concerns, ordered a halt to the operations of Oi's No. 3 and No. 4 reactors in May 2014.
But Kansai Electric appealed the decision and has since been gearing up to restart the units.

Kobe Steel scandal impacts on restarts

November 30, 2017

Kobe Steel scandal delays reactor restarts
https://www3.nhk.or.jp/nhkworld/en/news/20171130_34/
Two Japanese utilities say they will delay the planned restarts of 4 nuclear reactors due to the data falsification of Kobe Steel products.

Kyushu Electric Power Company and Kansai Electric Power Company made the announcements on Thursday.

They said they will delay the restarts of the reactors by about 2 months in order to confirm the safety of equipment that use misrepresented Kobe Steel products.

The delays affect the Number 3 and 4 reactors at the Genkai nuclear power plant in Saga Prefecture, managed by Kyushu Electric, and the Number 3 and 4 reactors at the Ohi plant in Fukui Prefecture, run by Kansai Electric.

The operators originally planned to restart the reactors from January to March. They have passed the Nuclear Regulation Authority's screenings and received the consent of local governments.

They are now scheduled to be restarted from March to May.

Kobe Steel announced in mid-October that its misrepresented products had been shipped to 500 firms.

No restart yet for Joyo (experimental) reactor

December 4, 2017

Experimental nuclear reactor Joyo restart delayed
https://www3.nhk.or.jp/nhkworld/en/news/20171204_27/

The operator of a suspended experimental fast reactor in Ibaraki, north of Tokyo, has decided to delay its restart currently set by March 2022.

The Joyo experimental fast nuclear reactor is expected to replace the prototype fast-breeder nuclear reactor, Monju, as part of the development of fast reactors in Japan.

The Japanese government decided to scrap the trouble-marred Monju last year.

The Japan Atomic Energy Agency in March submitted a request for the state to carry out a safety assessment of Joyo with the aim of restarting the reactor by March 2022.

The document stated that Joyo will run on 100,000 kilowatts despite its total output capacity of 140,000 kilowatts to accommodate a smaller-scale evacuation plan for nearby residents in case of an accident.

The Nuclear Regulation Authority delayed the inspection, and instead asked the operator to run on its total capacity.

The agency is considering reducing the amount of nuclear fuel inside the reactor to reduce output.

Officials say they will apply for government inspections next year.

They say the agency must still decide when it will put Joyo back online.

High Court orders shutdown of Ikata No.3

December 13, 2017

High court orders first reactor shutdown

https://www3.nhk.or.jp/nhkworld/en/news/20171213_31/

For the first time, a Japanese high court has ordered the operator of a nuclear plant not to restart a reactor.

The Hiroshima High Court issued the injunction on Wednesday. It ordered Shikoku Electric Power

Company not to restart the No. 3 reactor at its Ikata plant in Ehime Prefecture. It's currently offline for regular inspections.

The decision reverses a lower court order in March. Residents had sued to have the reactor shut down, citing the threat of a serious accident.

The latest lawsuit considered whether Shikoku Electric had properly assessed the risk to the plant posed by the largest possible earthquake and eruptions of nearby volcanoes.

Presiding Judge Tomoyuki Nonoue said the likelihood wasn't small that the nuclear plant would be affected by pyroclastic flows from an eruption of Mount Aso on the neighboring island of Kyushu. He found fault with the plant's location. He added that the operator had underestimated the amount of volcanic cinder and ash that would fall on the plant.

He concluded that the Nuclear Regulation Authority's judgment that the plant had met the requirements needed for a restart was flawed. He noted that the NRA hadn't properly assessed the risk that residents faced from various dangers such as volcanoes.

Under the injunction, the reactor will remain shut down until September 30th of next year.

The No.3 reactor was restarted in August 2016. It has been offline since October for regular checks.

The decision is the first of its kind by a high court.

Shikoku Electric called the decision extremely regrettable. It said it had made an honest assessment of quake and volcano threats. It added it will appeal the ruling after careful study.

Restart of Tomari plant may be delayed

December 11, 2017

Screenings for restart of Tomari nuke plant likely to be prolonged
THE ASAHI SHIMBUN
http://www.asahi.com/ajw/articles/AJ201712110031.html

A possible active fault beneath the Tomari nuclear power plant in Hokkaido could prolong the government's screening process for a restart and deal a major financial blow to Hokkaido Electric Power Co., the plant's operator.
On Dec. 8, the Nuclear Regulation Authority (NRA) did not accept the assertion of Hokkaido Electric Power that no active fault existed in the compound of the plant. The NRA directed the utility to do additional research.

The ruling by the country's nuclear watchdog will inevitably delay the screening process and hurt the utility, which had been counting on a restart to help its financial situation.
In the screenings, which are based on the new safety standards introduced after the 2011 Fukushima No. 1 nuclear plant crisis, faults that moved after the period between about 130,000 and 120,000 years ago are regarded as being active.
If active faults exist just below key facilities, such as nuclear reactor buildings, the reactors must be decommissioned. Even if active faults do not exist just beneath them, those facilities are required to have high quake-resistance capabilities if those faults exist in the compound.
In 2013, Hokkaido Electric Power applied to NRA to approve the restart of all three reactors at the Tomari nuclear power plant in western Hokkaido. In the NRA's screenings, the company acknowledged that several faults exist in the compound of the plant.
However, the company asserted that those faults do not run through the layer of volcanic ash from about 200,000 years ago, which was found in the boring research at the time of construction of the No. 1 and the No. 2 reactors.
Based on the assertion, the firm insisted that those faults moved in the period earlier than 200,000 years ago and, therefore, are not active. The NRA accepted the statement at that time.
As the layer of volcanic ash was found only in the location of the boring research, however, the NRA also required the company to take boring samples in other places to support the assertion.
In response, the firm implemented boring research in six other sites in and outside the compound of the nuclear power plant. Then, the apparent layer of volcanic ash was not found in any of the six locations.
"We were very surprised because what should have been found was not found. It is certain that (the result) will have major influences on our screenings," said NRA Chairman Toyoshi Fuketa.
In an NRA screening meeting on whether to approve a restart on Dec. 8, Hokkaido Electric Power repeated its assertion that faults that exist in the compound of the nuclear power plant are not active.
The claim was based on the result of the analysis of the "ingredients of volcanic ash" found in the same places and on the topographical features of the area in and around the plant.
"The assessment we have made so far is appropriate," an official of the utility said in the meeting.
However, it failed to gain support as the NRA members cast doubts on the method used by the utility to determine when the faults were formed.
Hokkaido Electric Power said that it will show by late January the result of new research that uses a different method.
"We want to show the data (of the result) as early as possible," an official of the utility said after the meeting.
In the meeting, the company also acknowledged that one of the faults that exist in the compound of the nuclear plant runs just below the key facilities of the No. 1 and the No. 2 reactors.
So far, the utility had not revealed details on the locations of facilities and their distances from the faults as part of anti-terrorism measures.
Meanwhile, if Hokkaido Electric Power is unable to present sufficient data for the restart of the nuclear power plant, it will suffer further financial setbacks.
Even if the operation of the Tomari nuclear power plant is suspended, the utility will need nearly 70 billion yen (about $616.3 million) in maintenance costs.
After the operations of all the three reactors at the plant were suspended in 2011 and 2012, the utility raised electricity rates by an average 7.73 percent (11 percent for companies) in 2013 and 15.33 percent (20.32 percent for companies) in 2014 to avoid deficits.
As a result, the electricity charges imposed by Hokkaido Electric Power have become the highest in Japan.

High Court orders shutdown of Ikata No.3 (Part 2)

Lawyers hold up signs outside the Hiroshima High Court on Dec. 13 proclaiming an injunction had been ordered on operations at the Ikata nuclear power plant. (Koichi Ueda)

December 13, 2017

For 1st time, a high court rules against nuclear plant operations
http://www.asahi.com/ajw/articles/AJ201712130050.html
By KEI KOBAYASHI/ Staff Writer
HIROSHIMA--A high court for the first time has banned operations at a nuclear power plant.
The Hiroshima High Court issued the injunction in a verdict Dec. 13 that applies to the No. 3 reactor at the Ikata nuclear power plant in Ikata, Ehime Prefecture, operated by Shikoku Electric Power Co.
In the ruling, the high court concluded there was a chance the Ikata plant could be affected by a pyroclastic flow from Mount Aso if an eruption occurred similar in scale to a massive one 90,000 years ago on the southern island of Kyushu.
A computer simulation by Shikoku Electric of the possible effects from an eruption like the one in ancient times showed there was a possibility of a pyroclastic flow reaching the grounds of the Ikata plant.
The high court concluded that the Ikata plant was located in an inappropriate location and that the Nuclear Regulation Authority's decision that new safety standards had been met was not rational.
The company suspended operations in October to carry out a periodic inspection. If a judicial decision overturning the Dec. 13 high court ruling is not issued, the Ikata reactor will not be able to resume operations--even if the inspection is completed without problems.
For that reason, the latest ruling could affect the government's plans to resume operations at other nuclear plants more than six years after the triple meltdown at the Fukushima No. 1 nuclear power plant.
An official with Shikoku Electric Power labeled the court injunction as "extremely regrettable" and lamented the fact that it did not accept the company's assertion that the plant is safe.

"The verdict is unacceptable," the official said.
The utility plans to initiate procedures immediately to have the injunction suspended.
The injunction request was made by four residents of Hiroshima and Matsuyama cities.
Among the main points of contention before the high court were the rationality of new safety standards approved by the Nuclear Regulation Authority (NRA) in the aftermath of the 2011 Fukushima nuclear disaster; the rationality behind the expected maximum strength of an earthquake for the area; and an evaluation of the effect of volcanic ash on the reactor's operations.
While district courts have issued injunctions on operations at other plants, higher courts have overturned all those verdicts until now.
For example, the Fukui District Court in April 2015 and the Otsu District Court in March 2016 ordered operations stopped at the No. 3 and No. 4 reactors of the Takahama nuclear power plant in Fukui Prefecture operated by Kansai Electric Power Co., but those verdicts were later overturned.

Hiroshima High Court orders suspension of Ikata nuclear reactor in Ehime Prefecture, revoking district court ruling

https://www.japantimes.co.jp/news/2017/12/13/national/crime-legal/hiroshima-high-court-orders-suspension-ikata-nuclear-reactor-ehime-prefecture-revoking-district-court-ruling/#.WjD-oHkiGos
Kyodo

HIROSHIMA – The Hiroshima High Court on Wednesday revoked a lower court decision and ordered the suspension of a nuclear reactor at Shikoku Electric Power Co.'s Ikata power plant in Ehime Prefecture, dealing a blow to the government and utilities that are aiming to bring more reactors back online.
The high court suspension order — the first in a series of similar injunctions — mandates that the plant operator shutter the No. 3 unit at the Ikata power plant until the end of September next year.
The ruling blocks the planned resumption in January of the unit, which is currently offline for regular checks after it was restarted in August 2016.
Shikoku Electric said the court's decision is "unacceptable" and plans to file an appeal.
The court questioned a decision by the Nuclear Regulation Authority that potential risks associated with volcanic eruptions would not breach the stricter regulations introduced following the 2011 Fukushima nuclear crisis.
"Specific threats to the lives and health of residents are anticipated," the court said.
The latest decision follows a ruling by Otsu District Court in March 2016 that ordered Kansai Electric Power Co. to suspend two reactivated nuclear reactors at its Takahama plant. The district court decision was later overturned by the Osaka High Court.
The Fukushima nuclear crisis led to a nationwide halt of nuclear plants, but the government is looking to produce 20 to 22 percent of the country's electricity supply using nuclear power by 2030.
The focal points of Hiroshima High Court's decision Wednesday included whether estimates by the plant operator, Shikoku Electric Power Co., of the potential size of possible earthquakes, were reasonable, and whether safety screening conducted under stricter regulations set after the 2011 Fukushima nuclear disaster was credible.
Risks predicted in the event of a nuclear accident or natural disasters such as a volcanic eruptions were also contested.
The plaintiffs claimed that in calculating the size of a potential earthquake, the utility had underestimated the fact that the reactor lies above the epicenter of an anticipated Nankai Trough mega-quake, and that it is located near a geologic fault.

They added that the post-Fukushima regulations cannot ensure safety, and that major damage could occur at the time of an accident or disaster because the regulations were compiled without thoroughly determining the cause of the 2011 disaster.
But Shikoku Electric maintains that it has ensured safety and that there is no danger.
Hiroyuki Kawai, the lawyer representing the plaintiffs said, “Our plea was understood. We could protect the Seto Inland Sea. It is our victory.”
The plaintiffs had said that if the Ikata plant, which faces the Seto Inland Sea, was to be severely damaged, nuclear substances could spread and contaminate waters in the area.
In March, the Hiroshima District Court found that the new regulations set by the Nuclear Regulation Authority and Shikoku Electric’s estimates of a possible earthquake and tsunami were reasonable.
The district court had turned down the request to halt the reactor, saying, “There is no specific risk that residents will suffer severe damage due to radioactive exposure associated with an accident.”
Following the checks, Shikoku Electric had been expected to bring the reactor back online on Jan. 22 and resume operations on Feb. 20.
The plaintiffs were four residents from Matsuyama in Ehime and Hiroshima, located on the opposite side of the Seto Inland Sea to the nuclear plant. Similar injunctions have been contested at the Takamatsu High Court, Oita District Court and the Iwakuni branch of Yamaguchi District Court.

Shikiku Electric objects to injunction

December 22, 2017

Ikata reactor operator objects to court injunction
https://www3.nhk.or.jp/nhkworld/en/news/20171222_01

<image: >
The operator of a nuclear power plant in western Japan has filed an objection to a recent court order to shut down a reactor at the plant due to possible volcanic risk.

The Hiroshima High Court handed down the injunction on December 13th for a reactor at the Ikata plant run by Shikoku Electric Power Company.

The plant is located in western Shikoku, one of the 4 major Japanese islands. The reactor went back online in August of last year. It has been suspended for regular inspections since October.

The judge said the likelihood is not small that a massive eruption of Mount Aso, a volcano on the nearby island of Kyushu, could affect the plant.

On Thursday, Shikoku Electric lodged an objection to the injunction. The utility says the court noted the possibility that fragments of volcanic rock could reach the plant, citing an eruption 90,000 years ago. But the utility says the court didn't take the company's study of the site into account.

The utility also requested the court to suspend implementation of the injunction.

Following the objection, another judge at the high court will look into findings on the safety of the plant, including the risk of major volcanic eruptions.

It is believed to take some time for the second judge to decide whether the court should accept the company's request.

The likelihood is growing that the reactor will remain offline after February of next year, when routine checks are scheduled to end.

Kashiwazaki-Kariwa OK'ed but restart might take years

December 27, 2017

Tepco nuclear reactors pass safety review, 1st after Fukushima crisis
https://mainichi.jp/english/articles/20171227/p2g/00m/0dm/051000c#cxrecs_s
TOKYO (Kyodo) -- Two reactors Japan were cleared for reactivation by the nuclear regulator on Wednesday, becoming the first run by the operator of the crippled Fukushima power plant to formally clear stricter government safety standards imposed after the 2011 crisis.
The Nuclear Regulation Authority endorsed safety measures for the Nos. 6 and 7 reactors at the Kashiwazaki-Kariwa power plant in Niigata Prefecture at a meeting that was open to the public, with some members of the audience shouting their disapproval. The decision paves the way for the restart of the two reactors by Tokyo Electric Power Company Holdings Inc., known as Tepco.
However, the process of reactivating the reactors straddling the municipalities of Kashiwazaki and Kariwa in Niigata on the Sea of Japan coast could still take several more years as local governments need to give their consent.
Niigata Gov. Ryuichi Yoneyama, who has said it will take "at least three to four years" before he can decide on whether to approve the restart of the reactors, issued a statement saying he wants to be briefed on the plan and "examine the outcome of (the NRA) review."
The two units are boiling water reactors, the same as those that suffered meltdowns during the Fukushima crisis triggered by the massive March 2011 earthquake and tsunami in northeastern Japan. No BWRs had previously cleared Japan's tougher safety standards imposed after the disaster, partly because major refurbishments are required for added safety.
The NRA's approval of the two units brings the total number of reactors that have cleared the post-crisis safety regulations to 14, with the Japanese government pushing to restart nuclear plants that were taken offline after the crisis at the Fukushima Daiichi complex, the world's worst nuclear disaster since Chernobyl in 1986.
In addition to assessing the usual technical requirements, the NRA focused on whether Tepco is qualified to operate a nuclear power plant, as it continues to struggle with scrapping the Fukushima Daiichi complex -- an effort expected to take until around 2051 -- and dealing with contaminated water at the plant where radiation levels remain high.

Of around 800 public comments received by the regulator regarding its assessment of the Tepco reactors, about half of them questioned Tepco's qualification to run nuclear plants, according to the NRA.
At Wednesday's meeting, some of the members of the public voiced opposition, with one person saying, "It is not a technical or scientific assessment, but a political one."
In front of the building housing the NRA in Tokyo, civic group members gathered to protest the approval.
Yoshinari Usui, a forgmer public official from Kawasaki near Tokyo, said, "Tepco has no technical qualifications to run a nuclear power plant after causing such an accident. The restart of the Kashiwazaki-Kariwa units is totally unacceptable."
Han Kumata, 37, from Tokyo said, "I have absolutely no trust in Tepco even if it says it has implemented safety measures."
As a condition for gaining safety clearance, Tepco agreed to a request from the regulator to provide a safety pledge in its legally binding plant operation program.
The NRA says it can continue to monitor Tepco by conducting inspections and order the halt of operations if it finds any safety violations.
Facing huge compensation payments and other costs stemming from the Fukushima crisis, Tepco has been keen to resume operation of its reactors to reduce dependence on costly fossil fuel imports for non-nuclear thermal power generation.
Not all residents of Niigata oppose nuclear power, given its economic benefits.
"There may be risks but the local (municipality) cannot stand without nuclear power. I want the reactors to be restarted if they have been deemed safe," said Toru Murata from Kashiwazaki, who works in the construction industry.
A Niigata city resident Mie Kuwabara, 69, on the other hand expressed concern about the reactors coming back online, saying, "I think the possibility of a serious accident still remains," considering past problems at the plant including insufficient quake resistance of a building to be used as an emergency headquarters.
The two reactors are the newest among the seven units at the Kashiwazaki-Kariwa plant. The complex is one of the world's largest nuclear power plants, with a combined output capacity of 8.2 million kilowatts.

TEPCO reactors in Niigata OK'd, but restarts may still take years
http://www.asahi.com/ajw/articles/AJ201712270026.html
THE ASAHI SHIMBUN
Japan's nuclear watchdog approved safety standards at Tokyo Electric Power Co.'s nuclear power plant in Niigata Prefecture, but the governor wants answers about the 2011 Fukushima disaster before the company can restart any reactor.
After questioning TEPCO's commitment to safety, the Nuclear Regulation Authority on Dec. 27 gave its stamp of approval for the No. 6 and No. 7 reactors at its Kashiwazaki-Kariwa plant.
It was the NRA's first approval of boiling-water reactors since the 2011 accident at TEPCO's Fukushima No. 1 nuclear power plant, which operated the same type of reactor.
However, the Niigata prefectural government is unlikely to approve the reactor restarts at the Kashiwazaki-Kariwa plant until three or four years down the road.
Niigata Governor Ryuichi Yoneyama, whose approval is required for the resumption of reactor operations, has stated that he would not make a decision until the prefectural government completes its own assessment of the Fukushima nuclear accident.
Members of the public have also vehemently opposed allowing TEPCO to operate nuclear facilities.

Doubts were raised within the NRA on whether TEPCO was fit as a company to run a nuclear plant, considering the scale of the disaster in Fukushima Prefecture.
NRA officials in July asked TEPCO executives to appear at a meeting and explain their attitude toward safety.
In August, TEPCO submitted a document to the NRA that said in part: “We are prepared to go through with decommissioning the reactors at the Fukushima No. 1 plant. We will not place priority on economic interests over safety.”
The NRA compiled its draft inspection document in October. NRA officials said they will confirm TEPCO’s safety stance during screening of more specific measures designed for safety, which include an explanation of plant operating procedures.
The nuclear watchdog allowed the public to submit their views on the inspection document over a 30-day period.
At the NRA meeting on Dec. 27, 904 views were made public.
NRA officials said several hundred opinions were opposed to having TEPCO resume operations at the Kashiwazaki-Kariwa plant. Some argued that the utility had not improved its corporate posture. Others said the inspection document contained little in the way of specific plans for how TEPCO would go about ensuring safety.
But the NRA approved the document on the grounds that it would still have the opportunity to judge TEPCO’s fitness during the safety screening. The utility will submit specific safety measures as the next step in the process toward resuming operations of the two reactors at the Kashiwazaki-Kariwa plant.
(This article was written by Yusuke Ogawa and Masanobu Higashiyama.)

Kashiwazaki-Kariwa: Local governments remain divided

December 28, 2017

Local gov'ts of areas hosting nuke plant in Niigata Pref. divided over reactivation
https://mainichi.jp/english/articles/20171228/p2a/00m/0na/008000c#cxrecs_s
NIIGATA -- There are no prospects that two reactors at the Kashiwazaki-Kariwa Nuclear Power Plant, which have passed a safety review by the Nuclear Regulation Authority (NRA), will be restarted in the foreseeable future, as local bodies hosting the plant remain divided over the issue.

- 【Related】TEPCO nuclear reactors pass safety review, 1st after Fukushima crisis
- 【Related】60 holes at Kashiwazaki-Kariwa nuke plant found unfilled in violation of building code
- 【Related】Environmental economics expert questions clearing of TEPCO reactors in safety review

Niigata Gov. Ryuichi Yoneyama, on the other hand, remains cautious about the resumption of the units' operations.
Gov. Yoneyama told Masaya Kitta, head of TEPCO's Niigata regional headquarters who visited the governor on Dec. 27 that the prefectural government cannot agree on the early reactivation of the plant.
"I have no intention of objecting to the decision by the NRA, but our position is that we can't start talks on reactivation unless our examination of three-point checks progresses," Yoneyama told Kitta. The governor was referring to his policy of not sitting at the negotiation table over reactivation unless three points are

examined by the prefectural government: the cause of the Fukushima nuclear disaster, potential effects on people's livelihoods as well as health in case of an accident, and safe evacuation measures. He has stated that it would take two to three years to complete the checks of these points.
The governor also told Kitta, "Our examination will never be affected" by the NRA's judgment that the plant meets the new safety standards. Moreover, the prefectural government is poised to independently examine the outcome of the NRA's safety review of the Kashiwazaki-Kariwa power station.
Kashiwazaki Mayor Masahiro Sakurai and Kariwa Mayor Hiroo Shinada were separately briefed by plant manager Chikashi Shitara on the outcome of the NRA safety review of the facility.
Both mayors have expressed their appreciation for TEPCO's response up to this point, and Sakurai urged the power company to "make efforts to reassure local residents (about the nuclear plant)," while Shinada urged the utility to "try to provide information in an appropriate manner."
In the meantime, if the reactivation of the atomic power station is to be delayed, there is a possibility that the national government's grants to the host municipalities will be reduced.
The Economy, Trade and Industry Ministry is continuing to provide such grants to local bodies hosting idled nuclear plants by deeming them to be running plants in some form. In April 2016, the national government revised its rules on grants to nuclear plant host municipalities and decided to reduce the amount of funding if the facilities are not restarted within nine months after the completion of the NRA's safety review, which is necessary for reactivation.
The No. 6 and 7 reactors at the Kashiwazaki-Kariwa plant need to pass two more inspections within a year. If it takes several years to form a consensus among the local governments concerned, however, grants will be reduced in fiscal 2020 at the earliest. The amounts of reductions are estimated at some 400 million yen for Kariwa, about 100 million yen for Kashiwazaki and approximately 740 million yen for Niigata Prefecture.

Local govts want a say in restarts

December 30, 2017
About 50% of local bodies near nuke plants want say over reactor restarts
https://mainichi.jp/english/articles/20171230/p2a/00m/0na/010000c
Roughly 50 percent of local governments within a 30-kilometer radius of a nuclear power plant -- excluding municipalities where the plant is located -- want to have a say in the restarting of nuclear reactors, a Mainichi Shimbun survey has found.

- 【Related】 Prospect uncertain for Tokai No. 2 nuke plant restart despite extension application

Among 121 neighboring local bodies, 60 of the 119 that provided answers in the survey said that they wanted to have a say in whether nuclear reactors can be reactivated.
Since the meltdowns at Tokyo Electric Power Co. (TEPCO)'s Fukushima No. 1 Nuclear Power Plant in 2011, the reactivation of nuclear reactors has been subject to consent from prefectures and municipalities hosting the facilities. However, taking into consideration the widespread damage and risks associated with the disaster in 2011, neighboring authorities have also been keen to get involved in the approval process.

A total of 155 local governments were targeted in the survey, which was conducted between September and November 2017 and addressed to local government heads and also to assemblies. The local authority where the Fukushima No. 1 power plant is located also took part.
Thirty-four of the 155 authorities (13 prefectural and 21 municipal) have a commercial nuclear power plant directly within their jurisdictions. The remaining 121 neighboring local bodies (eight prefectural and 113 municipal) are situated within 30 kilometers of a power plant.
Of the 155 local bodies approached, 153 local government heads -- excluding those of Iitate, Fukushima Prefecture and Ikeda, Fukui Prefecture -- gave answers while 154 local assemblies, excluding that of Iitate, cooperated.
Local government heads were asked whether they are for or against reactor restarts at the local nuclear power plant, the extent of their local government's involvement, and the status of any safety agreements with electric power companies. Assemblies were asked whether or not they have adopted any written statements concerning the restarting of nuclear reactors, among other questions.
Regarding the right to approve reactivation of reactors at nuclear power plants and the right to conduct on-site investigations -- which have effectively already been given to mainly local governments where plants are located -- the local government heads were asked if these rights should be extended to neighboring bodies as well. In response, 56 heads stated that it was necessary to grant such rights, seven said that it is partly necessary, 24 said it was unnecessary, one head did not know, 60 gave other answers, and five did not reply.
Altogether, 60 of the 63 heads who said the granting of such rights was "necessary" or "partly necessary" belong to neighboring local governments. Of these 60 local bodies, 16 said that they are against restarting nuclear reactors.
Meanwhile, of the 24 heads who said the granting of these rights was "unnecessary," 10 belong to local governments where a nuclear power plant is located, including Fukui Prefecture -- revealing a difference in attitudes between the immediate and nearby local governments.
However, of the immediate local governments, the town of Okuma in Fukushima Prefecture -- which was seriously affected by the 2011 disaster -- said that the rights need to be extended on the grounds that, "Once an accident happens, the impact spreads across a wide area."
The village of Tokai in Ibaraki Prefecture -- where the Japan Atomic Power Co.'s Tokai No. 2 Nuclear Power Plant is based -- was among those that replied that it is "partly necessary" to extend the rights.

Using erroneous data for 40 years...

January 24, 2018

Erroneous fuel data in use at Tokai No. 2 nuke plant for over 40 years
https://mainichi.jp/english/articles/20180124/p2a/00m/0na/001000c
The Japan Atomic Power Co. (JAPC) reported on Jan. 23 that it had been using erroneous data on the height of nuclear fuel rods inside the nuclear reactor at the Tokai No. 2 Power Station in Ibaraki Prefecture for at least 40 years.

- 【Related】Prospect uncertain for Tokai No. 2 nuke plant restart despite extension application
- 【Related】Utility files application to extend operating period of Tokai nuclear reactor for 20 years
- 【Related】Nuclear plant operator to request 20-year extension for 'boiling water reactor'

The JAPC filed the report with the government's Nuclear Regulation Authority (NRA) on Jan. 23. According to the company, data indicating the height of nuclear fuel rods -- from the bottom of the reactor to the top of the rods -- was set around 5 centimeters lower than the actual height.
The Tokai No. 2 power plant in the village of Tokai is in the final phase of a safety screening by the NRA for possible reactivation. However, as the JAPC will need to check whether there is any other incorrect data in use, the screening is expected to be delayed.

Ibaraki reactor to resume research

January 31, 2018

Japan Atomic Energy Agency approved to operate research reactor under post-Fukushima rules
https://www.japantimes.co.jp/news/2018/01/31/national/japan-atomic-energy-agency-approved-operate-research-reactor-post-fukushima-rules/#.WnHNunwiGos
Kyodo
A Japan Atomic Energy Agency research reactor cleared a regulatory safety review on Wednesday, becoming the first facility run by the government-affiliated research institute to pass post-Fukushima regulations.
The reactor, which is located in Ibaraki Prefecture and called the Static Experiment Critical Facility, gained approval from the Nuclear Regulation Authority to resume operations and will be used to conduct research on the extraction of melted fuel from nuclear plants.
The facility still needs to go through several final checks under new rules introduced after the Fukushima nuclear disaster in 2011.
The approval came after the JAEA responded to a request made in November by the Japan Atomic Energy Commission, a government nuclear panel, to clarify the purposes of storing plutonium-uranium mixed oxide fuel, known as MOX fuel, at the reactor.
Japan, while upholding a policy of reprocessing spent fuel from nuclear reactors and reusing extracted plutonium and uranium as reactor fuel, adopts a policy of not possessing plutonium — a material that can be used to make nuclear weapons — without a specified purpose.
In a document, the agency said it will not use MOX fuel "other than for peaceful purposes," winning approval from the Japan Atomic Energy Commission.
According to the JAEA, the reactor will be used to conduct research on the removal of melted nuclear fuel in an effort to support the decommissioning of the Fukushima No. 1 nuclear complex, which experienced core meltdowns following the March 2011 earthquake and tsunami disaster.
The JAEA previously came under heavy criticism for lax safety management following revelations of a number of equipment inspection failures at its Monju prototype fast-breeder nuclear reactor. The prototype had been envisioned to play a key role in the country's nuclear fuel recycling policy but is now set to be scrapped.
In June of last year, a nuclear exposure accident occurred at the institution's Oarai Research and Development Center in Ibaraki, causing internal radiation exposure in five workers, although no harmful consequences were detected in the surrounding environment.

Shimane No.3 reactor may go ahead

February 17, 2018

Utility eyes NRA screening nod for new nuclear reactor in Shimane
http://www.asahi.com/ajw/articles/AJ201802170020.html
THE ASAHI SHIMBUN
Chugoku Electric Power Co. will initiate procedures to gain approval to start operations of a nuclear reactor whose construction was halted in the aftermath of the 2011 earthquake and tsunami disaster.
The utility began construction of the No. 3 reactor at its Shimane nuclear power plant in 2005, and work was close to completion when the Great East Japan Earthquake struck, unleashing tsunami that devastated coastal areas of the northern Tohoku region.
Chugoku Electric Power initially planned to begin operations of the No. 3 reactor in March 2012, but the triple meltdown at the Fukushima No. 1 nuclear power plant prompted the government to review its safety standards.
The review process brought construction work to a halt at the No. 3 reactor of the Shimane plant.
Before Chugoku Electric Power can apply to the Nuclear Regulation Authority for a safety screening, it must gain the consent of Shimane prefectural authorities and the Matsue municipal government.
Sources close to the utility said the company would seek approval from the two entities as soon as preparations are completed.
A key reason behind the step is action taken by the NRA for the No. 2 reactor located on the same complex as the No. 3 reactor now under construction.
Chugoku Electric Power has applied for a safety screening to resume operations at the No. 2 reactor, and on Feb. 16 the NRA signed off on the utility's basic earthquake ground motion as the likely maximum quake that could strike the No. 2 reactor.
"Now that we have approval for the basic earthquake ground motion for the No. 2 reactor, we will work toward also applying for a safety screening for the No. 3 reactor," said a utility official.
If Chugoku Electric Power does submit an application for the No. 3 reactor it would be the second case of a safety screening application for a reactor under construction.
In December 2014, Electric Power Development Co. (J-Power) submitted an application to the NRA for a safety screening for its Oma nuclear plant in Aomori Prefecture.
The No. 3 reactor being constructed by Chugoku Electric Power is an improved version of the boiling-water type reactor similar to those at the crippled Fukushima No. 1 plant.
Even if the NRA approves the safety screening, operations will not begin immediately as additional work is needed to improve the safety of the reactor.

Fuel loading at Genkai 3

19.02.2018_No35 / News in Brief
Fuel Loading Begins At Japan's Genkai-3
https://www.nucnet.org/all-the-news/2018/02/19/fuel-loading-begins-at-japan-s-genkai-3

19 Feb (NucNet): Fuel loading at Japan's Genkai-3 nuclear reactor unit began on 16 February 2018, operator Kyushu Electric Power Company said.
Genkai-3 in the southern Saga Prefecture is a 1,127-MW pressurised water reactor (PWR) unit, which began commercial operation in 1994. There are four PWR units at the Genkai site, but Kyushu Electric plans to restart only the newer ones – Genkai-3 and-4.

Unit 3 was shut down for an annual outage in December 2010 and Unit 4 in December 2011. The units were never restarted following a nationwide nuclear shutdown after the March 2011 Fukushima-Daiichi accident.

The governor of Saga Prefecture approved the restart of Genkai-3 and-4 in April 2017, clearing the final regulatory hurdle. Kyushu Electric said the physical startup of Genkai-3 is scheduled for March 2018 but gave no precise dates.

Five units in Japan have resumed commercial operation after meeting revised regulatory standards. They are: Takahama-3 and -4, Ikata-3 and Sendai-1 and -2.

Idle reactors maintenance

Although the reactors at the Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture are all offline, 6,000 or so people work at the complex each day. (Asahi Shimbun file photo)

March 8, 2018
Utilities spent 5 trillion yen on idle reactors after disaster
http://www.asahi.com/ajw/articles/AJ201803080090.html
THE ASAHI SHIMBUN
Electric power companies spent more than 5 trillion yen ($47 billion) to maintain and manage idle reactors, passing on the tab to consumers as "costs for nuclear power generation."

The expenditures by seven utilities for the five-year period between fiscal 2012 and fiscal 2016 were covered mainly by electricity charges.
Although the companies say they can gain profitability by restarting idle reactors, they have yet to initiate procedures to bring about half of the units back online.
The utilities in question are the Hokkaido, Tohoku, Tokyo, Hokuriku, Chubu and Chugoku electric power companies and Japan Atomic Power Co.
The hidden costs emerged after The Asahi Shimbun scrutinized financial statements of 10 utilities with nuclear reactors.
Of the 10, the Kansai, Kyushu and Shikoku electric power companies have resumed partial reactor operations.
It turned out that the seven utilities spent a combined 5.09 trillion yen on 34 idled nuclear reactors in the five-year period after the 2011 Fukushima nuclear disaster.
The expenditures consisted of personnel and outsourcing expenses for maintenance and management of the reactors; spent nuclear fuel reprocessing, which is not an issue with thermal or hydraulic power generation; financial outlays related to compensation for the triple meltdown at the Fukushima No. 1 nuclear power plant; and depreciation costs concerning the construction of nuclear reactors.
Restarting a single reactor with an output capacity of one gigawatt would translate into a revenue increase of 100 billion yen annually and cover their financial outlays to date, the utilities insist.
The three power companies that have resumed limited reactor operations spent 2.47 trillion yen in the five-year period as costs for nuclear power generation. They have 20 nuclear reactors, of which seven have been restarted, including ones not currently in operation.
Circumstances surrounding nuclear power industry have changed drastically since the Fukushima nuclear disaster.
At that time, there were 54 nuclear reactors operating on a commercial basis in Japan. Fourteen are due to be decommissioned.
Of the remaining 40 reactors, seven have restarted. As for the remaining 33 reactors, utilities have yet to apply to the Nuclear Regulation Authority for screening to restart 15 of them.
That is mainly due to costs the companies would incur to implement safety measures under new standards introduced after the Fukushima disaster and the fact that profitability will decline in the case of aged or small reactors.
Even among reactors that utilities applied to reactivate, the prospects for doing so remain murky due to concerns among local governments or the possibility of active faults running just below the reactor buildings.
(This article was written by Takaoki Yamamoto and Eiji Shimura.)

Ohi No.3 reactor back online

March 14, 2018

Ohi No.3 reactor back online
https://www3.nhk.or.jp/nhkworld/en/news/20180314_33/

Another Japanese nuclear reactor has been restarted following the March 2011 nuclear accident in Fukushima in Japan.

The Number 3 reactor at the Ohi nuclear plant in Fukui Prefecture is run by Kansai Electric Power Company. It was reactivated on Wednesday afternoon following the removal of control rods that suppress atomic fission.

It is expected to reach criticality early on Thursday, begin power generation and transmission on Friday, and go into commercial operation in early April.

It is the 6th reactor at 4 nuclear power plants in Japan to be restarted under new regulatory requirements for commercial nuclear plants that were introduced after the serious accident at the Fukushima Daiichi plant.

Two of the reactors are at the Takahama plant, located about 13 kilometers to the west of the Ohi plant. If both plants are damaged simultaneously by an earthquake or tsunami, efforts to respond to the disaster or evacuate residents could be disrupted.

Kansai Electric Power plans to restart the Number 4 reactor at Ohi in mid-May.

In 2014, the Fukui District Court ruled against putting the Number 3 and Number 4 reactors back online. The ruling was appealed to a higher court, which has yet to rule on the issue.

A 60-year-old local resident said he's against the restart because he doesn't know where and how he should evacuate if there's an accident.

Another local person, who is 67 years old, says he has visited the plant several times and found its equipment and management to be fine. He said he wanted the utility to supply electricity without keeping the reactors idle.

Coastal nuclear reactor resumes operations, joins 2 units nearby
https://mainichi.jp/english/articles/20180314/p2g/00m/0dm/091000c
FUKUI, Japan (Kyodo) -- Kansai Electric Power Co. restarted Wednesday a reactor at its Oi plant on the Sea of Japan coast, located close to two other units already online, amid lingering safety concerns following the Fukushima disaster.
It is the first time that multiple nuclear reactors within the same vicinity have been in operation since the crisis at the Fukushima Daiichi plant, triggered by the March 2011 earthquake and tsunami.
The No. 3 reactor at the Oi plant is a mere 14 kilometers from the No. 3 and 4 units at the Takahama plant, all in the central Japan prefecture of Fukui.
Local residents are worried about the lack of an effective evacuation plan in the event accidents hit both the Takahama and Oi complexes at the same time.
The No. 3 Oi unit is the sixth reactor to resume operations in Japan after clearing stricter safety regulations implemented in the wake of the Fukushima disaster.
The government of Prime Minister Shinzo Abe, seeing nuclear power as an "important base-load power source," is promoting the restart of nuclear reactors considered safe by regulators.
Under the current national energy policy, the government plans to generate between 20 and 22 percent of total electricity using nuclear power in fiscal 2030.

Kansai Electric aims to start commercial operations of the No. 3 Oi reactor in early April. The No. 4 reactor at the Oi plant is also expected to restart in May, having cleared the Nuclear Regulation Authority's safety review along with the No. 3 unit in May 2017.
See also : https://www.japantimes.co.jp/news/2018/03/14/national/kepco-brings-no-3-reactor-fukui-plant-back-online/

Genkai No.3 restarted

March 23, 2018

Genkai No.3 reactor being restarted
https://www3.nhk.or.jp/nhkworld/en/news/20180323_22/
The Number 3 reactor at the Genkai nuclear power plant in Saga Prefecture, southwestern Japan, has been restarted for the first time in 7 years and 3 months.

Kyushu Electric Power Company initiated restart procedures on Friday by removing the control rods that suppress atomic fission.

The company says the reactor will reach criticality -- a self-sustained nuclear reaction -- early on Saturday, and begin power generation and transmission on Sunday. The reactor is expected to go into commercial operation in late April.

The reactor runs on MOX fuel, which is a mixture of plutonium extracted from spent nuclear fuel and uranium.

It is the 7th reactor to be restarted under new regulations introduced for commercial nuclear power plants after the 2011 Fukushima accident.

The six reactors currently in operation are 2 at the Sendai plant in Kagoshima Prefecture, one at the Ikata plant in Ehime Prefecture, 2 at the Takahama plant in Fukui Prefecture, and one at the Ohi plant, also in Fukui.

Kyushu Electric plans to restart the No. 4 reactor at the Genkai plant in May.

The Genkai plant is located in a coastal area, with 20 small islands within a 30-kilometer radius. Experts point out the importance of evacuation plans for the islanders in the event of a nuclear accident in bad weather.

Leak forces shutdown of No.3 Genkai reactor

March 31, 2018

March 31, 2018

Steam leak prompts power generation to halt at Japan nuclear plant
https://mainichi.jp/english/articles/20180331/p2g/00m/0dm/002000c
FUKUOKA (Kyodo) -- Kyushu Electric Power Co. stopped generating and supplying electricity at its nuclear reactor in southwestern Japan on Saturday after detecting a steam leak the previous day.
The utility said there has been no radiation leak and that it will inspect the reactor, which resumed operation only a week ago at the Genkai power plant in Saga Prefecture.
According to Kyushu Electric, staff discovered at around 7 p.m. Friday that steam was leaking from the pipe of a device used for the removal of oxygen and other dissolved gases from the feedwater to steam generators.
The No. 3 reactor at the plant resumed operation on March 23 after being offline for over seven years, amid lingering concerns among residents about how to evacuate from islets near the plant in the event of a serious accident. It restarted power generation two days later.
Following the latest incident, Kyushu Electric's plan to restart the No. 4 reactor in May could be delayed, the utility said.
The No. 3 unit was suspended for a regular inspection in December 2010, three months before a massive earthquake and tsunami sparked a crisis at the Fukushima Daiichi nuclear plant.
It cleared the Nuclear Regulation Authority's safety screening in January 2017 under stricter, post-Fukushima regulations and was later approved for reactivation by the Genkai municipal government and Saga prefectural government.

Steam leak found at Genkai nuclear power plant
https://www3.nhk.or.jp/nhkworld/en/news/20180331_09/
The operator of the Genkai nuclear power plant in southwestern Japan has found a steam leak in a reactor just one week after putting it back online. It suspended power generation early Saturday.

Kyushu Electric Power Company says a worker found the small leak at the No. 3 reactor around 7 PM on Friday. The plant is located in Genkai Town in Saga Prefecture.

The utility says the steam does not contain radioactive substances, and that monitoring posts around the plant show no change in radiation levels. It says there has been no harm to the environment.

Kyushu Electric says the leak occurred in a pipe connected to equipment that removes oxygen, carbon dioxide and other substances from the steam.

The reactor was generating power at 75 percent of its capacity at the time. The utility says it gradually

lowered output through the night, halting it completely by around 6 AM on Saturday.

Kyushu Electric says it is working quickly to determine the cause and resume operations.

The leak is an unwelcome setback for the utility, which put the reactor back online on March 23rd, ending a break of more than 7 years in operations. The reactor began generating and transmitting power 2 days later.

The reactor was suspended for a regular inspection after the 2011 earthquake and tsunami, which triggered the Fukushima nuclear accident.

Restarts: New deal fairer to municipalities?

June 3, 2018

EDITORIAL: Tokai nuke plant deal with local entities a model for all restarts
http://www.asahi.com/ajw/articles/AJ201804030021.html
Cities and towns adjacent to areas where nuclear power plants are located have no say over plant operators' decisions to restart offline reactors even though they face safety risks similar to those borne by nuclear host communities.
The recent agreement between the operator of the Tokai No. 2 nuclear power plant in Ibaraki Prefecture and surrounding municipalities is a big step toward fixing the serious flaw in the procedure for obtaining local approval for reactor operations.
Japan Atomic Power Co. (JAPC) agreed on March 29 to seek approval from five surrounding municipalities including the city of Mito as well as Tokai village, which hosts the nuclear plant, and the prefecture before bringing its idled reactor back on stream.
The agreement expands the scope of local governments that have the effective "right to consent" concerning JAPC's decisions to restart its reactor at the plant beyond the host town to include surrounding municipalities.
It was the first time that a nuclear power plant operator has agreed in writing to obtain prior consent on the restart of its reactors from surrounding municipalities.
JAPC is currently working to restart the boiling water reactor. About 1 million people live within 30 kilometers of the plant, more than in any other 30-km area around a nuclear plant in this nation.
In Japan, municipalities located within a 30-km radius from nuclear plants are required to craft evacuation plans to prepare for possible accidents at those facilities.
Many of the local governments within this area are struggling to work out effective and plausible evacuation plans, while local residents are living in anxiety.
The five municipalities located in the 30-km area had been demanding that they be given the same "right to consent" as that enjoyed by Tokai.
The agreement stipulates that it effectively establishes a system that requires the plant operator to obtain "prior consent" from the six municipalities to any decision to restart the reactor through prior consultation with them.

The deal represents progress toward a more democratic process of building a consensus among the parties concerned.
But the agreement leaves some important questions unanswered, such as what if the six municipalities fail to reach an agreement. The plant operator should implement the agreement in a way that places the highest priority on the safety of local residents. It should be willing to continue prior negotiations until it obtains consent from all the local governments involved.
Local governments in various parts of the nation, including the Kansai and the Kyushu regions, have taken exception to the current system, which only gives the right to consent to the prefectures and host municipalities involved.
Surrounding communities have every right to demand that they also have a say over decisions to restart reactors given that they have to bear the burdens of accepting the risk of accidents and developing evacuation plans.
But electric utilities operating nuclear plants loathe facing higher barriers to resuming the operations of reactors.
If they want to win the trust of local communities, however, they should shed their reluctance to seek approval from a wider range of local governments.
The agreement between JAPC and the local governments is not legally binding and is vague about the company's responsibility for the safety of local residents.
The government has said it is "not in a position" to get involved in such an agreement between an electric utility and local governments.
But the government should be accused of irresponsibility if it acts like a bystander with regard to this issue.
The government should instead take the initiative for new legislation to establish formal rules for agreements between nuclear utilities and local communities over operational decisions.
Close cooperation among Ibaraki Prefecture, Tokai and the five surrounding municipalities has opened the door to their agreement with JAPC.
In many areas with nuclear plants, however, there is a rift between the host communities and surrounding municipalities.
The prefectural governments in such areas can play an important role in solving the rift.
The latest agreement--call it the "Ibaraki formula"--should set a model for other areas facing the same problem.
--The Asahi Shimbun, April 3

March 30, 2018

Japan Atomic Power grants local gov'ts say in reactor restart under new agreement
https://mainichi.jp/english/articles/20180330/p2a/00m/0na/003000c
Japan Atomic Power grants local gov'ts say in reactor restart under new agreement

- 【Related】TEPCO, Tohoku Electric to give Japan Atomic financial boost to help restart reactor
- 【Related】About 50% of local bodies near nuke plants want say over reactor restarts
- 【Related】Prospect uncertain for Tokai No. 2 nuke plant restart despite extension application

Japan Atomic Power Co. has agreed to give not only the Tokai Municipal Government that hosts the company's Tokai No. 2 nuclear plant but also five surrounding municipalities the right to effectively approve reactivation of the plant.
This is apparently the first agreement in Japan that gives not only local bodies hosting a nuclear plant but also surrounding municipalities such a right.
The five local bodies are Mito, Hitachi, Hitachinaka, Naka and Hitachiota in Ibaraki Prefecture, all within a 30-kilometer radius of the power plant. The mayors of these five municipalities plus Tokai gathered with Japan Atomic President Mamoru Muramatsu at the Tokai Municipal Government headquarters on the evening of March 29 and signed the accord.
Under the agreement, all six municipal governments can express opinions on reactivation of the plant or any extension of its operational life, and demand explanations from the plant operator.
There have been growing calls from municipalities surrounding those hosting nuclear plants for the right to approve the stations' operations following the outbreak of the Fukushima nuclear crisis. However, most nuclear plant operators have refused to grant such rights to local bodies not actually hosting a plant.

A fairer deal (2)

April 4, 2018

Editorial: JAPC pact seeking local bodies' consent for N-plant restart a good move
https://mainichi.jp/english/articles/20180404/p2a/00m/0na/022000c
Japan Atomic Power Co. (JAPC) has signed a pact with six municipalities within a 30-kilometer radius from its Tokai No. 2 nuclear power plant in Tokai, Ibaraki Prefecture, over prior approval of the facility's reactivation. Under the accord, the company must effectively obtain consent in advance from not only the village of Tokai, which hosts the nuclear station, but also Mito and four other surrounding cities after holding consultations.

- 【Related】Japan Atomic Power grants local gov'ts say in reactor restart under new agreement
- 【Related】Fukushima & Nuclear Power

While some issues remain unclear, including how to respond when the opinions of the six municipalities are divided, the pact is unprecedented in that it includes the need to obtain approval for reactivation from not only the local body hosting a nuclear plant but also from surrounding municipalities.
If a nuclear plant accident breaks out, its impact would extend beyond local municipalities hosting the facility. Nevertheless, surrounding municipalities not home to the plant are not granted the right to give prior consent to reactivation. JAPC's new pact should serve as a role model for reviewing such disparities across the country.
While host municipalities are usually reluctant to allow surrounding local bodies the right to give prior consent for reactivation, it was the former Tokai village mayor who initiated the latest scheme, calling on surrounding municipalities to negotiate with JAPC in the wake of the Fukushima No. 1 Nuclear Power Plant disaster in March 2011. A former proponent of nuclear power, the ex-mayor turned himself anti-nuclear after the Fukushima crisis, which broke out in the neighboring prefecture.

After the Fukushima disaster, the central government expanded areas where local governments need to draw up nuclear evacuation plans for residents from within an 8-10 kilometer radius of a nuclear plant to a 30-kilometer radius. In the case of the Tokai No. 2 nuclear plant, approximately 960,000 people live in a 30-kilometer radius from the facility -- the largest figure in the country. Nonetheless, local municipalities are still struggling to devise their own nuclear evacuation schemes.
JAPC may well have judged that it would be easier to obtain local understanding for reactivation if the right to prior consent was given to surrounding municipalities as well.
The central government and power companies operating nuclear plants should not take the JAPC pact as an exceptional case. There are seven nuclear reactors, operated by three utilities, which have been put back online under the new regulatory standards introduced in the aftermath of the Fukushima disaster. Before restarting these reactors, utilities obtained approval from only the cities, towns and prefectures hosting the nuclear facilities. Power companies apparently believed that expanding the right to prior consent could set a high hurdle for reactor restarts.
With regard to Kyushu Electric Power Co.'s Genkai nuclear plant in Saga Prefecture, which was restarted just last month, four surrounding cities have opposed the reactivation out of concern for resident evacuation plans. If electric companies are to keep ignoring the voices of residents of surrounding municipalities, public distrust in nuclear power would only be left growing.
Minister of Economy, Trade and Industry Hiroshige Seko spoke lightly of the JAPC pact with six municipalities, saying, "The central government is not in a position to get involved in it." The minister's comment clearly illustrates that he feels the matter as someone else's affair.
Under the country's basic energy plan, it is stated that the central government should come to the fore and make efforts to obtain the understanding of and cooperation for reactivation from concerned parties including local bodies hosting nuclear plants. The central government is urged to introduce laws on the procedures in which local bodies within a 30-kilometer radius from a nuclear plant give consent to reactivation, in a manner better reflecting their intentions.

Niigata governor quitting will affect nuclear future

April 18, 2018

Niigata governor to quit
https://www3.nhk.or.jp/nhkworld/en/news/20180418_35/
Niigata Governor Ryuichi Yoneyama has announced he's stepping down over an alleged sex scandal. His sudden departure throws into question the future of a nuclear power plant in the central Japan prefecture. Yoneyama has been cautious about the plant operator's efforts to restart the facility.

Yoneyama held a news conference on Wednesday, the day before a weekly magazine was expected to run a story about the scandal.

Yoneyama revealed that he had tendered his resignation earlier in the day to the chairperson of the prefectural assembly.

He said he decided to resign to avoid further turmoil and take responsibility for his actions. He added that he wanted to offer his sincere apology for undermining the trust of many people.

Yoneyama was elected governor in October 2016, with the recommendation of the Japanese Communist Party, the Liberal Party, and the Social Democratic Party.

He has been cautious about the restart of the Kashiwazaki-Kariwa nuclear power station in the prefecture.

It is run by Tokyo Electric Power Company, the operator of the Fukushima Daiichi nuclear plant, which was crippled by the March 2011 earthquake and tsunami.
The utility has been seeking local consent to restart the Kashiwazaki-Kariwa plant.

Governor quits over sex scandal, affects nuclear reactor restart
https://mainichi.jp/english/articles/20180418/p2g/00m/0fp/074000c
April 18, 2018 (Mainichi Japan)
NIIGATA (Kyodo) -- Niigata Gov. Ryuichi Yoneyama said Wednesday he will resign after admitting to a sex scandal in a move affecting the approval process for the restart of Tokyo Electric Power Company Holdings Inc.'s nuclear reactors in the central Japan prefecture.

- 【Related】Niigata governor to decide in few days if he'll resign over alleged affair
- 【Related】TEPCO's Niigata nuclear plant set to clear screening to restart reactors

"I sincerely offer apologies for betraying the trust of many people," Yoneyama told a press conference, admitting that his relationship with a woman, as described in a weekly magazine due out Thursday, may "look to some as prostitution."
Shukan Bunshun magazine alleged in an online teaser article Wednesday that the 50-year-old governor has been paying money to have sex with a 22-year-old college student. At a news conference Wednesday, the governor said he gave a woman he met online "presents and money so she would like me more."
Since being elected governor in 2016, Yoneyama has refrained from approving the restart of the No. 6 and 7 reactors at the Kashiwazaki-Kariwa nuclear complex.
The governor has said he cannot make the decision until the prefectural government completes its own assessment of what caused the Fukushima Daiichi nuclear disaster in 2011.
All seven Kashiwazaki-Kariwa units are boiling water reactors, the same as those at the Fukushima Daiichi nuclear plant where three of six reactors melted down in the days after a massive earthquake and tsunami in March 2011. Last December, two reactors at the Kashiwazaki-Kariwa complex cleared safety reviews under the stricter, post-Fukushima regulations.
On Tuesday, Yoneyama said he would consider whether to quit over a forthcoming magazine article about a "woman issue." Calls for his resignation were growing in the Niigata prefectural assembly.
The gubernatorial election to pick Yoneyama's successor is expected to be held in early June. Yoneyama will resign with two and a half years of his term remaining.
The seven-reactor Kashiwazaki-Kariwa complex is one of the world's largest nuclear power plants with a combined output capacity of 8.2 million kilowatts.
Facing huge compensation payments and other costs stemming from the Fukushima disaster, Tepco is keen to resume operation of its reactors to improve its financial performance.
The Japanese government of Prime Minister Shinzo Abe also supports restarting nuclear reactors that have cleared post-Fukushima safety reviews.

Yoneyama won the Niigata governorship in October 2016 with the support of the Japanese Communist Party and the Social Democratic Party, which are both opposed to nuclear power. He defeated contenders including a candidate backed by Abe's Liberal Democratic Party and its junior coalition partner Komeito.

Governor resigns. What now?

April 19, 2018

Will resignation of key governor weaken Japan's anti-nuclear movement?
by Stephen Stapczynski
Bloomberg

A governor who has been blocking the restart of the world's biggest nuclear power plant in his prefecture has resigned, but it remains to be seen whether the move will create an opening for the nation's pro-nuclear forces.
Niigata Gov. Ryuichi Yoneyama, who campaigned on his opposition to restarting Tokyo Electric Power Co. Holding Inc.'s Kashiwazaki-Kariwa reactors, said Wednesday he would resign over allegations he paid women for sex.
The governor was one of a few high-profile opponents to nuclear power, which the public has viewed with skepticism since the 2011 Fukushima disaster. He was also the biggest roadblock for Tepco's effort to run reactors in his prefecture, two of which have been given the all-clear by regulators. Although the country has imposed stronger safety regulations since 2011, only five of its 39 operable reactors are online.
"Yoneyama was not a leader, but certainly an important figure in a position to influence the fate of reactors," said Jeff Kingston, the director of Asian studies at Temple University's Japan campus. "Not many of those, so he will be missed."
Yoneyama repeatedly said he wouldn't support a restart until a panel of experts appointed by the prefecture investigate the Fukushima disaster and study evacuation plans in case of an emergency at Tepco's Niigata plant. He said in January that the process would take at least three years.
When is the next election?
A vote is likely to be held around the beginning of June, according to an official at the prefecture's election commission. The assembly president will officially inform the commission of Yoneyama's resignation in the coming days, which will then trigger a gubernatorial election within 50 days.
Would the next governor also oppose restarts?
Probably. The last two governors were against restarting the reactors and 64 percent of voters in the last election opposed the move, according an exit poll conducted by the Asahi Shimbun.
"It is likely that the next governor will continue an anti-restart policy," wrote Daniel Aldrich, a professor at Northeastern University, in an email. "Anti-nuclear sentiment is still high across the country."
Prime Minister Shinzo Abe's Liberal Democratic Party supports the restarts, while most of the opposition parties don't. Both sides will likely field candidates.
High-ranking officials from the Constitutional Democratic Party, the nation's largest opposition party, which is also against nuclear restarts, and the Democratic Party told the Sankei Shimbun Wednesday that opposition parties should band together behind one candidate.

Tamio Mori, who was backed by the LDP in the 2016 Niigata election, could be a potential contender for Abe. Mori is the former mayor of Nagaoka City, and was seen as the more pro-nuclear candidate in the 2016 election when he captured 46 percent of the vote. He didn't respond to an emailed request for comment.

What about the review panel?

This timeline for its work might speed up if the new governor is pro-restart, according to Miho Kurosaki, an analyst at Bloomberg New Energy Finance.

"I don't think the panel review will be removed fully," said Kurosaki, highlighting lingering safety concerns in the community over a 2007 earthquake that temporarily shut the facility.

Does Tepco even need local approval?

While the local governor's approval is traditionally sought by utilities before they resume operations at a reactor, it's not required by law. Kyushu Electric Power Co. continued operating reactors at its Sendai facility despite opposition from a newly elected anti-nuclear governor in 2016.

"The 'gentlemen's agreement' that has provided some unwritten capacity to nuclear host community decision makers is in fact quite weak," Aldrich said. "Even if another anti-nuclear governor is elected within Niigata, I believe that the economic and political pressure on utilities will push them to restart reactors."

Ohi No.4 restarted

May 10, 2018

Ohi No.4 reactor restarted

https://www3.nhk.or.jp/nhkworld/en/news/20180509_30/

Japan's 8th reactor is back online. Kansai Electric Power Company on Wednesday restarted a reactor at the Ohi plant in Fukui Prefecture, central Japan.

At the plant, workers pulled out the control rods that suppress atomic fission of the No.4 reactor.

The facility is expected to reach criticality early Thursday, begin power generation and transmission on Friday and go into commercial operation in early June.

The reactor had complied with new government regulations put in place following the 2011 Fukushima Daiichi nuclear accident.

Two months earlier, the utility reactivated the No.3 reactor at the plant. Two more reactors are running at its Takahama plant about 13 kilometers west of Ohi.

Although they all passed the government's new regulations, attention is now focused on the threat of multiple accidents at these plants in the event of an earthquake and tsunami.

This summer, the government plans to hold its first drill based on a scenario that accidents have occurred

simultaneously at the Ohi and Takahama plants.

In 2014, the Fukui District Court ruled against putting the No.3 and No.4 reactors at Ohi back online. It said estimated tremors of possible quakes at the plant are too optimistic. The ruling was appealed to a higher court, which has yet to decide the issue.

And now there are eight

June 6, 2018

Japan's Ohi-4 Has Resumed Commercial Operation, Says Operator
https://www.nucnet.org/all-the-news/2018/06/06/japan-s-ohi-4-has-resumed-commercial-operation-says-operator
6 Jun (NucNet): Japan's Ohi-4 nuclear reactor unit in Fukui Prefecture, southwest Japan, entered commercial operation mode yesterday at 16:00 local time, operator Kansai Electric Power Company said in a statement.
Kansai Electric connected Ohi-4, a 1127-MW pressurised water reactor unit, to the grid on 11 May 2018 for the first time since the unit had been shut down in September 2013 in the aftermath of the March 2011 Fukushima-Daiichi accident.

Ohi-4 becomes the eighth nuclear plant at one of five sites, which has been restarted under new regulatory standards introduced following the 2011 accident.

Ohi-3, a twin unit, resumed commercial operation in April 2018.

Ohi-3 and -4 were the first two reactors to resume operation in Japan after the Fukushima-Daiichi accident but were both taken offline in September 2013 for scheduled refuelling and maintenance.

Their restarts where delayed when in May 2014 the Fukui district court ruled that it would not allow Ohi-3 and -4 to return to operation.

The governor of Fukui Prefecture allowed the restart of Ohi-3 and -4 in November 2017 after courts rejected challenges by anti-nuclear groups.

All of Japan's 48 reactors were taken offline as a result of the Fukushima-Daiichi accident for safety assessments and upgrading measures.

The eight units that have been restarted in Japan since the Fukushima accident are: Ohi-3, Ohi-4, Genkai-3, Sendai-1, Sendai-2, Ikata-3, Takahama-3 and Takahama-4.

Will Tokai No.2's operational life be extended?

June 22, 2018

Tokai nuclear plant passes key test, resumption still in the cards
http://www.asahi.com/ajw/articles/AJ201806220040.html
THE ASAHI SHIMBUN
June 22, 2018 at 15:30 JST
The Tokai No. 2 nuclear power plant in Ibaraki Prefecture passed a major earthquake safety test on June 21, paving the way for the Nuclear Regulation Authority to approve the extension of its operational life beyond 40 years.
NRA officials visited a facility in Hyogo Prefecture on June 21 to observe a test of equipment at the currently offline nuclear plant that is designed to keep the reactor building airtight even in the event of a strong earthquake.
The test was conducted at the National Research Institute for Earth Science and Disaster Resilience, located in Miki, Hyogo Prefecture. The institute contains a building that can replicate the tremors of earthquakes.
Japan Atomic Power Co. brought in equipment designed to keep in place blowout panels attached to the wall of the Tokai No. 2 nuclear reactor building. The test was to confirm that the device operated appropriately even under the maximum shaking simulation.
The panel, measuring five meters square and weighing two tons, was shaken strongly for about 90 seconds to test if it would stay sealed. The outcome was not perfect, with a five-centimeter opening appearing as some parts were damaged by the shaking. A worker then manually sealed the panel, and airtightness was confirmed.
Japan Atomic Power will have to change the design of the equipment to ensure that it can remain sealed even if hit by the maximum expected quake.
NRA Commissioner Shinsuke Yamanaka, who observed the test, said that while additional measures were needed, there were no major technical problems in the fundamental design.
"With today's test, a major hurdle was overcome," he said.
The Tokai No. 2 nuclear power plant will reach 40 years of operation in November, but the NRA is expected to decide that the plant meets new safety standards implemented in the wake of the 2011 Fukushima nuclear accident.
However, Japan Atomic Power faces other issues beyond design conditions. For the Tokai No. 2 plant to resume operations, the consent of the Ibaraki prefectural government as well as six municipal governments in the vicinity of the plant must be obtained. However, many local governments are cautious about having operations resume.
On June 19, the Mito city assembly passed a document opposing the resumption of the plant.
Japan Atomic Power will also have to find 174 billion yen ($1.6 billion) in funds for the construction work that will be necessary for safety measures. While Tokyo Electric Power Co. Holdings Inc. has indicated it was prepared to provide financial assistance, it is still unclear if Japan Atomic Power can come up with all the money to cover the costs that can further increase.
(This article was written by Yusuke Ogawa and Toshio Kawada.)

Tokai No.2: Ready to be restarted and extended for another 20 years?

June 28, 2018

Japan Atomic's Tokai No. 2 plant set to pass restart screening
https://mainichi.jp/english/articles/20180628/p2a/00m/0na/016000c
TOKYO -- The Nuclear Regulation Authority (NRA) said on June 27 that it is set to complete a safety screening of Japan Atomic Power Co.'s Tokai No. 2 nuclear power station in Tokai, Ibaraki Prefecture -- a reactor Japan Atomic is looking to have both restarted and its operational life extended.

- 【Related】Editorial: JAPC pact seeking local bodies' consent for N-plant restart a good move
- 【Related】Japan Atomic Power grants local gov'ts say in reactor restart under new agreement
- 【Related】TEPCO, Tohoku Electric to give Japan Atomic financial boost to help restart reactor

Japan Atomic filed a written amendment for the Tokai No.2 nuclear plant's safety measures with the NRA on the same day. Commenting on the move, NRA Chairman Toyoshi Fuketa said at a news conference, "We can forecast the prospects for the screening." After NRA officials examine the amendment, the nuclear watchdog is expected to present a draft report at a regular meeting stating that the nuclear plant has met the new safety standards.
The Tokai No. 2 nuclear plant will be decommissioned if the facility can't pass three types of NRA screenings, one each for adherence to the new safety standards, construction plans for updating the plant, and the operational life extension. All the screenings must be passed by Nov. 27, 2018, the day before the plant reaches its 40-year operational limit.
While there were concerns the construction plan screening may take too long to meet the deadline, the NRA judged at a June 26 meeting that the basic design for the reactor has met the security standards as a result of tests on safety measure devices and other evidence. That results in promoting the process of restarting the nuclear reactor and extending the operational periods for up to 20 years.
(Japanese original by Toshiyuki Suzuki, Science & Environment News Department)

Nukes: How many restarts yet?

July 3, 2018

Nuclear reactor restarts likely as Cabinet OKs new energy plan
By SHINICHI SEKINE/ Staff Writer
http://www.asahi.com/ajw/articles/AJ201807030061.html
A new wave of nuclear reactor restarts became more likely as the government approved the new Basic Energy Plan on July 3, confirming that nuclear power will remain a key component of Japan’s energy strategy.
The latest Basic Energy Plan, which charts the nation’s mid- and long-term energy policy, marks the fifth in a series that is required by law to be reviewed about every three years.

The second plan to be revised under the administration of Prime Minister Shinzo Abe stated for the first time that the country will strive to make renewable energy a major power source, although it noted fluctuations in output due to weather conditions.
Renewables can become a viable source of a stable power supply when they are combined with rechargeable batteries and hydrogen, according to the plan.
The plan also maintained the reliance on coal-fired thermal power as a base-load energy source despite high emissions of carbon dioxide.
The Abe administration decided to promote nuclear energy when it revised the plan in 2014, reversing the policy of the previous government led by the then-Democratic Party of Japan, which pledged to phase out nuclear power by 2039 in the face of mounting public concern over the safety of nuclear power following the 2011 Fukushima nuclear disaster.
Under the latest plan, the ratio of nuclear energy, renewables and coal thermal power in the nation's overall energy as of fiscal 2030 will remain at 20-22 percent, 22-24 percent and 26 percent, respectively, in line with the government's target set three years ago.
Experts say about 30 reactors need to be reactivated to achieve the 20-22 percent target, but only nine have gone back on line so far after they cleared the more stringent reactor regulations that took effect after the Fukushima accident.
The plan did not touch on the need for building a new nuclear plant in light of the widespread public opinion against nuclear energy. The last Basic Energy Plan did not mention the subject, either.
The latest plan re-endorsed using the nuclear fuel cycle, in which plutonium extracted from spent nuclear fuel at nuclear plants is used to generate power.
But the plan, noting calls from the United States, said that Japan "will make efforts to cut the stockpile of plutonium."
Japan holds a total of 47 tons of plutonium, equivalent to 6,000 Nagasaki-type atomic bombs, a source of criticism from the United States and other countries.
The country has failed to reduce its plutonium stockpile due to little progress in the nuclear fuel cycle over decades.
The project to operate the Monju prototype fast-breeder reactor in Fukui Prefecture, the core part of the nuclear fuel cycle, rarely worked over 20 years due to numerous glitches. The government finally decided to pull the plug on it in 2016.
Burning a mixed oxide form of plutonium and uranium has not spread among conventional nuclear reactors, although it was considered a way to reduce the plutonium stockpile.
In its attempts to export nuclear plants, the country has hit major problems wherever it has pitched them. But the government will maintain the export policy as a key component of the administration's strategy for expanding the Japanese economy.
According to the Basic Energy Plan, "Japan is determined to make a positive contribution to enhancing the safety of nuclear energy and the peaceful use of nuclear energy" through exports of nuclear plants.

NRA clears restart of Tokai 2 reactor

Residential areas spread around the Tokai No. 2 nuclear plant in Tokai, Ibaraki Prefecture. (Satoru Semba)

July 5, 2018

The reactor closest to Tokyo is cleared by nuclear watchdog
THE ASAHI SHIMBUN

The Nuclear Regulation Authority approved safety measures at the only nuclear plant in the Tokyo metropolitan area, but questions remain on whether its aging reactor can restart and if its operator will survive.

At a July 4 meeting, the NRA concluded that Japan Atomic Power Co.'s measures to protect the Tokai No. 2 nuclear plant from a severe accident, such as a core meltdown, in a powerful earthquake and tsunami meet the stricter safety regulations put in place in 2013.

"We believe the measures were designed in a way to generate appropriate and sufficient results," Toyoshi Fuketa, chairman of the NRA, said.

The plant is located in the village of Tokai, Ibaraki Prefecture, northeast of Tokyo.

The Tokai No. 2 reactor is the first to pass the NRA's safety regulations among those affected by the 2011 Great East Japan Earthquake and tsunami.

It is also the 15th reactor cleared by the NRA since the quake and tsunami caused the triple meltdown at the Fukushima No. 1 nuclear plant and forced the shutdowns of all reactors in Japan.

The NRA's assessment will become official after it solicits public opinions over 30 days.

However, the plant's sole reactor, with an output capacity of 1.1 gigawatts, will mark the end of its 40-year life span on Nov. 27. Japan Atomic Power will need approval from the NRA by November to extend the reactor's operational life by 20 years.

On top of that, the company will have to obtain NRA approval for details of the company's project to strengthen the facility, also by Nov. 27.

And the company needs the consent of Tokai, host of the plant, as well as Ibaraki Prefecture and five neighboring cities.

About 960,000 people reside within 30 kilometers of the Tokai No. 2 plant, making it the most crowded 30-km zone around nuclear power facilities in the nation.
Nuclear power plant operators normally gain approval for reactor restarts only from the host community and the prefectural government.
But Japan Atomic Power in March reached an agreement with Tokai village and the five cities to reactivate the plant only after they all endorsed the restart.
Last month, the Mito municipal assembly adopted a motion objecting to the restart of the Tokai No. 2 reactor.
Central government guidelines call on municipalities sitting within 30 km of a nuclear facility to devise evacuation plans in advance.
Mito, with a population of 270,000, has not secured places for 90,000 potential evacuees. In fact, only three of the 14 municipalities around the Tokai No. 2 nuclear plant have come up with evacuation plans so far.
The establishment of evacuation plans is not a legal requirement for restarting a nuclear power plant.
But local leaders have said they will take it into consideration when they weigh their decision on the Tokai No. 2 reactor.
One other problem facing Japan Atomic Power is that the NRA's screening procedures have been stalled.
If further delays cause the company to miss the deadline for submitting required documents to the NRA, Japan Atomic Power could be forced to decommission the plant.
The Tokai No. 2 reactor is the only unit that the company can bring back online in the near future.
Of the company's four reactors, two are already on their way to be decommissioned.
Prospects for restarting the No. 2 reactor at its Tsuruga plant in Fukui Prefecture are slim because many seismologists have said an active geological fault runs under the reactor building.
The Tokai No. 2 reactor appears to be Japan Atomic Power's last chance for survival.
The company is expected to spend 174 billion yen ($1.58 billion) on safety measures, including construction of a sea wall to protect the plant against tsunami.
Japan Atomic Power used to supply power to Tohoku Electric Power Co. and Tokyo Electric Power Co. before the Fukushima disaster. The two utilities said they will provide funds for Japan Atomic Power's measures.

July 4, 2018

Nuclear watchdog OKs restart of aging nuclear plant hit by tsunami
TOKYO (Kyodo) -- Japan's nuclear watchdog on Wednesday gave the green light to the restart of an aging nuclear power plant northeast of Tokyo, idled since it was hit by the tsunami that caused meltdowns at the Fukushima Daiichi plant.

- 【Related】Japan Atomic's Tokai No. 2 plant set to pass restart screening
- 【Related】Japan approves 70-year plan to scrap nuclear reprocessing plant

The Tokai No. 2 plant is the first nuclear plant affected by the March 2011 earthquake and tsunami disaster to have cleared screening by the Nuclear Regulation Authority, part of the steps required before it can actually resume operations.

The plant, located in the village of Tokai in Ibaraki Prefecture, suffered an emergency automatic shutdown of its reactor and was cut off from its external power source following the quake.
After being hit by a 5.4-meter tsunami, one of its three emergency power generators was incapacitated. But the other two remained intact and allowed the reactor to cool down three and a half days after the disaster.
Despite the approval by the NRA, the Tokai plant still needs to clear two more screenings by regulators by November, when it will turn 40 years old, otherwise it could face the prospect of decommissioning.
Tougher safety rules introduced in the post-Fukushima years prohibit in principle the operation of nuclear reactors beyond 40 years. But extending a unit's life for an additional 20 years is possible if operators make safety upgrades and pass regulators' screening.
Actual plant operation is unlikely before March 2021 when construction to bolster safety measures is scheduled to be completed. The restart plan also needs to be approved by local municipalities.
The Tokai No. 2 plant, operated by Japan Atomic Power Co., uses a boiling water reactor, the same type as those used at the crisis-hit Fukushima Daiichi plant, which saw core meltdowns and spewed a massive amount of radioactive materials into the atmosphere in the 2011 disaster.
It is the eighth plant approved of a restart under the stricter safety rules introduced after the 2011 Fukushima nuclear crisis and the second with a boiling water reactor following the Kashiwazaki-Kariwa nuclear plant run by Tokyo Electric Power Company Holdings Inc.
The plant's evacuation plan -- which covers 960,000 residents, the largest number of potential evacuees for a nuclear plant in Japan due to its location in a metropolitan area -- has yet to be compiled.
The operator filed for a safety screening to restart the plant in May 2014. It predicts a potential tsunami as high as 17.1 meter and expects some 180 billion yen ($1.63 billion) is needed to construct coastal levees and beef up power sources among other safety measures.
Japan Atomic Power solely engages in the nuclear energy business but none of its reactors has been online since the 2011 quake. Given its financial problems, the NRA has asked it to show how it will finance the safety measures and Tokyo Electric Power and Tohoku Electric Power Co. have offered to financially support the company.

Ikata-3 gets OK to restart

September 26, 2018

High Court Allows Restart Of Japan's Ikata-3 Reactor
https://www.nucnet.org/all-the-news/2018/09/26/high-court-allows-restart-of-japan-s-ikata-3-reactor
Plant Operation
26 Sep (NucNet): The Hiroshima High Court yesterday accepted an appeal by Shikoku Electric Power Company allowing it to restart the Ikata-3 nuclear power plant in Ehime Prefecture in southern japan, saying worries over a volcanic eruption damaging the plant are groundless.
The decision is a reversal of the court's earlier provisional injunction that demanded the utility halt the unit until the end of this month, citing safety risks associated with potential volcanic activity in a nearby prefecture.

The temporary suspension order was issued in December 2017 following a request from a local opposition group. It was the first case in which a high court had prohibited operations at a nuclear plant since the 2011 Fukushima-Daiichi accident led to a nationwide shutdown of all nuclear plants pending safety inspections.

Following the court's decision, Shikoku Electric said it will restart the 846-MW pressurised water reactor unit on 27 October. The unit has been offline for maintenance since October last year.

Mayor of Naka,Ibaraki opposed to restart of Tokai 2

October 24, 2018

Naka mayor opposed to Tokai No.2 restart
https://www3.nhk.or.jp/nhkworld/en/news/20181024_40/

The mayor of a city north of Tokyo adjacent to the host village of the Tokai No.2 nuclear power plant has voiced opposition to putting its reactor back online.

The facility, operated by Japan Atomic Power Company, has met government requirements introduced after the 2011 accident at the Fukushima Daiichi nuclear plant.

It is also expected to win approval next month for extended operation, though it is 40 years old.

Attention is focused on whether the operator can obtain consent from Tokai Village, where the plant is located, and 5 nearby cities before it can restart the reactor.

Naka City Mayor Toru Umino on Wednesday met citizens opposed to the restart.

He said he has no choice but to say no, as it's impossible to draw up a plan to evacuate 960,000 residents in the area.

Umino is the first mayor among those of the 6 municipalities to voice opposition to the restart.

He later said he will ask the company whether the restart will be put on hold if even one of the 6 opposes the plan.

October 23, 2018

Mayor of city near Tokai No. 2 nuke plant to oppose reactor reactivation

https://mainichi.jp/english/articles/20181023/p2a/00m/0na/020000c

NAKA, Ibaraki -- The mayor of this city has revealed that he will oppose the planned reactivation of the Tokai No. 2 nuclear power station in Ibaraki Prefecture northeast of Tokyo in an interview with the Mainichi Shimbun.

- 【Related】 Tokai No. 2 nuke plant passes tighter safety checks introduced after 2011 quake
- 【Related】 Editorial: JAPC pact seeking local bodies' consent for N-plant restart a good move
- 【Related】 Fukushima & Nuclear Power

Toru Umino is the first mayor expressing such a view among the heads of six local municipalities that have sealed a safety agreement with plant operator Japan Atomic Power Co. (JAPC).

His remark in the Oct. 22 interview is significant because the six municipalities including Naka surrounding the nuclear plant have effective right to give consent on the restart of the plant. That right is included in a new safety agreement they signed with JAPC in March about the facility in the village of Tokai, Ibaraki Prefecture.

As a reason for his stance, Umino cited the difficulty in formulating a wide-area evacuation plan that local municipalities are required to prepare for a severe accident at the nuclear complex.

"There's no way we can devise a perfect plan. There would be a terrible traffic jam with cars trying to go through highway tollgates. Bus companies would not send their drivers (to evacuate residents)," said Umino. "It would be safest to keep the reactor offline considering the safety of local residents."

Regarding the local governments' right of consent, Umino said, "In my understanding, the reactor cannot be put back online if even one local municipality opposed it, but the JAPC considers it differently." The mayor also disclosed that his city plans to conduct a large-scale opinion survey on local residents about whether they agree with the resumption of the reactor's operation.

The new safety agreement between the JAPC and the six municipalities stipulates that prior consultation will be held among them before restarting the reactor. However, the pact does not specify a scenario where the opinions of the six local governments are divided over reactivation. The municipalities include the cities of Naka and Mito as well as the village of Tokai.

The central government's Nuclear Regulation Authority (NRA) certified in September that the Tokai No. 2 plant has met the new safety standards introduced in the aftermath of the 2011 nuclear disaster. The NRA also authorized the construction plan for the facility on Oct. 18. In addition, the authority is expected to give the green light to an extension of the operational life of the aging reactor beyond the 40-year rule by Nov. 27, the deadline for the procedure.

(Japanese original by Keisuke Ota and Sakae Kato, Mito Bureau)

Onawaga No.1 to be scrapped

October 25, 2018

Utility plans to scrap reactor at Onagawa plant
https://www3.nhk.or.jp/nhkworld/en/news/20181025_33/

Tohoku Electric Power Company has told Miyagi Prefecture that it is going to decommission an aging reactor at its Onagawa nuclear power plant.

The 3 reactors at the plant in northeastern Japan have been offline since the March 2011 earthquake and tsunami.

The utility's president, Hiroya Harada, conveyed its decision to Miyagi Governor Yoshihiro Murai on Thursday.

Harada explained that additional safety steps would create technical difficulties as the No.1 reactor is more than 30 years old. The measures are required under government regulations that were introduced after the 2011 disaster.

Murai asked Tohoku Electric Power to put top priority on safety in scrapping the reactor as the work is expected to take a long time. The governor also asked the utility to properly disclose information and maintain stable power supplies.

The utility hopes to put the 2 other reactors back into operation. The No.2 reactor is being checked by the nuclear regulator, and the firm is preparing to apply for an inspection of the No.3 reactor.

Utilities have decided to decommission 10 reactors at 7 plants, including Onagawa, since the 2011 disaster at the Fukushima Daiichi plant. They cite the huge cost of additional safety measures. These figures do not include the all 6 reactors at Fukushima Daiichi.

See also:
Tohoku Electric to scrap aging No. 1 unit at Onagawa nuclear plant

https://www.japantimes.co.jp/news/2018/10/25/national/tohoku-electric-scrap-aging-no-1-unit-onagawa-nuclear-plant/#.W9GmUDGYSos

Kyodo
SENDAI – Tohoku Electric Power Co. said Thursday it will scrap the idled No. 1 unit at its Onagawa nuclear power plant in Miyagi Prefecture, more than 30 years after it started operations.

Onawaga No.1 to be scrapped

October 26, 2018

Tohoku Electric to scrap aging Onagawa nuke plant reactor over maintenance costs
https://mainichi.jp/english/articles/20181026/p2a/00m/0na/027000c

Tohoku Electric Power Co. has decided to decommission the idled No. 1 reactor at its Onagawa Nuclear Power Station in the northeastern Japan prefecture of Miyagi, the utility's president Hiroya Harada announced on Oct. 25.

- 【Related】Tohoku Electric to scrap aging No. 1 unit at Onagawa nuclear plant
- 【Related】Tohoku Electric considering decommissioning Onagawa nuke plant reactor
- 【Related】Tokai No. 2 nuke plant passes tighter safety checks introduced after 2011 quake

The company decided to scrap the reactor after determining that it would be burdensome to bring it up to new safety standards implemented in the wake of the Fukushima nuclear disaster triggered by the March 2011 Great East Japan Earthquake and tsunami.

To bring the plant back online, Tohoku Electric would need to greatly strengthen the reactors against earthquakes and tsunamis, and provide measures against terrorism to pass strict screening by the Nuclear Regulation Authority (NRA). Though the company has not provided details of the required work, it is believed it would cost a huge amount.
Furthermore, a rule implemented in the wake of the Fukushima disaster limits the operational life of nuclear reactors to 40 years in principle, and 34 years have passed since the Onagawa plant's No. 1 reactor went into service in June 1984. This means the reactor could only operate for a few years even if it were reactivated.

Additionally, the No. 1 reactor has an output of just 524,000 kilowatts, smaller than the 825,000 kilowatts of the plant's No. 2 and 3 reactors. All three reactors at the plant -- the oldest of four nuclear stations operated by Tohoku Electric -- remain idled in the wake of the 2011 tsunami, which flooded the No. 2 reactor building.

In its basic energy plan, the government has designated nuclear power as an important baseload source of energy, and it aims to increase the rate of nuclear power generation in the country to 20-22 percent of total electricity production by fiscal 2030. This is premised on having around 30 nuclear power reactors in operation, but since the Fukushima nuclear disaster, just nine reactors have passed NRA screening and been reactivated.

The decision to dismantle the No. 1 reactor at the Onagawa plant means that 10 reactors at seven plants -- not including the reactors at the disaster-stricken Fukushima Daiichi Nuclear Power Station in northeastern Japan -- have now been slated for decommissioning.

"Even if other nuclear power plants are reactivated in the future, unless exemptions are permitted to allow the reactors to operate for up to 60 years, then reactors will start being decommissioned one after another. Reaching the target nuclear power ratio in (Japan's) energy is quite a high hurdle," an official at one major power company commented.

(Japanese original by Atsuko Motohashi, Sendai Bureau; Takayuki Hakamada, Business News Department; and Riki Iwama, Science & Environment News Department)

October 25, 2018

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See also:
Tohoku Electric to scrap aging No. 1 unit at Onagawa nuclear plant
https://www.japantimes.co.jp/news/2018/10/25/national/tohoku-electric-scrap-aging-no-1-unit-onagawa-nuclear-plant/#.W9GmUDGYSos

Kyodo
SENDAI – Tohoku Electric Power Co. said Thursday it will scrap the idled No. 1 unit at its Onagawa nuclear power plant in Miyagi Prefecture, more than 30 years after it started operations. [...]

Ikata reactor restarted

Shikoku Electric restarts Ikata nuclear reactor
October 27, 2018 (Mainichi Japan)

https://mainichi.jp/english/articles/20181027/p2g/00m/0dm/050000c#cxrecs_s

MATSUYAMA, Japan (Kyodo) -- Shikoku Electric Power Co. on Saturday restarted a reactor at the Ikata nuclear power plant in western Japan after a suspension of nearly one year due to a high court order.

- 【Related】Japan court rejects local call to prevent restart of Ikata reactor
- 【Related】Experts divided on court OK for restart of Ikata nuke reactor
- 【Related】Hiroshima High Court overturns injunction against Ikata reactor restart

The restart of the No. 3 unit at the plant in the town of Ikata in Ehime Prefecture, announced by the power company after midnight, came after a Japanese high court accepted an appeal by the utility in late September ruling that there are no safety risks associated with potential volcanic activity in the nearby region.

Shikoku Electric said if all goes smoothly the No.3 unit will reach criticality, a controlled self-sustaining nuclear fission chain reaction, in the evening.

The company said it will start producing and transmitting electricity on Tuesday, before possibly putting the reactor into commercial operation on Nov. 28.

The decision by the Hiroshima High Court was an about-face from its provisional injunction issued in December last year that demanded the power company halt the No. 3 unit, capable of generating 890,000 kilowatts of electricity, until Sept. 30 following a request from a local opposition group.

The group had argued that Shikoku Electric underestimated the risk of pyroclastic flows reaching the plant if a big eruption occurred at the caldera of Mt. Aso, which is about 130 kilometers away.

The temporary suspension order was the first in which a Japanese high court banned operations at a nuclear plant since the 2011 meltdowns at the Fukushima Daiichi complex.

But the high court said Sept. 25 that the group's claim of a possible destructive volcanic eruption during the plant's operating period has no satisfactory grounds and there is a small chance of volcanic ash and rocks reaching the facility.

The reactor had been idle for maintenance since October last year. Before that, it had gone back online in August 2016 after clearing stricter safety regulations implemented in the wake of the Fukushima nuclear disaster.

Shikoku Electric had already decided to decommission the aging No. 1 and 2 reactors at the plant.

The No. 3 unit becomes the eighth reactor to be in operation in Japan at a time when a large majority of reactors in the country remain offline following the 2011 nuclear disaster.

At the time of the meltdowns, Japan had 54 nuclear reactors for commercial use.

20-tear life extension for Tokai 2 approved by NRA

November 7, 2018

Aging Tokai nuclear plant outside Tokyo cleared to restart

http://www.asahi.com/ajw/articles/AJ201811070061.html

THE ASAHI SHIMBUN

The nation's nuclear watchdog on Nov. 7 formally approved a 20-year extension of the only nuclear reactor in the Tokyo metropolitan area, although local communities will have the final say on the restart.

Operator Japan Atomic Power Co. will need the consent of the Ibaraki prefectural government, as well as six local municipalities, including the village of Tokai, where its aging Tokai No. 2 nuclear plant is located.

The company faced having to prepare to decommission the plant's 40-year-old reactor if it failed to meet a Nov. 27 deadline on revised and more stringent safety standards implemented by the Nuclear Regulation Authority in the aftermath of the 2011 nuclear disaster in Fukushima Prefecture.

After the triple meltdown at the Fukushima No. 1 nuclear plant, the operational life of nuclear reactors was set at up to 40 years in principle. But power companies can continue to operate their facilities for an additional 20 years if their reactors pass the NRA screening.

So far, all requests to the NRA to extend the operating life of old reactors have been approved.

The reactor at the Tokai No. 2 plant is the fourth to clear the NRA for extended operations since the Fukushima disaster. It is located about 120 kilometers from the heart of Tokyo.

The 1.1-gigawatt boiling water reactor is the only unit at the Tokai No. 2 plant and is of the same design as the crippled reactors at the Fukushima No. 1 nuclear plant.

The Tokai No. 2 plant was also affected by the tsunami generated by the magnitude-9.0 Great East Japan Earthquake on March 11, 2011.

It is the first time for a reactor affected by the tsunami to be approved for an operational extension. It is also the first boiling water reactor to gain such approval.

The NRA examined the reactor's pressure vessel and other equipment, and concluded that the unit could operate safely until November 2038.

But it remains unclear if Japan Atomic Power can restart the plant under its earliest time frame of 2021, due to local opposition.

In October, Mayor Toru Umino of Naka, one of the six municipalities around the plant, announced his opposition to the extension. The city assembly of Mito, another municipality, adopted a resolution against the extension in June.

About 960,000 people live within a 30-km radius of the plant, making it the most densely populated site among the nation's nuclear facilities.

After the Fukushima disaster, municipalities in close proximity to a nuclear plant were required to craft an evacuation plan to respond to a nuclear emergency.

But only three of the 14 municipalities around the Tokai No. 2 nuclear plant within that range have done so due to the difficulty of arranging transportation for such a large number of people.

Bringing the reactor back online is expected to cost Japan Atomic Power at least 174 billion yen ($1.54 billion), a sum that includes construction of a seawall and other safeguard measures.

The company hopes to have those measures in place by the end of March 2021.
It may well also have to spend tens of billions of yen in the future to meet a new requirement that nuclear facilities are able to contain damage from a terrorist attack.

TIMELINE OF KEY EVENTS
May 20, 2014
Operator Japan Atomic Power Co. applies for an NRA safety screening under new reactor regulations
Nov. 24, 2017
Application for a screening of an extension of operations
Sept. 26, 2018
NRA certifies that the reactor's safeguard measures meet the new regulations
Oct. 18
NRA approves plans to enhance the safety of the reactor
Nov. 7

NRA approves an operational extension
March 2021
Seawall and other safety measures to be completed
Plant to restart if Ibaraki prefectural government and six nearby municipalities give their consent

NRA approves extension of tsunami-hit Tokai No. 2 plant, but restart awaits local agreement

https://mainichi.jp/english/articles/20181107/p2a/00m/0na/010000c

TOKYO -- The Nuclear Regulation Authority (NRA) has approved the extension of operations at Japan Atomic Power Co.'s Tokai No. 2 Power Station in the eastern Japan prefecture of Ibaraki by up to 20 years, but the restart of the aging facility still awaits local approval.

- 【Related】Eastern Japan cities sign nuclear accident evacuation accord
- 【Related】Evacuation drill held near nuclear plant in capital of Shimane Pref.
- 【Related】Tokai No. 2 nuke plant passes tighter safety checks introduced after 2011 quake

The government's nuclear regulator made the decision on Nov. 7 after the nuclear plant passed three inspections, including one to see if the complex meets the new regulatory standards introduced in the wake of the March 2011 outbreak of the Fukushima nuclear crisis.

The move could allow Japan Atomic Power to continue operating the atomic power station in the village of Tokai until Nov. 27, 2038.

Attention is now focused on whether the decision will win approval from the Ibaraki Prefectural Government and six municipalities around the station with which the company has signed safety agreements.

Nuclear reactors can be operated for up to 40 years in principle. However, the period of operations at such plants can be extended just once by up to 20 years. The Tokai No. 2 plant's sole unit is the fourth nuclear reactor for which an extension has been approved following the No. 1 and 2 reactors at Kansai Electric Power Co.'s Takahama plant and the No. 3 reactor at the firm's Mihama plant, both in the central Japan prefecture of Fukui.

The Tokai No. 2 station will be the first nuclear plant for which an extension has been approved among those that sustained damage in the March 2011 Great East Japan Earthquake and tsunami. Furthermore, the plant's reactor is the sole boiling-water unit -- the same type as those at the tsunami-ravaged Fukushima Daiichi Nuclear Power Station -- for which an extension of operations has been green-lighted.

Japan Atomic Power applied to the NRA for safety inspections for the Tokai No. 2 power station in May 2014 with an eye to reactivating it and for permission to extend the operations at the plant in November 2017.

The facility would have been decommissioned if it had not passed the three inspections by Nov. 27 this year. Therefore, the NRA barely made the deadline.

The plant's large boiling-water reactor with an output of 1.1 million kilowatts stopped following the Great East Japan Earthquake on March 11, 2011. The power station temporarily lost its external power source. Moreover, it was hit by up to 5.4-meter-high tsunami waves triggered by the temblor, making one of the three emergency power generators unusable. However, the plant used the remaining two generators to continue cooling the reactor core.

Out of reflection on the trouble, Japan Atomic Power has decided to take additional safety measures, including the installation of a reinforced concrete storm surge barrier on the assumption that the plant could be hit by tsunami waves up to 17.9 meters high.
The NRA deemed these safety measures are appropriate in light of the new regulatory standards.

In inspections of the power station to see if its reactor pressure vessel has deteriorated, the atomic power regulator concluded that it can endure the extension of operations beyond the 40-year limit.

Japan Atomic Power intends to secure 174 billion yen to implement these safety measures after receiving financial assistance from Tokyo Electric Power Co. and Tohoku Electric Power Co. and complete the work by March 2021.

The operator of the Tokai No. 2 station has signed safety agreements with five municipalities around the plant besides the municipal government of Tokai that hosts the power station and the prefectural government, effectively allowing these surrounding municipalities to approve or disapprove reactivation of the plant. Japan Atomic Power's agreements with five surrounding municipalities are the first of its kind allowing municipalities other than those hosting atomic power stations to approve or disapprove operations at such plants.

Among the five municipalities, Toru Umino, mayor of the Ibaraki Prefecture city of Naka, has already clarified the city's opposition to reactivation of the power plant.
Japan Atomic Power's Tokai Power Station, situated on the premises that host the Tokai No. 2 plant, is in the process of being decommissioned.

(Japanese original by Riki Iwama, Science & Environment News Department)
See also
https://www.japantimes.co.jp/news/2018/11/07/national/japans-nuclear-watchdog-approves-extension-tsunami-hit-plant-operate-beyond-40-year-cap/

Ikata 3

March 15, 2019

15.03.2019_No53 / News in Brief
Japanese Court Rejects Call To Suspend Operation Of Ikata-3

https://www.nucnet.org/all-the-news/2019/03/15/japanese-court-rejects-call-to-suspend-operation-of-ikata-3

15 Mar (NucNet): A Japanese district court rejected today a plea from local residents to suspend operation of the Ikata-3 nuclear power plant in Ehime Prefecture, southern Japan, local media reported.
The decision by a branch of the Yamaguchi District Court is in line with past rulings by other regional courts and allows the continued operation of Ikata-3, the Mainichi daily said.

The 846-MW Ikata-3 pressurised water reactor resumed commercial operation in September 2016 after owner and operator Shikoku Electric Power Company completed all regulatory safety checks.

Ikata-3 was at the time the fifth reactor in Japan to have restarted commercial operation following the March 2011 accident at the Fukushima-Daiichi nuclear station which resulted in the shutdown of Japan's reactor fleet.

In November 2018, the Takamatsu High Court rejected calls from local residents to suspend operation of Ikata-3, upholding a lower court decision from July the previous year.

The Takamatsu High Court said at the time that the reactor unit poses no danger because it meets stricter safety standards introduced after the Fukushima-Daiichi accident.

According to the Mainichi, concerns about the operation of Ikata-3 have remained among locals, leading them to turn to the courts in search of an injunction.

What's TEPCO doing?

TEPCO takes risk over soaring costs at Tokai nuclear plant

http://www.asahi.com/ajw/articles/AJ201903150001.html

THE ASAHI SHIMBUN
March 15, 2019 at 07:00 JST
Tokyo Electric Power Co. and other utilities are taking a huge gamble by providing hundreds of billions of yen (billions of dollars) to restart an aging nuclear power plant in need of safety upgrades.
Japan Atomic Power Co. intends to resume operations of the one reactor at the Tokai No. 2 nuclear plant in Ibaraki Prefecture in January 2023, but 300 billion yen--nearly double the initial estimate--is reportedly needed to ensure its safety.
TEPCO, which will be provided with electricity from the Tokai plant, will offer 190 billion yen, or two-thirds of the total cost. Tohoku Electric Power Co., Chubu Electric Power Co., Kansai Electric Power Co. and Hokuriku Electric Power Co. will also offer financial support.

But it remains unclear whether municipalities around the plant will approve the plan to restart the reactor.
If Japan Atomic Power fails to win consent from the local governments and is forced to scrap the Tokai No. 2 plant, TEPCO and other power distributors could suffer big financial losses.
TEPCO was effectively turned into a state property after the crisis unfolded at the Fukushima No. 1 nuclear power plant in March 2011. With taxpayers' money injected into it, TEPCO's plan to offer assistance to another operator's nuclear facility that has no clear prospects of restarting will inevitably provoke controversy.
Japan Atomic Power initially estimated safety improvement costs for a levee to block tsunami and other measures at 174 billion yen.
But the estimate has soared partly because of anti-terrorism equipment needed following the plant's restart.
Under Japan Atomic Power's recently released plan, an estimated 120 billion yen is needed between April 2019 and late 2022 in preparation for the plant's restart.
TEPCO, which will buy 80 percent of the electricity generated at the plant, will cover the same percentage of the expenses, or 96 billion yen.
Tohoku Electric will cover the remaining 24 billion yen, or 20 percent of total cost, based on its ratio of power supplied from the plant.
TEPCO is expected to use bank loans to provide "up-front payments" to Japan Atomic Power for electricity sent from the Tokai No. 2 plant.
Tohoku Electric has yet to decide whether to adopt TEPCO's strategy or offer support through the loan guarantee system.
Between January 2023 and March 2024, following the planned restart, an estimated 180 billion yen will be needed to operate the plant. Japan Atomic Power will borrow the funds from banks.
TEPCO will guarantee 96 billion yen of the debt, while Tohoku Electric will guarantee 24 billion yen, and Chubu Electric and other two utilities will guarantee 60 billion yen.
Although Kansai Electric, Chubu Electric and Hokuriku Electric do not receive power from the Tokai No. 2 plant, they will provide assistance, emphasizing that they used to get electricity from the No. 2 reactor at Japan Atomic Power's Tsuruga nuclear plant in Fukui Prefecture.
The Tsuruga No. 2 reactor, whose operations have been suspended, sits directly above an active fault, so it will be difficult to bring the reactor back online.
The three companies' assistance for the restart of the Tokai No. 2 plant could draw criticism from their shareholders.
"It is difficult to find a reason for offering support as we will not receive electricity from it," an insider said. "The move may result in shareholders' filing a lawsuit against the companies' management."
With two of its four reactors being decommissioned, Japan Atomic Power is struggling financially. The reactor at the Tokai No. 2 plant is the only one with prospects of going online.
Japan Atomic Power has not produced any power recently except for immediately after the accident at the Fukushima No. 1 plant. It is barely surviving on annual basic charges totaling 100 billion yen from TEPCO and four other companies that had concluded power supply contracts with it.
If the Tokai No. 2 plant is decommissioned, Japan Atomic Power would be at greater risk of going under, causing severe losses for utilities that have invested in the company.
That is why the utilities are considering extending a helping hand to Japan Atomic Power.

REMAINING UNCERTAINTY, HIGH RISKS

The Tokai No. 2 nuclear plant, which has operated for more than 40 years, passed tougher safety standards in September last year. And in November, the plant was given permission to extend the reactor's operational life by 20 years.
Japan Atomic Power announced on Feb. 22 its intention to resume operations at the plant.
However, the 2011 earthquake and tsunami caused the loss of outside power sources and an emergency power generator to stop at the Tokai No. 2 plant.
Many locals still oppose the restart of the reactor.
Anti-nuclear sentiment was further fueled when Japan Atomic Power set the restart time for January 2023 without holding sufficient talks with the local municipalities.
Six municipalities near the Tokai No. 2 plant have argued that Japan Atomic Power should gain their consent before the reactor restart. However, Japan Atomic Power has not made clear if it regards their consent as essential.
In addition, evacuation plans for nearly 1 million residents within 30 kilometers of the plant have not been worked out.

New Techniques - Alternatives & Renewables

Coal for Fukushima

November 23, 2013

TEPCO, Mitsubishi plan coal-fired power plants at Fukushima

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201311230048

REUTERS

The operator of Japan's wrecked nuclear plant and three Mitsubishi group firms plan to build a new type of energy-efficient coal-fired power plants in Fukushima, a source said on Nov. 23.

Tokyo Electric Power Co. (TEPCO) will tie up with Mitsubishi Heavy Industries, Mitsubishi Corp. and Mitsubishi Electric to build integrated gasification combined-cycle (IGCC) stations.

Mitsubishi group companies will have a majority of stake in the new plants while cash-strapped TEPCO will be in charge of running the facilities, which they plan to put online around 2020, the source said.

TEPCO has been under pressure to introduce energy-efficient facilities as all of its nuclear power plants have been closed since the Fukushima disaster, with no immediate prospects of restarting any nuclear plants given public distrust.

Mitsubishi Heavy also aims to be a leading player in the new IGCC technology, which will increase power output by 20 percent from conventional coal power plants, using the same amount of fuel.

Three reactors suffered core meltdowns at the Fukushima No. 1 nuclear plant after the March 2011 earthquake and tsunami that triggered explosions and forced the evacuation of 160,000 people from nearby towns and villages.

CTBTO: New system to track airborne radioactivity

November 27, 2013

CTBTO enhances airborne radioactivity tracking
http://www3.nhk.or.jp/nhkworld/english/news/20131127_11.html

An international nuclear test monitoring body has launched a new system that can predict the movements of airborne radioactivity more quickly and accurately.

The Comprehensive Nuclear-Test-Ban Treaty Organization, or CTBTO, began using the system on Tuesday.

The CTBTO observes airborne radioactive materials and seismic tremors caused by nuclear tests through its facilities around the world. But it can also monitor the dispersion of radioactivity in the event of a nuclear accident.
The new system can locate the source and predict the movements of radioactivity in the air with greater accuracy, at 20 times the speed of previous systems.

Japanese government officials were among the guests at a launch ceremony on Tuesday at the organization's headquarters in Vienna. Japan contributed about 737,000 dollars to upgrade the system in the wake of the Fukushima nuclear crisis.

The CTBTO analyzed the spread of radioactivity during the nuclear accident. Japan expects the international organization to provide accurate and reliable data on the dispersion and effects of radioactivity.

The CTBTO also monitored radioactive materials when North Korea conducted nuclear tests.

Advanced coal plant from TEPCO

November 30, 2013

TEPCO to build advanced coal plants in Fukushima
http://www3.nhk.or.jp/nhkworld/english/news/20131129_43.html

Tokyo Electric Power Company will build 2 advanced coal-fired power plants in Fukushima. The utility says it wants to contribute to the prefecture's recovery from the nuclear disaster.

TEPCO's Fukushima headquarters chief announced the project on Friday. Yoshiyuki Ishizaki said the coal-fired power generation systems will be built on the compounds of 2 existing power plants in Iwaki City and Hirono Town.

Ishizaki said the planned facilities will use both gas and heat from coal to achieve the world's highest level of power-generating efficiency.

Each facility will have a capacity of 500 megawatts and will be operational by the early 2020s.

TEPCO says the project will create up to 2,000 construction jobs per day, and its total economic benefit to the region will amount to 1.5 billion dollars.

Ishizaki said Japan has the top-of-the-line coal gasification technology. He added TEPCO will make sure the investment won't affect nuclear compensation payments or delay the decommissioning of its Fukushima Daiichi nuclear plant.

New aerial vehical to measure radiation

December 16, 2013

IAEA demonstrates aerial radiation monitor
http://www3.nhk.or.jp/nhkworld/english/news/20131216_24.html

The International Atomic Energy Agency has demonstrated an unmanned aerial vehicle designed to measure radiation levels in areas too dangerous for humans to access.

The aircraft on Monday hovered over Fukushima City near the site of the 2011 nuclear accident.

The prototype was designed based on a disc-shaped aircraft used for inspecting post-disaster sites around the world.

Presently, an unmanned helicopter developed by the Japan Atomic Energy Agency monitors radiation levels over evacuation zones in the prefecture.

But the IAEA 6-rotor prototype is easier to maneuver. It can thread its way close to building walls and electric cables.

It is radio-controlled. It can fly on automatic pilot by pre-programming data regarding the topography and buildings in the area.

The IAEA hopes to make the aircraft available to Fukushima prefecture in 2 years after test flights in the no-go zones.

Drone used to measure radiation over Fukushima

January 24, 2014

Radiation monitoring drone tested in Fukushima

http://www3.nhk.or.jp/nhkworld/english/news/20140124_43.html

An unmanned aircraft equipped with a radiation monitoring device has been tested over a town close to the disabled Fukushima Daiichi nuclear power plant.

The remotely-controlled aircraft took off on Friday from the evacuated town of Namie. The small plane circled the area for about 30 minutes and measured ground-level radiation. The results were immediately sent to land-based personal computers.

The drone aircraft was jointly developed by the Japan Atomic Energy Agency, or JAEA, and the Japan Aerospace Exploration Agency, JAXA.

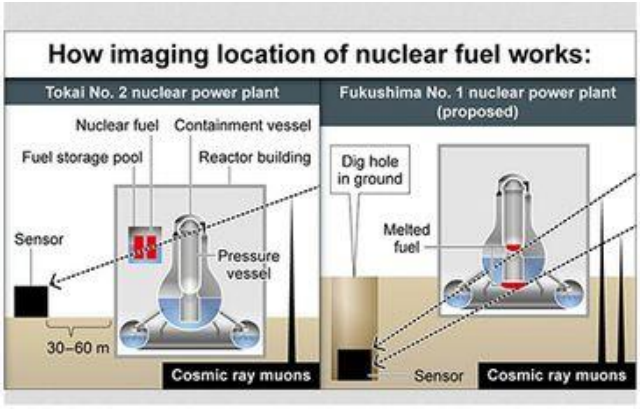
Unlike manned aircraft that must keep a minimum altitude of 300 meters, the drone can fly lower to follow the outlines of an area's topography.

Developers of the aircraft say this greatly increases the accuracy of radiation measurements.

Chief JAEA researcher Tatsuo Torii says he and his team plan to measure radiation in the forests that cover large parts of Fukushima.

More test flights are planned before the drone becomes fully operational in 2015.

New rays to see through reactor



January 24, 2014

Scientists: Cosmic rays can see through nuclear reactor, locate fuel

By JIN NISHIKAWA/ Staff Writer

Japanese scientists have developed a method to use cosmic rays to see through a nuclear reactor, raising hopes for locating and accounting for melted fuel inside the crippled Fukushima nuclear plant.

"Installing several sensors outdoors for a month or so is enough to get a picture of internal structures," said Fumihiko Takasaki, a particle physics scientist at the High Energy Accelerator Research Organization. "Our technology is well established, so I hope it will be used to help decommission the stricken reactors at the Fukushima No. 1 nuclear power plant."

Takasaki and his co-workers installed sensors outdoors at the Tokai No. 2 nuclear power plant in Ibaraki Prefecture between February 2012 and December 2013 to detect muon particles contained in cosmic rays. Muon beams, which are absorbed more easily in high-density materials such as uranium, can be used to obtain see-through images, much in the way of X-ray radiography.

The measurements allowed the scientists to outline the shape of the reactor containment vessel, locate the fuel storage pool and size up the amount of nuclear fuel being stored. The perspective images clearly showed the fuel was stored in two separate sections in the storage pool.

At the Fukushima plant, high radiation levels are preventing workers from staying for a long time inside the No. 1, No. 2 and No. 3 reactor buildings, where meltdowns occurred following the March 2011 Great East Japan Earthquake and tsunami.

Tokyo Electric Power Co., the plant operator, has yet to learn where the nuclear fuel currently lies. The locations and amounts of the melted nuclear fuel should be identified by the time the government and TEPCO plan to start extracting it in the first half of fiscal 2020.

Even if the melted fuel has escaped into the basement levels, it can still be located by installing sensors in underground holes, the scientists said. Each sensor unit weighs 800 kilograms, not including the steel sheets for shielding radiation, and costs around 20 million yen ($200,000), they added.

Japan & geothermal energy

February 6, 2014

Source : The Motley Fool
http://www.fool.com/investing/general/2014/02/06/japan-looks-at-dozens-of-new-geothermal-power-plan.aspx

Japan Looks at Dozens of New Geothermal Power Plants
By Oilprice.com

This article was written by Oilprice.com -- *the leading provider of energy news in the world. Also check out these recent articles:*
In the aftermath of the 11 March 2011 Fukushima Daiichi nuclear crisis, the then ruling Democratic Party of Japan took all of the country's 54 nuclear reactors offline before subsequently restarting two NPP reactors at the Oi nuclear power facility in Fukui Prefecture.

Nevertheless, not unexpectedly, resistance to nuclear power generation nearly three years after the Fukushima Daiichi debacle, which shut down six reactors, remains quite substantial.

Accordingly, seeking alternative power sources has increased, with the result that construction plans for mid-sized geothermal plants is becoming a boom energy concern across Japan in the wake of the 2011 "Great East Japan Earthquake" that effectively destroyed the Fukushima Daiichi six nuclear reactor complex.

As a significant milestone on Japan's increasing diversification of energy sources, in April Chuo Electric Power Co. will open a new geothermal plant in Kumamoto Prefecture, Japan's first geothermal power plant opened since 1999.

The move toward renewables by the world's third largest economy is not insignificant.

Regarding Japan's ongoing power issues the U.S. government's Energy Information Administration noted in its most recent country analysis brief, "Japan is the world's largest liquefied natural gas importer, second largest coal importer... the third largest global net oil importer, is highly dependent on the Middle East for the majority of its supply. It is seeking to diversify its supply sources in Russia, Southeast Asia, and West Africa... Japan relies on LNG imports for virtually all of its natural gas demand... Japan consumed about 37% of global LNG in 2012, as the Fukushima disaster spurred greater demand for LNG in the power sector since 2011. "

As Japan was the world's third largest producer of nuclear power after the United States and France before the Fukushima Daiichi nuclear power plant accident, where to go from here with indigenous power reserves, as opposed to ramping up hydrocarbon imports?

Accordingly, Japan's Ministry of Economy, Trade and Industry has targeted 20 sites across the country for potential geothermal power generation.

And Japan's incipient geothermal power lobby has some long-standing friends.

During a 5 December 2012 speech at the United Nations University in Tokyo, Iceland's ambassador to Japan, Stefan Larus Stefansson, gave an upbeat assessment of Japan's enormous untapped geothermal potential, citing Iceland's 85-year history of success in this area as a model, telling his audience that 66 percent of Iceland's primary energy comes from geothermal resources and in contrast, despite having the world's third-largest potential for geothermal energy, Japan built its last geothermal energy plant in 1999, and all research funding from the government ceased in 2003, while nearly all geothermal turbines in Iceland were constructed in Japan.

Three Japanese industrial concerns-Toshiba, Mitsubishi Heavy Industries and Fuji Electric have a combined total of over half the world market for geothermal turbines, even though currently geothermal power accounts for a mere 0.3 percent of Japan's total electricity production.

But Stefansson's relentless advocacy of geothermal power for Japan may have yet an ace up his sleeve. When in August 2012 Stefansson presented his ambassador credentials to Japanese Emperor Akihito, the monarch expressed great interest in the role of Japan related to global warming, querying Stefansson about Iceland's geothermal energy industry before asking about trade relations between Iceland and Japan.

While the initial kilowatt-hour price of geothermal remains higher than hydrocarbon-based power generation, Japan remains an indigenous power source costing out eventual kilowatt hours after factoring out start-up costs. And, unlike most other renewable energy sources, like hydroelectric power generation, it is available 24/7.

Except for initial sticker shock on start-up prices then, there seems little not to like in Tokyo.
Written by John C.K. Daly at Oilprice.com.

Green energy

March 3, 2014
Nuke-shy firms launch green energy initiatives
by Megumi Iizuka
Kyodo
http://www.japantimes.co.jp/news/2014/03/03/national/nuke-shy-firms-launch-green-energy-initiatives/#.UxSyqIXrV1s

ODAWARA, KANAGAWA PREF. – Moves by businesses and citizens to set up renewable energy plants at the regional level have been spreading in the hope of breaking away from nuclear power in light of the man-made disaster at the Fukushima No. 1 plant triggered by the March 2011 earthquake and tsunami.

In the city of Odawara, Kanagawa Prefecture, Houtoku Energy Co. has been set up by 38 small and midsize companies, including a “kamaboko” fish sausage maker and a fish market.

“After the March 11 disaster, I thought (continuing to rely on nuclear plants) won’t work anymore. Besides, when there is no place to abandon nuclear waste, setting up nuclear plants is just like building apartments without toilets,” Houtoku Energy President Takeo Minomiya said.

In late January, the company set up 256 solar panels on the roof of an elementary school to generate 50,804 kilowatt-hours of electricity a year, enough to run 14 households. It is also building a large solar power plant in the city for 300 households.

The company will sell the electricity to Tokyo Electric Power Co. under a feed-in tariff system that requires utilities to buy electricity generated from renewable energy at fixed prices. The power can also be used at the school during disasters.

"Instead of just lamenting the current situation, we wanted to take action to make Japan a better place," said Minomiya, a former board member of Sony Corp.

Since its establishment in December 2012, Houtoku Energy has raised ¥58 million in investment. In January, it also began soliciting investments worth ¥100,000 each from citizens.

Minomiya said he hopes to take advantage of Odawara's rich natural environment, including its forests and rivers, to generate power from renewable energy. The energy will be used for the region's needs, with the profits passed on to local investors in the form of dividends.

Elsewhere in Japan, citizens have funded solar power plants and wind farms. Such initiatives include Shizuoka Future Energy Co. in Shizuoka Prefecture and Satsuma Shizen Energy LLC in Kagoshima Prefecture.

Some companies are even generating electricity by using food waste, including from "udon" noodles from factories in Kagawa Prefecture and pulp left over from making mandarin orange juice in Ehime Prefecture.

Noriaki Yamashita, senior researcher at the Institute for Sustainable Energy Policies, said there are more than 100 such local-level power plants throughout Japan.

"The 2011 nuclear disaster raised awareness among people . . . and the number of such power plants could explode going forward," if the feed-in tariff system becomes more popular, he said.

The government said in its latest draft energy policy that it considers nuclear energy an important energy source. Japan's most influential business lobby, Keidanren, has been calling for the restart of idled nuclear reactors.

But such views do not represent all business owners, especially small and midsize companies, said Teisuke Suzuki, executive vice president of fish sausage-maker Suzuhiro Kamaboko Co. in Odawara and one of the central figures who drove the movement to set up Houtoku Energy.

He brought together small and midsize businesses nationwide to form the Network of Business Leaders and Entrepreneurs for a Sustainable Business and Energy Future, which holds seminars on renewable energy and helps establish self-sustaining energy systems in communities.

After radioactive cesium was detected in Ashigara tea produced in the area, even though Odawara is about 300 km away from the crippled Fukushima plant, his company lost customers immediately after the disaster started, he said, noting that a clean and safe environment is a prerequisite for any business.

The subsequent rolling blackouts implemented by Tepco, operator of the Fukushima plant, also hit his factory.

"I felt my business was in danger," he said, adding that he realized the need to generate green energy in a regional community so that his company would not be totally dependent on big power companies or the government.

Suzuki's movement slowly gained support from small and midsize companies and the number of business owners supporting the network has grown to about 300, he said.

"We may not be able to do something big from the outset but it is important to start small activities," he said. "By sharing information about local activities to generate green energy, we hope that people in other communities will realize they can also do something themselves."

Robot practice

March 18, 2014
Robot practice for nuclear accidents
http://www3.nhk.or.jp/nhkworld/english/news/20140318_44.html

Workers at a nuclear power plant in Niigata on the Sea of Japan on Tuesday learned how to maneuver a remote-controlled robot in areas of high radiation.

The exercise took place at the Kashiwazaki-Kariwa plant, assuming a scenario in which all 7 of the plant's reactors have lost their power sources following a strong earthquake.

About 350 people, including employees of plant operator Tokyo Electric Power Company, participated in the drill.

The robot moves slowly on a wheeled platform 50 centimeters wide. It features an arm that can reach as far as 2 meters, with a camera at its end. The robot can be controlled from distances of up to 100 meters.

In the nuclear accident at the Fukushima Daiichi plant 3 years ago, radiation levels were so high that workers were unable to enter the area, thus delaying efforts to cope with the accident.

The drill used a robot of the same type as one deployed at the Fukushima Daiichi plant a month after the disaster began.

Watching the robot's movements on a computer display, participants maneuvered around in the rubble and picked things up.

The Kashiwazaki-Kariwa plant's safety center chief, Shiro Arai, says the robot is indispensable for gaining control of a situation in areas that are too dangerous for humans to enter.

Coal-fired plants as an alternative?

March 28, 2014
Utilities looking at coal-fired plants to ensure stable power supply

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201403280064

THE ASAHI SHIMBUN

With the nation's 48 nuclear reactors offline, utilities are looking to construct more thermal power plants, most of which are expected to be coal-fired facilities that are cheaper to operate than ones fueled with liquefied natural gas and crude oil.

Although a drawback to coal-fired thermal power plants is the large amounts of carbon dioxide they emit, their fuel cost is one-fourth that of oil thermal power plants.

Major electric companies are aiming to secure a stable power supply in the mid- to long term through this new construction, which will see the changeover from aging thermal power plants to more cost-effective ones.

Tohoku Electric Power Co. and Kyushu Electric Power Co. included the expansion of thermal power plants in their electricity supply plans for fiscal 2014, which were submitted to the industry ministry on March 27. Tohoku Electric and Kyushu Electric will restart plans to build a unit at the Noshiro Thermal

Power Plant in Akita Prefecture and a unit at the Matsuura Thermal Power Plant in Nagasaki Prefecture, respectively.

Construction on the thermal plants had been frozen after the electricity demand did not increase as much as previously projected.

Chubu Electric Power Co. and Kansai Electric Power Co. announced March 25 and 26, respectively, their plans to construct thermal power plants.

“We concluded that we need new sources of power in terms of the economy and the stability of the electricity supply,” said Akihisa Mizuno, president of Chubu Electric.

Tokyo Electric Power Co. is seeking to build thermal power plants with a combined output capacity of about 6 gigawatts for fiscal 2014, and some additional ones in the future.

The nation is relying on thermal power generation for 90 percent of its overall power needs following the accident at the Fukushima No. 1 nuclear power plant triggered by the March 2011 Great East Japan Earthquake and tsunami. The accident forced the shutdown of the nation's nuclear reactors for safety inspections.

Many of the 48 reactors are not expected to restart soon, if ever, due to their age or location above active seismic faults.

Others must pass new stringent safety standards before being given the green light for a restart.

Since the Fukushima accident, aged and inefficient thermal power plants have been operating at full capacity to make up for the loss of electricity supplied by nuclear power.

However, the increasing imports of fossil fuels needed to operate the thermal plants have weighed heavily on the finances of the electric companies. Therefore the utilities hope to lower the fuel costs through the construction of more energy-efficient facilities.

In regards to the increased carbon dioxide emissions from the coal-fired plants, the electric power industry will be forced to come up with ways to further curb the emission levels.

Reduce greenhouse gases not optional

March 18, 2014

U.N. panel: Reduce greenhouse gases or suffer catastrophic effects

http://ajw.asahi.com/article/sci_tech/environment/AJ201403180044

THE ASAHI SHIMBUN

Greenhouse gases must be cut 40 to 70 percent within 36 years to prevent cataclysmic environmental changes, according to a U.N. panel's draft report that urges an immediate shift away from coal-fired power plants.

The draft report by the Working Group III of the Intergovernmental Panel on Climate Change details how the international community should reduce greenhouse gas emissions to curb temperature increases, including the promotion of renewable energy sources.

The IPCC is expected to finalize the draft at a meeting scheduled for April in Germany.

According to the draft obtained by The Asahi Shimbun, growth in both the world's population and the global economy has accelerated the increase in greenhouse gas emissions since 2000.

The draft report estimates that annual greenhouse gas emissions across the planet were equivalent to 49.5 billion tons of carbon dioxide in 2010, raising the level of greenhouse gases in the atmosphere to around 400 parts per million (ppm)--the highest figure over the past 800,000 years.

To prevent drastic climate changes, the IPCC urges nations to keep temperature increases within 2 degrees compared with levels before the Industrial Revolution in the mid-19th century.

To achieve this goal, the panel advises U.N. member states to take measures to ensure the atmospheric greenhouse gas concentration stays at or below 480 ppm until the end of the century.

It also cites a probability of 50 percent or more that temperature rise will be kept within 2 degrees even if the atmospheric concentration is between 480 ppm and 530 ppm.

According to the draft report, global greenhouse gas emissions must be cut by 40 to 70 percent by 2050 from 2010's figures to keep temperature increases at or below 2 degrees.

It is unclear when emissions will be able to start declining, but as a countermeasure, the panel emphasizes the necessity of shifting to low-carbon and renewable power generation.

As a first step, nations should replace coal-fired power plants with natural gas-fired ones for the time being, the report said.

They should eventually raise the ratio of low-carbon energy, like nuclear power, and renewable power generation, such as solar power and wind electricity generation, by three to four times from the current 17 percent.

The draft report also calls on countries to introduce more energy-saving technologies for traffic systems, building operations and manufacturing industries.

The U.N. panel's previous report released seven years ago emphasized nuclear power and anticipated its expanding market share. But the latest draft points out challenges facing the difficult-to-control power generation method, such as safety and dealing with nuclear waste.

The latest draft report evaluates nuclear power as a mature low-carbon technology but says its global share as an electricity-generating method has been falling since 1993.

TH

Certainly not looking good for small-scale renewables

April 11, 2014
Small-scale renewable energy producer disappointed with new gov't energy policy
http://mainichi.jp/english/english/newsselect/news/20140411p2a00m0na008000c.html

Figures in Japan's renewable energy sector are voicing their disappointment with the government's new basic energy plan, which reaffirms the country's commitment to nuclear power now and in the future.

The plan "has no high (renewable energy) targets, and doesn't contain any measures to support small and medium energy producers. Only the big producers with megasolar stations will survive," said 75-year-old Yoichi Yamakawa, president of Tama Energy LLC, a solar energy firm based in Tokyo's Tama district with small arrays atop universities and other buildings.

Tama Energy's business concept is local power generation for local consumption. The company says that if electricity is generated primarily on a local basis, the business will contribute to the local economy by helping keep people, goods, and money circulating in the community. Plans based on this local power generation model have also been adopted by the city of Odawara, Kanagawa Prefecture, and Fukushima Prefecture's Aizu region, among other bodies.

The new basic energy policy, however, does not give a clear picture of the government's attitude to the promotion of renewable energy.

"This will pluck the sprout of localized energy generation before it even has a chance to grow," lamented Yamakawa.

April 11, 2014(Mainichi Japan)

Koizumi-Hosokawa to promote renewables

April 15, 2014
Former PMs to launch group for renewable energy

http://www3.nhk.or.jp/nhkworld/english/news/20140415_29.html

Former Japanese prime ministers Morihiro Hosokawa and Junichiro Koizumi are moving to launch an organization toward ending Japan's reliance on nuclear power.

Hosokawa ran for Tokyo governor in February with a pledge to work for that goal, but finished third. Koizumi supported him in the campaign.

Sources say a meeting to launch the general incorporated organization next month is to be held in Tokyo on May 7th.

They say the group will promote the use of renewable energy sources to end nuclear power generation in Japan.

They add that it is expected to oppose restarting of nuclear reactors in Japan and its export of nuclear

plant technology. The organization may also support candidates in local elections next year.

All of Japan's 48 reactors at 16 commercial nuclear power plants are offline.
Apr. 15, 2014 - Updated 09:07 UTC

Sakuraichigo

April 18, 2014
New remote-control robot developed to explore nuclear accident sites

The disaster-response robot "Sakuraichigo" navigates a staircase in Tokyo. (Mainichi)
http://mainichi.jp/english/english/newsselect/news/20140418p2a00m0na003000c.html

A new remote-control robot has been developed to explore underground at nuclear power plants in the event of an accident, groups including Chiba Institute of Technology have announced.

The robot, dubbed "Sakuraichigo," was delivered to the Japan Atomic Power Co.'s nuclear emergency situation support center in Tsuruga, Fukui Prefecture, in February. The same type of robot is to soon be

deployed at the stricken Fukushima No. 1 Nuclear Power Plant. Nichinan, a maker of prototypes for cars and appliances in Ayase, Kanagawa Prefecture, worked on the robot's development.

The robot is an upgraded version of the "Quince" robot that has been used to detect contaminated water and photograph the crippled plant since the 2011 disaster. With its robotic arm folded up, it measures just 53 centimeters long and 42 centimeters wide. The robot was made compact so that it would be able to navigate in narrow underground passages at the plant.

The robot is equipped with four cameras as well as instruments for measuring temperature and radiation. It has also been waterproofed to allow it to function within radioactive water at the site, and it can operate wirelessly for around eight hours at a time. During a demonstration to the media, the robot traveled up and down a set of stairs at a 45-degree angle.

Koizumi and Hosokawa launch new association for renewables

May 7, 2014
Former PMs launch group for renewable energy
http://www3.nhk.or.jp/nhkworld/english/news/20140507_45.html

Former Japanese prime ministers Morihiro Hosokawa and Junichiro Koizumi have launched an organization dedicated to ending Japan's reliance on nuclear power.

Hosokawa ran for Tokyo governor in February pledging to work for that goal, but finished third. Koizumi supported his campaign.

The two, along with other founders, held an inaugural meeting of the association in Tokyo on Wednesday.

The group will promote the use of renewable energy sources to end nuclear power generation in Japan.

Group representative Hosokawa referred to an energy plan the government approved last month. Under the plan, nuclear plants will be allowed to resume operation if they meet new safety standards.

Hosokawa denounced the plan, saying the government had not reflected on the 2011 nuclear disaster at all.

He said he campaigned in the Tokyo gubernatorial election determined to fight these absurdities and will continue working to correct what should be corrected.

Koizumi said he had been telling the public that the claim that nuclear generation is safe and low-cost is a big lie.

Koizumi added he will work with Hosokawa to promote renewable energy and create a nation without nuclear power.

The organization plans to hold town meetings across the country. It will oppose restarting nuclear reactors and exporting nuclear plant technology.

The group may also support candidates in nationwide local elections next year.
May 7, 2014 - Updated 13:00 UTC

Convert Fukushima farmland to develop renewables?

June 16, 2014
Gov't looks to deregulate farmland use in Fukushima for renewable energy development
http://mainichi.jp/english/english/newsselect/news/20140616p2a00m0na004000c.html

The government is looking to relax the requirements to convert agricultural land in areas near the crippled Fukushima No. 1 Nuclear Power Plant that are designated as evacuation zones to non-farming purposes to promote construction of renewable energy generators on abandoned farms in the areas.

The move aims at tackling issues surrounding farmland use in 10 municipalities in Fukushima Prefecture, including the towns of Namie and Futaba, which are under evacuation orders.

Agricultural land goes to waste when left abandoned, and farmers in these areas may avoid raising crops in fear of harmful rumors even after evacuation orders are lifted.

Farmland use is strictly regulated under the Agricultural Land Act, except in urban areas. In special zones for disaster recovery, however, converting farmland into non-agricultural uses is allowed as an exception if municipal governments establish restoration plans for local disaster recovery.

Many local governments, however, hesitate to work on farmland conversion as their land reconstruction plans must meet government-set requirements, which stipulate that farm land conversion must be "necessary and appropriate for disaster recovery" and "will not affect development of local farming."

The government is looking to turn the renewable energy sector into a key industry and is considering including plans to reduce necessary procedures for farmland conversion in its growth strategy that the Cabinet is set to approve by the end of June. It aims at simplifying paperwork related to farmland

conversion that must be reported to prefectural and national governments and supporting farmland owners in procedures for land registration and land surveys.

Meanwhile, local farmland owners have requested the government to not just simplify procedures necessary for land conversion but also reduce regulation hurdles.

Prime Minister Shinzo Abe in March mentioned the possibility of including disaster-affected areas in "strategic special zones" that are subject to deregulation.
June 16, 2014(Mainichi Japan)

Japano-Ukrainian satellite to check on Chernobyl and Fukushima

June 19, 2014
Japan, Ukraine to launch 2 nuclear power plant-monitoring satellites
http://mainichi.jp/english/english/newsselect/news/20140619p2g00m0dm071000c.html

TOKYO (Kyodo) -- Japan and Ukraine will jointly launch two small satellites to monitor environmental damage near Japan's Fukushima Daiichi nuclear power plant and Ukraine's Chernobyl power plant, Japanese officials said Thursday.

The space launch vehicle, the Ukrainian-designed Dnepr rocket, will lift off early Friday morning Japan time from the Dombarovsky space center in Russia's Ural region carrying 33 satellites from 17 countries including the two Japanese ones.

Japan's state-run University of Tokyo developed the two satellites, while the rocket is operated by ISC Kosmotras, a Moscow-based joint venture owned by Russia and Ukraine.

The University of Tokyo, Japan's top university, said it has developed the two satellites with low costs with less than 300 million yen (about $2.9 million) per unit.

The joint Japan-Ukraine satellite project would be a key step for Japan's space development efforts with low costs, university officials said.

The launch had been planned for last year but fell behind schedule.

Officials with links with Ukraine had expressed concern about the delay amid worsening ties between Ukraine and Russia, but project leader Shinichi Nakasuka, a professor at the University of Tokyo, said the delay was not caused by the political situation.

The two satellites are the Hodoyoshi-3 and Hodoyoshi-4. The Hodoyoshi-3 satellite measures 50 centimeters by 70 cm and weighs 56.5 kilograms. The Hodoyoshi-4 satellite is slightly bigger at 63.7 kg.

The two satellites will take photos of the two nuclear power plants and surrounding areas regularly and receive data from instruments near the plants, the officials said.

The Fukushima Daiichi nuclear power plant was severely damaged by the March 11, 2011 earthquake and tsunami which hit northeastern Japan. In April 1986, the world's worst nuclear disaster hit the Chernobyl nuclear power station in Ukraine.

Nakasuka said the two satellites will also monitor river levels as part of efforts to prevent flooding. A total of 22 countries, such as Japan, Vietnam, Thailand and Bangladesh, will receive relevant data.

The Dnepr rocket, which was originally developed as an intercontinental ballistic missile named SS-18, was repurposed as a space launch vehicle. The three-stage rocket measures 34.3 meters in height with a diameter of 3 meters.

University of Tokyo officials said the Dnepr rocket has successfully launched satellites 18 times.
Last year, the rocket put into orbit a meteorological satellite for Japan's Weathernews Inc.
June 19, 2014(Mainichi Japan)

New drones for Fukushima plant

June 24, 2014
Drone flying indoors without GPS
http://www3.nhk.or.jp/nhkworld/english/news/20140724_40.html

A university research team in Japan has developed a new drone that can fly indoors without using GPS. It will be used for inspecting the Fukushima Daiichi nuclear power plant.

A research group from Chiba University, along with about 10 firms including Japanese electronics makers, developed the plane. It's about one square meter and has 6 propellers.

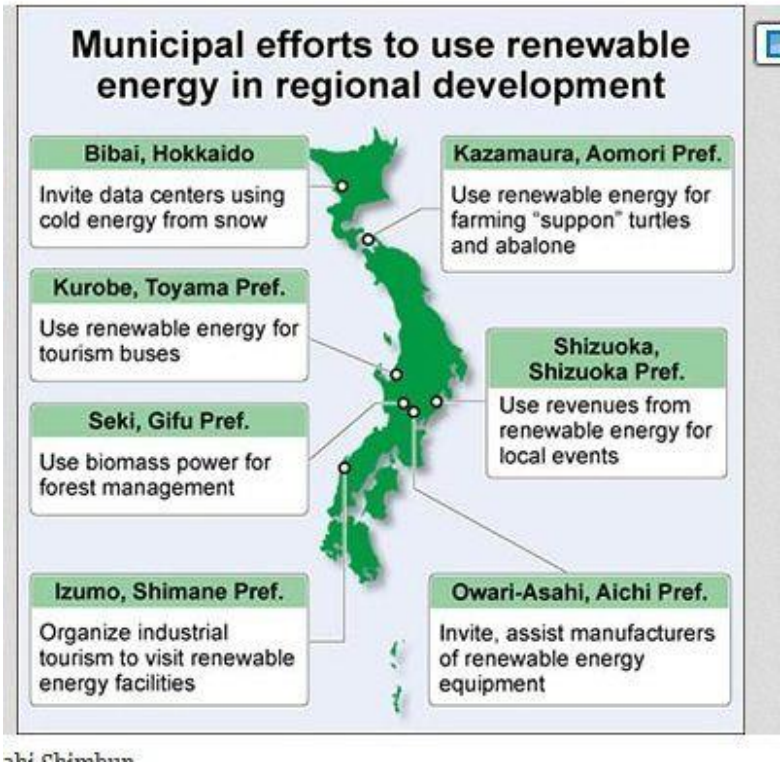
Conventional drones need positioning information provided by infrared or other rays to fly indoors where GPS does not work.

The new model has a sensor to allow it to figure out its position and surroundings. It is designed to avoid obstacles.

Global competition is intensifying in the drone market. Amazon and Google are among companies developing unmanned planes.
Jul. 24, 2014 - Updated 09:12 UTC

Most municipalities in favor of renewable energy

July 22, 2014
Survey: 80% of municipalities eager to promote renewable energy
http://ajw.asahi.com/article/behind_news/social_affairs/AJ201407220038



THE ASAHI SHIMBUN

About 80 percent of municipal governments across Japan are keen to promote renewable energies in the hope that the new energy sources, technology and sales revenue will help revitalize regional development, a survey shows.

The Asahi Shimbun and Hitotsubashi University carried out a joint survey to mark the second anniversary of the government feed-in-tariff system introduced in July 2012 to kick-start the market for renewable energy.

Of 1,279 municipal governments that responded, 74 percent said they currently operate power facilities using renewable energies.

More than 60 percent said that local governments, corporations and citizens groups are involved in the operation of renewable energy plants, symbolizing local initiatives to promote recyclable energies.

The industry ministry has reported the number of power plants using renewable energy and their outputs in each of the qualified prefectures. But this is the first time that an extensive survey has been conducted to uncover each municipality's scope of use of renewable energies and its willingness to introduce them in the future.

The Asahi Shimbun and a research team of Hitotsubashi University led by Shunichi Teranishi, a specially appointed professor of environmental economics, sent out inquiries to all 1,741 municipalities across Japan and had received responses from 1,279 local governments as of July 21.

Asked why they are promoting recyclable energies, the municipalities said they want to reduce emissions of greenhouse gases, develop sources for local energy production, effectively use idle lands and promote regional development.

Although the municipalities have long purchased electricity and fossil fuels from outside sources, the development of locally produced new energy can play a key role in sustaining their economies, alleviating the impact of population decline.

In Akita Prefecture, about 100 local manufacturing companies are working together to develop a "Made in Akita" wind power generator in a project led by the prefecture and a local bank.

It is an ambitious project to locally produce the more than 20,000 parts needed to construct the wind turbine. Such equipment is currently manufactured by major electronics companies.

"The popularization of renewable energy has increasingly allowed local municipalities to produce electricity on their own," said Tetsunari Iida, director of the Institute for Sustainable Energy Policies. Iida said the development of renewable energies is a move away from the "colony model" of energy consumption, in which local communities depend on outside energy producers.

"It is important for local communities to develop energy sources by their own initiatives and circulate the benefits within their communities," he said.

The survey also said that 284 municipalities cited the lack of sufficient capacity in their local energy transmission network as an obstacle to introduce locally produced energy.

The problem stems from the fact that Japan's energy transmission network is created on a mass production and consumption model, and local networks are given relatively low capacity.

As many as 402 local governments said difficulties in financing is a major obstacle, while 388 cited the lack of know-how.

Although the industrial groups have called for a review of the current feed-in-tariff system on grounds it causes higher utility prices, about 30 percent of local municipalities said the system should be maintained to help promote renewable energy.

No power revolution

August 16, 2014

Power play: the debate over renewable energy

Two years after a new feed-in tariff system for alternative energy went into effect, we discover that the promised power revolution looks more like an evolution

http://www.japantimes.co.jp/news/2014/08/16/business/power-play-debate-renewable-energy/#.U--zYGOnq1s

by Eric Johnston
Staff Writer

On Aug. 26, 2011, the same day that Prime Minister Naoto Kan resigned after widespread criticism of his handling of the meltdowns at the Fukushima No. 1 nuclear power plant that followed the Great East Japan Earthquake and tsunami in March 2011, the Diet passed legislation that created a new feed-in tariff system for renewable energy.

It was a major victory for renewable advocates, who had spent more than a decade pushing for a feed-in tariff system that would kick-start the country's power revolution. However, the system was only approved after weeks of political wrangling between Kan, who wanted it, and the pro-nuclear power village comprised of Ministry of Economy, Trade and Industry bureaucrats, business lobbies such as Keidanren, local and national politicians in the Liberal Democratic Party — who were (and remain) in the pockets of the nuclear industry — and the utilities themselves.

The feed-in tariff system went into effect in July 2012 amid much expectation of new energy revolution. Two years later, though, it might be more accurate to say "evolution" than "revolution."

There is no doubt private investment continues and public support, if anything, is now stronger for renewable energy than it was in 2011. Even though electricity prices have risen between 6 percent and nearly 10 percent for households, and up to 17 percent for industrial users due to a rise in imported fuel costs, media polls earlier this year by Asahi and Kyodo showed that 60 percent of respondents remain opposed to restarting the nation's idled 48 reactors as a way of reducing those costs.

At the same time, however, a host of logistical and engineering issues need to be overcome if the country's supply of electricity from renewable sources is to rise significantly. If large-scale hydroelectric power is excluded, renewable energy is the source of around 2 percent of the nation's electricity consumption at present, according to the most recent calculations.

Data from the Agency for Natural Resources and Energy shows that total renewable energy capacity was just over 30 gigawatts as of the end of April. Of that amount, over 9.7 gigawatts has been added to the grid in the past two years since July 2012. 2012. Of the more than 9.7 gigawatts of power created under the feed-in tariff system, roughly 9.5 gigawatts comes from solar power. And of this amount, about 7.4 gigawatts comes from solar facilities that generate more than 10 kilowatts of power.

But the 9.7 gigawatts that has been added to the grid represents less than one-seventh the 71 gigawatts that has actually been certified in the form of new facilities under the feed-in tariff system. The government has certified 1.2 million renewable energy-related projects, large and small, since July 2012. However, only about 644,000 were actually generating electricity as of April.

By the end of 2013, more than 90 percent of the solar power projects generating less than 10 kilowatts were up and running in Hokkaido, Chugoku, Chubu and and Kyushu. Nationwide, though, only about 10 percent, on average, of solar facilities generating more than 1,000 kilowatts were online, with the percentages for Hokkaido and Tohoku under 5 percent.

In a speech last year in Austria, Ritsumeikan University sociology professor Asami Takehama touched on some of the fundamental challenges facing the spread of renewable-generated electricity in Japan. First, she said, inter-zone transmission grids are weak, which means that even if you can produce a lot of renewable energy in, say, Hokkaido, where the grid is largely controlled by Hokkaido Electric Power Co., you can only send a limited amount of electricity to the grids in Tohoku or Tokyo Electric Power Co.

In addition, Takehama said, the utilities do not have to give priority access to using electricity generated by renewables under the new feed-in tariff system. The law states that utilities can refuse such electricity if it "unreasonably" harms their profits.

Finally, the utilities are still not legally obligated to expand their current grids to connect to renewables, moves that, given that current nationwide grid system, would involve huge expenditures.

"Tepco and the monopolies can refuse connection to the grid for whatever reason they choose," says Andrew DeWit, a professor in the School of Policy Studies at Rikkyo University and an expert on the country's renewable energy policy.

These barriers help explain the huge gap between the 9.7 gigawatts of renewable electricity capacity since July 2012 and the 71 gigawatts worth of renewable energy that has actually received official approval since then.

"The (feed-in tariff) system was not designed properly. The government didn't expect such an explosive growth of solar power. They just introduced a very simple registration process and put the burden of checking the details on the utilities," says Mika Ohbayashi, director at Japan Renewable Energy Foundation.

"The utilities check all necessary documents for starting grid connection operations, but the registration process is handled by each district METI branch," she added. "Only a few people at each branch are tackling the enormous number of submissions, and we can imagine they are just automatically giving permission to all applicants and passing them along to the utilities."

The current feed-in tariff system is set up so that applicants are guaranteed the fixed rate for their project once it has been accepted. Those who want a higher tariff rush to register before the end of the fiscal year before a new, lower tariff goes into effect the following year.

The latest figures show virtually all investors are still going into solar power, where, initially, the feed-in tariff was ¥42 per kilowatt-hour before being reduced to between ¥32 and ¥37 per kilowatt-hour earlier this year, for either 10 or 20 years depending on the type of project. As many solar power projects are able to generate electricity well below that rate, prospective candidates have expressed an interest to invest knowing they'd be paid ¥42 or even ¥32 per kilowatt-hour over an either 10- or 20-year period by the purchaser (depending on the size of the project).

The other renewables covered by the feed-in tariff system — wind, geothermal, mini-hydro and biomass — lag behind solar in terms of new investment but some are attracting more attention among certain players. In an attempt to garner more offshore wind investment, the government this year created a feed-in tariff of ¥36 per kilowatt-hour over 20 years for that category. The feed-in tariff for onshore wind facilities is ¥22 per kilowatt-hour over 20 years.

Companies such as Toshiba, Hitachi and Sumitomo Electric are investing big in offshore wind power. A 2011 Environment Ministry estimated its potential at 1,600 gigawatts and onshore potential at 280 gigawatts. At the moment, onshore facilities have a cumulative capacity of about 2.7 gigawatts nationwide. However, offshore wind farms still face massive costs and technical challenges.

"Wind development should have focused onshore," DeWit said. "Offshore wind in Japan confronts a few technical challenges such as a steeply sloping subsea (no continental shelf), although it has enormous potential."

It remains unclear, however, whether such potential can be realized at a cost-competitive rate. The jury's also still out on the exact role regional governments and Tokyo should take in providing incentives for fostering new projects and providing financial incentives. Such issues are of particular interest to those parts of Japan that are seen as having particularly good prospects for renewable energy development and where, increasingly, local politicians see renewable energy investment as a way to revive local economies, regardless of what the central government decides.

In the central government's long-term strategic energy plan, released in April, much of the media focus was on the role nuclear power would play in the coming years. In the end, the pro-nuclear power administration of Prime Minister Shinzo Abe — backed by influential lobby groups such as Keidanren, the power utilities and local governments hosting nuclear power plants that are deeply reliant on associated central government subsidies — announced that "nuclear power is an important base-load power source as a low carbon and quasi-domestic energy source."

The report neither called for the phasing out of nuclear power, as many antinuclear advocates hoped, nor said it would remain a critical part of the nation's energy mix, as many pronuclear advocates wanted. Thus, there is some confusion on both sides as to what the government plans to do with nuclear power in the coming years.

In the long-term plan, Abe and his government also categorize nuclear power as a quasi-domestic energy source, even though the fuel for the country's reactors is all imported from abroad (most of Japan's oil, coal and natural gas is also imported).

The energy plan did include a section on fully domestic renewable energy sources but the outlook, at least for the next few years, was cautious at best.

"Renewable energy has various challenges in terms of stable supply and cost at this moment, but it is a promising, multi-characteristic and important energy source that can contribute to energy security as it can be domestically produced free of greenhouse gas emissions," the English translation of the report said.

If Tokyo appears somewhat hesitant to fully embrace renewable energy, localities from Hokkaido to Kyushu appear to remain willing to move forward. A survey conducted last month by Hitotsubashi University and the Asahi Shimbun of 1,700 local governments showed that 80 percent were keen to support local renewable energy projects in the hope that sales from the electricity generated could be used to cover things such as local education costs and social welfare services for the elderly, as well as provide new employment opportunities.

A large part of what is driving the hope is the potential for certain regions. By some calculations, Hokkaido has enough wind power to generate the equivalent of 150 nuclear power plants. Local towns in the farming area of Obihiro have also begun projects to convert agricultural waste into biogas and biomass fuel.

In Tohoku, there is a particularly strong effort at the community level to create local renewable energy projects. As of April, more than 32,000 small- and large-scale renewable energy facilities had been certified in Fukushima Prefecture alone under the feed-in tariff system, although only about 13,000 had actually started up.

And while, nationally, renewable energy sources account for less than 2 percent of the mix, the picture looks very different at a local level. Japan Status Report 2014 notes that eight prefectures, mostly in Kyushu and Tohoku, as well as Nagano and Toyama, supply at least 10 percent of their electric power and heat from renewable sources. Oita, Toyama and Akita prefectures lead the nation, with more than 15 percent of their electricity coming from renewables, mostly geothermal and mini-hydro.

In the end, however, it will be a combination of local and regional initiatives, political leadership and a national strategy that is more proactive toward renewable energy development that will determine how quickly, and to what extent, Japan shifts out of other fuel sources and into renewables.

Ohbayashi says the national government, at the very least, needs to make the feed-in tariff system more profitable. The government should not only earmark subsidies for large, established firms but also for individuals and small groups, she said. It should offer assurances of grid connections, low-interest loans and more transparent procedures.

DeWit says that funding allotted for renewables also needs to be spent more effectively. "The central government has thrown a lot of money at renewables and energy efficiency since 3/11, but the funds are often not used as effectively as they might be," he says. "That indicates the 'bottom up' local governments need to do more, linking local and regional initiatives with civil society and hungry private-sector players."

Over the coming years, the electricity market is scheduled to be liberalized further, with legislation to end regional monopolies and give consumers more choice. By 2020, the last stage of liberalization, in which

utilities will have to separate their power generation and transmission operations, is expected to take place.
While such moves are likely to create more renewable energy opportunities — especially at the local level in places where there is already abundant energy and local political will to tap it — the guiding principles of Japan's national energy policy have always been a "best" energy mix that is "safe, stable and secure" and renewable energy is still viewed with suspicion in that regard.
Thus two years after the creation of the feed-in tariff system, it's clear that Japan's renewable energy industry — growing in importance and moving forward in many parts of the country — is still, at the national policy level at least, seen as risky and costly in terms of overcoming various economic and logistic problems. Everyone agrees that the potential remains great, and that technologies are improving, making solar, wind and other alternatives more cost-efficient. Virtually all predications, even among staunch pro-nuclear advocates, suggest that renewable energy will play a more important role for Japan in the years to come.
However, entrenched political interests and public concerns, especially in large urban centers, about the lights going off and electricity bills increasing if renewable energy is ramped up too quickly remain. Any combination of national policy measures, private technological innovation and local government incentives that leads to greater renewable energy use overall will have to overcome this mentality first.

Thermal power for Kanagawa?

August 26, 2014

TEPCO mulls building highly efficient thermal power plant in Kanagawa

http://mainichi.jp/english/english/newsselect/news/20140826p2a00m0na025000c.html
Tokyo Electric Power Co. (TEPCO) is considering building a highly efficient coal-fired thermal power station jointly with Electric Power Development Co., a Japanese electricity supplier, in a suburban city of Kanagawa Prefecture.
As TEPCO sees no prospects for the restart of the Kashiwazaki-Kariwa nuclear plant in Niigata Prefecture due to opposition from local residents, the company is looking to boost electricity output with relatively cheap thermal power to prepare for potential price competition when Japan's electricity market is liberalized in 2016.
TEPCO and Electric Power Development Co., better known as J-Power, are looking to build a new thermal power plant on the premises of the currently idled Yokosuka Thermal Power Station in Kanagawa Prefecture and start its operation by the 2020s. The project is expected to cost some 200 billion yen.
TEPCO will finalize the new thermal station plan in consideration of a joint fuel-procurement and thermal power project under negotiation with Chubu Electric Power Co. and other companies.
The planned thermal station will generate electricity in an integrated gasification combined cycle, in which power is generated with gasified coal fuels. It will increase power generation efficiency by around 15 percent, allowing the plant operator to reduce greenhouse gas emissions and offer cheaper electricity.
TEPCO and J-Power mull making a joint bid for the thermal power generation of some 6 million kilowatts in a tender TEPCO plans to offer this fiscal year.
Coal-fired thermal power accounted for 16 percent of the electric output TEPCO generated in fiscal 2013, while more costly liquefied natural gas (LNG) made up 63 percent of TEPCO's total electricity output.

Meanwhile, the average of LNG-generated power among 10 electric power companies across the country was 44 percent.
August 26, 2014(Mainichi Japan)

New way to measure radiation in reservoirs

September 21, 2014

Atomic Energy Agency finds more effective way to measure radiation in reservoirs

http://ajw.asahi.com/article/sci_tech/technology/AJ201409210005
By CHIKAKO KAWAHARA/ Staff Writer
The Japan Atomic Energy Agency has developed a new way to measure radiation in agricultural reservoirs that will enable the government to streamline decontamination work.
Previously, it had been estimating overall figures in agricultural reservoirs in Fukushima Prefecture, home of the stricken Fukushima No. 1 nuclear power plant, by sampling a few points in each body of water.
The agency's new method uses a detector that is 20 meters long and shaped like a rope. It has a plastic core that emits light when it senses radiation. The surveyors use two boats to drag the detector along a reservoir's bed and take readings across an entire horizontal plane.
"It's a simple method that allows us to get very reliable data," said an agency official.
Fukushima Prefecture has agricultural reservoirs in 3,730 locations. At the end of last year, the prefectural government and the farm ministry's Tohoku regional office examined the mud at the bottom of 1,939 reservoirs. They detected cesium readings of more than 8,000 becquerels per kilogram of mud at 468 reservoirs outside the evacuation zone, which were supplying water for farming at rice paddies and other fields even after the onset of the nuclear crisis triggered by the 2011 earthquake and tsunami disaster.
Outside the zone alone, there were five areas where the readings reached 100,000 becquerels.
Instruments for measuring airborne radiation levels in the atmosphere do not work in water. So far, the agency's surveys have extracted and analyzed mud from one or two locations in each reservoir.

New way to test cesium in water

September 25, 2014

Quicker way found to test for radiation in water

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201409250023
THE ASAHI SHIMBUN
Kajima Corp. and analysis equipment maker Nikkin Flux Inc. have jointly developed equipment that quickly examines large quantities of water for radioactive cesium.
The box-shaped device, measuring 2.2 meters by 2.7 meters, is expected to be used at interim storage facilities for radioactive soil and debris generated from decontamination work due to the Fukushima nuclear disaster.
The equipment is able to analyze 1,800 times the amount of water that conventional systems can, and at nine times the speed, according to officials of the two companies.

For example, it can measure cesium levels in 3,500 liters of water, equivalent to 18 home bathtubs, in about 20 minutes, compared with existing systems that take more than three hours to analyze two liters of water.
The device was developed using general contractor Kajima's waste-water processing know-how and technologies owned by Nikkin Flux, a Tokyo-based company.
The two firms also intend to sell the equipment to general waste disposal facilities, the officials said.

One way of seeing it

September 25, 2014

Kyushu Electric suspends buying renewable energy, fearing supply instability

http://ajw.asahi.com/article/business/AJ201409250029
THE ASAHI SHIMBUN
Kyushu Electric Power Co. on Sept. 25 stopped signing contracts with renewable energy companies, fearing a further expansion of clean energy could lead to an unstable power supply in local areas.
The utility had been buying electricity from private power generators based on the government's feed-in tariff system for clean energy. But the company said the previous day that it would temporarily halt its dealings with clean power stations with an output of 10 kilowatts or more in almost all areas of the Kyushu region.
Kyushu Electric said it will continue accepting surplus power generated by solar panels and other devices of general households.
Many applications for setting up solar panels have been submitted in Kyushu, where the land receives good sunlight and is affordable for solar panel installation.
The number of applications surged before the government reduced the predetermined purchase prices of renewable energies on April 1 because new power operators tried to sell their electricity at higher prices to Kyushu Electric.
According to Kyushu Electric officials, the utility found that its output of solar and wind power would total 12.6 gigawatts if it accepted all applications from private operators. That output could cover about 80 percent of electricity demand in the areas Kyushu Electric serves during peak electric use hours in summer.
However, solar power is an unstable electricity source because it is inevitably affected by the weather and cannot be generated at night.
Sending large amounts of such electricity into power cables can make the electrical frequency unstable and degrade the quality of electricity, resulting in occasional power failures and other problems, Kyushu Electric officials said.

Halting clean energy access

October 1, 2014

Under strain, utilities halt new access to clean energy

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201410010034
By KUNIAKI NISHO/ Staff Writer

T**hree regional utilities have temporarily suspended grid access for new clean energy producers**, citing the risk of overload.
Hokkaido Electric Power Co., Tohoku Electric Power Co., and Shikoku Electric Power Co. said they will not accept new applications from renewable energy developers as of Oct. 1.
Kyushu Electric Power Co. and Okinawa Electric Power Co. have already limited such access.
The move threatens the government's alternative energy push following the Fukushima nuclear crisis that unfolded in 2011.
The utilities said any further increase in their purchase of new energy through the government's feed-in-tariff system could cause blackouts and other glitches due to the limited capacity of their electricity distribution networks.
The government introduced the feed-in-tariff program in July 2012 with the aim of doubling the country's renewable energy dependence from around 10 percent to more than 20 percent.
The program offers attractive rates to alternative energy developers and triggered a boom in clean energy projects, particularly solar power.
The suspensions were announced during a meeting of the industry ministry's New and Renewable Energy Subcommittee on Sept. 30. The ministry set up a working panel the same day to decide the next step.
Okinawa Electric suspended new orders for clean energy from early August, while Kyushu Electric started limiting access from Sept. 25.
The utilities, excluding Okinawa Electric, will continue to purchase surplus energy produced by households.
According to the industry ministry, about half of the solar energy producers using the feed-in tariff system are in the utilities' service areas.
The availability of inexpensive, large land lots has helped solar energy production expand in the zones.
They do not cover the three major metropolitan areas of Tokyo, Osaka and Nagoya.
Solar energy production capacity fluctuates greatly depending on time of day and season, the utilities said.
A surge in energy supply can impair utility distribution equipment and cause blackouts.
The industry ministry's working panel will discuss measures to encourage utilities to continue increasing the procurement of renewable energy, such as creating a system to allow regional utilities to exchange surplus electricity.

Too much clean energy?

October 2, 2014

Clean energy boom challenges power grid

Bloomberg
Four regional utilities stopped signing contracts to buy renewable energy from big solar power plants and other suppliers starting Wednesday, limiting an influx that is testing the nation's electricity grid.
The decision by the utilities serving Shikoku, Hokkaido, Tohoku and Okinawa, and a similar move last week by Kyushu Electric Power Co., threatens to undermine the national push to expand renewable energy supply in the wake of the Fukushima nuclear crisis.
Grid access "has been the largest impediment for clean energy developers in Japan," Mika Obayashi, director of the Tokyo-based Japan Renewable Energy Foundation, said in a statement last week after Kyushu Electric's announcement.

At the heart of efforts by utilities to limit clean energy access is the design of the electricity distribution network and whether it is able to handle the flow of intermittent supplies of power from hundreds of different producers. The grid is being challenged and utilities are starting to balk.

Kyushu Electric, which supplies power to almost 9 million residential and business customers, said Sept. 24 that it will suspend responding to applications by developers seeking access to its grid while it reviews how much more clean energy it can handle.

Shikoku Electric Power Co., Tohoku Electric Power Co., Hokkaido Electric Power Co. and Okinawa Electric Power Co. are also restricting access to varying degrees, as blackouts could occur if all output from renewable energy suppliers is transmitted to the utilities' grids, causing overcapacity.

The moves run counter to the efforts of policymakers to promote and increase the use of renewable energy to alleviate the publicly touted plight of energy-dependent Japan.

Japan introduced incentives to encourage renewable energy development in July 2012, offering some of the world's most attractive rates to developers through the feed-in tariff program, which required utilities to purchase electricity generated from renewable sources at fixed prices. A boom in clean energy projects — particularly in solar — resulted.

"The design of the feed-in tariff program could have included clauses to avoid a situation like this," said Takehiro Kawahara, an analyst for Bloomberg New Energy Finance. "The current design did not take into account any measures on matching renewable energy project development with local electricity demand nor ease of integration of approved projects into the existing grid infrastructure."

A working group will be set up to review Japan's grid, including how much access is available for clean energy and how access can be expanded, the Ministry of Economy, Trade and Industry said Tuesday.

About 72,000 megawatts of clean energy projects have been approved since the feed-in tariff program's inception. The bulk of the approvals, or 96 percent, has been solar. Japan had 31,000 megawatts of renewable energy at the end of 2010, according to Bloomberg New Energy Finance data.

Not all clean energy projects qualifying for incentives have been built, signaling various bottlenecks ranging from the availability of land to the cost of equipment and labor. As of June, METI said that 11,090 megawatts of approved projects had started operating, 15 percent of the total.

Kyushu Electric's decision is already affecting developers and installers with plans in the region.

Sanix Inc., a solar-panel installer with headquarters in Fukuoka, said it may shift workers.

"We will inevitably be affected as we won't be able to install systems in areas covered by Kyushu Electric," the company said in a statement Sept. 25. "We will review our plans for hiring, advertising and adding branches to minimize the impact" of the utility's decision, the company said.

Kyushu Electric's decision may also affect a 430-megawatt solar station under development on Ukujima, an island off Kyushu in Nagasaki Prefecture. The project, touted by developer Kyocera Corp. and its partners as the largest in the world to be built on agricultural land, has yet to secure grid access from Kyushu Electric.

"We want to continue talks with Kyushu Electric while gathering more information and working with our partners," Kyocera spokesman Sanae Iwasaki said Sept. 25 after Kyushu Electric's announcement. Orix Corp. and Germany's Photovolt Development Partners GmbH are among Kyocera's partners in the Ukujima project.

Some industry officials say the surge in feed-in tariff applications overwhelmed expectations, meaning utilities had difficulty estimating how much additional power they could take on. But the same phenomena has been witnessed in other countries.

Developers rushed at the end of the fiscal year for approval before the government lowered tariffs for solar projects. In March, Kyushu Electric received about 70,000 applications for grid access, equaling the amount received in the previous 11 months.
"The way solar expanded so abruptly was something that people in the industry didn't anticipate, including myself," said Hiroshi Takahashi, a research fellow at Fujitsu Research Institute who says the tariffs for solar energy were too high. "The scheme has some problems. Developers rush at the end of fiscal year because the tariffs are only changed once a year."
For the Japan Renewable Energy Foundation's Obayashi, the pushback from Japan's utilities is symptomatic of a larger problem. Besides solar, Japan has installed very little in the way of competing clean energy, such as wind or geothermal.
"The serious problem is little growth in renewables other than solar," Obayashi wrote in a Sept. 5 column in which she looked at the challenges to the incentives program.
For wind power, grid access is proving a particularly troublesome hurdle for developers in Japan, Obayashi wrote.
"Operation of grids by power utilities that own generation facilities is obviously problematic in securing fair management in grid connection," she wrote.

Too much clean energy? (2)

October 4, 2014

EDITORIAL: Measures needed to prevent renewable energy boom from going bust

http://ajw.asahi.com/article/views/editorial/AJ201410040038

The positive growth of electricity production using renewable energy powered by the feed-in-tariff (FIT) system is beginning to show signs of losing steam.
Major power utilities are suspending the acceptance of new entries into the FIT program because the capacity of their transmission lines to take additional electricity has reached its limit in some areas. Of the 10 big utilities that are legally required to purchase all power generated from renewable energy sources at fixed prices, five, including Kyushu Electric Power Co., have stopped making new FIT contracts in almost all the areas they serve.
This inability by utilities to accept all the electricity produced under the FIT program due to capacity deficiency reflects the strong investment interest in renewable energy and the high expectations for the use of green power.
But solar and wind power has one big drawback. The amount of electricity generated with these energy sources tends to fluctuate wildly due to factors such as weather conditions, time of day and the season. Such fluctuations in power generation, unless they are properly adjusted, can affect the frequency and voltage of the power, causing power failures and malfunctioning equipment.
One solution is to expand transmission lines for integrated operations to wider areas so that the effects of the fluctuations in power generation can be buffered more easily.

Thicker power lines between utilities will allow for the transmission of surplus power generated from renewable energy sources in one area, say Kyushu, to other areas where there is demand.
Decisions on investing in power grids in the past had been left up to the individual utilities.
The situation, however, will change when the scheduled power market reform separates the operation of transmission lines from the business of power generation. This will encourage investment in transmission grids based on a broader perspective that is not restricted by the needs of the individual utilities.
Starting in April next year, a new operational entity will take charge of integrating the transmission lines operated by regional power companies. The new body will be responsible for developing trunk transmission lines and connecting lines between utilities.
This new system will make it easier to expand and enhance transmission grids in response to policy needs and requests from power generation companies.
Some issues remain to be sorted out, such as how the costs should be shared. But it is vital to carry through such power system reforms without delay.
It will take time, however, to build up a large network of transmission lines covering wide areas. There are also problems that need to be solved, including the insufficient capacity of transmission lines at locations where they are connected to power plants.
The Ministry of Economy, Trade and Industry will set up a working group to study the formula for calculating the maximum amount of green electricity individual utilities can accept, as well as conditions for such acceptance.
The ministry should consider taking steps to ensure early, preferably ahead-of-schedule, implementation of plans to bolster transformers and storage batteries, instead of leaving utilities to decide when to take these measures.
As for large-scale solar farms, which account for the majority of applications for power sales under the FIT program, the ministry may need to ensure the appropriate scale by using the price mechanism. It can do so, for instance, by reviewing the purchase prices more frequently than the current once a year.
Promoting the use of renewable energy is a global trend. It is important from the viewpoint of developing alternative energy sources that can replace nuclear power and fossil fuels and of tackling global warming.
In its new basic energy supply plan, the government designated about three years from 2013 as a period for "maximum possible acceleration" in the effort to spread the use of renewable energy. It has set a target of increasing the share of clean power as part of the nation's overall electricity production to more than 20 percent by 2030.
The government should figure out ways to prevent the current renewable energy boom from going bust.
--The Asahi Shimbun, Oct. 4

Too much clean energy? (3)

October 5, 2014

Unprepared for green electricity

http://www.japantimes.co.jp/opinion/2014/10/05/editorials/unprepared-green-electricity/#.VDFjNxanp1s

Under the feed-in-tariff system introduced in July 2012 by the then Democratic Party of Japan administration, the nation's major power companies are required by law to buy, in principle, all the electricity generated by solar, wind, geothermal and medium-to-small-scale hydro-power sources and biomass at fixed prices.

The purchase costs are to be added to electricity charges. It was hoped that the system would help revitalize local economies and reduce Japan's dependence on nuclear power. Recently, however, one power company after another has announced a decision to stop such purchases.

They say the oversupply of green electricity due to the required purchase of all such power could wreck the stable supply of electricity to businesses and households.

The situation has prompted the trade and industry ministry to prepare for a review of the feed-in-tariff system. Given what has happened, it is clear that the system was not well thought out and needs to be redesigned.

But in the review, the ministry should not use the recent development as an excuse to put a brake on the expansion of power generation through renewable sources and to maintain the weight of nuclear power in the supply of electricity. It should uphold the goal of expanding green power generation, and bring together the accumulated knowledge and technologies of the power and other industries to achieve it.

On Sept. 24, Kyushu Electric Power Co. announced that it would halt the purchase of green electricity in the whole Kyushu region, starting the next day, including putting on hold some 70,000 plans for generation of green power by entities that have applied to Kyushu Electric for contracts to sell the electricity.

Kyushu Electric's decision affected not only the renewable energy businesses but also local governments, including the Kumamoto prefectural government, which had pushed for introduction of green electricity.

Okinawa Electric Power Co. had stopped the feed-in purchases in August.

Hokkaido Electric Power Co., Tohoku Electric Power Co. and Shikoku Electric Power Co. followed the Kyushu power firm with a decision to suspend the purchase of green electricity beginning this month.

Tokyo Electric Power Co. and Kansai Electric Power Co. have also halted such purchases in some parts of the areas serviced by them.

In making their moves, the power companies have cited a clause in the Law on Special Measures Concerning Procurement of Renewable Electric Energy by Operators of Electric Utilities, which exempts them from the duty to buy green electricity if the purchase of such power poses a danger to stable supply of electricity.

Behind their moves is a rapid increase in the volume of green electricity they have had to agree to buy.

Green energy operators rushed to make last-minute applications for electricity sales to the power firms before the government lowered on April 1 the prices at which the utilities must buy power from various renewable energy sources.

The power companies explain that if all the electricity from renewable energy sources is supplied to their transmission grids, the total supply will exceed their capacity, which could lead to stoppage of the power companies' generators.

They also say that the wild ups and downs in the output of solar and wind power due to weather changes will make it extremely difficult for them to adjust the output of their power generators to cope with the fluctuations. If the adjustments fail, it could damage their power grids.

Both cases could result in blackouts.

The government should be blamed for failing to foresee a large number of applications for sale of green electricity to the power companies.

There may be some entities that have applied to the power firms for the electricity purchase contracts without proper investment plans. However, many entities have already carried out necessary investments for power generation through renewable energy sources on the belief that the power firms will fulfill their duty to buy the electricity from them.
The government and the power companies should realize that power from renewable sources accounted for only 2.2 percent of the total electricity generated in fiscal 2013.
Green electricity has the advantages of emitting very little carbon dioxide in the process of power generation. Severe accidents like the one that may happen at a nuclear power plant are unlikely. Green power generation facilities scattered around the country reduce the risk of severe power shortages. It is clear that green electricity's weight in total power generation in this country should be sharply increased.
In reviewing the feed-in-tariff system, the trade and industry ministry should not forget this point and should remember that the government's energy basic plan adopted in April calls for reducing Japan's reliance on nuclear power as much as possible as well as for aggressive introduction of renewable energy, citing a government advisory body's document that states that green electricity should account for about 20 percent of the total power generation in 2030.
The Natural Resources and Energy Agency estimates that if all the green energy facilities that have signed feed-in-tariffcontracts with power companies and received approval from the government as of the end of May went into operation, their total output in 2030 would top 20 percent of the nation's total power generation.
Development of large-capacity and high-efficiency batteries, an increase in the capacity of the power grids, including building of transmission lines across different service areas, and upgrading of the facilities to convert the different frequencies of electric currents — 50 Hertz in eastern Japan and 60 Hertz in western Japan — are needed to solve major technical problems inherent to the supply of electricity generated through green sources.
Trillions of yen are estimated to be needed for such projects, and power companies are reluctant to invest. To stimulate such investments, the government should first declare clear percentages as goals in expanding the share of green electricity in the nation's total power generation.
Also important for the government would be to clarify what party or parties should shoulder the cost of such investments — which was left unaddressed when the system was introduced in 2012.

Renewables too important to be left to utilities

Editorial: Gov't must not leave promotion of renewable energy to private utilities

http://mainichi.jp/english/english/perspectives/news/20141007p2a00m0na004000c.html
A dark shadow has been cast on efforts to spread the use of renewable energy.
Major power companies are suspending new applications for access to the power grid from solar- and wind-power suppliers through the feed-in tariff (FIT) system, because supply has soared at a rate that exceeds the capacity of utilities' transmission lines.
To accelerate the spread of power generated from renewable energy sources, the government must take responsibility for expanding the capacities of utilities to take on energy.

Over 10 million kilowatts of electricity is generated from renewable sources in Japan, and when combined with facilities that already have FIT contracts, the total comes out to over 70 million kilowatts. If all such generators were put into operation, the government's goal, as stated in its basic energy plan, to produce over 20 percent of energy through renewable sources in 2030, would be fulfilled.

Under current circumstances, however, such an accomplishment may become just a pie in the sky. The Kyushu, Hokkaido, Tohoku, Shikoku and Okinawa electric power companies have announced that they are temporarily suspending new entries into the FIT system.

The fixed prices at which utilities are required to purchase renewable energy are re-evaluated every April. In March, shortly before that re-evaluation took place, there was a rush of applications from renewable energy producers hoping to sell power -- primarily solar -- at high prices, before prices dropped. As a result, the supply of energy with certification from the Ministry of Economy, Trade and Industry (METI) exceeded the peak demand of the aforementioned five utilities. That means that even if the power companies stopped all of their power generators, there would still be surplus energy if all the renewable power generators were in operation.

Disruption in the balance between energy supply and demand can put excess strain on the power grid, potentially causing large-scale power outages. The utilities say they will spend several months assessing the capacity of their transmission grids in accepting renewable power. We urge them to make the utmost effort to accept as much clean energy as possible, instead of rejecting it because of supply fluctuations.

METI plans to set up a panel of experts to verify the capacities of the five companies' transmission lines. This process is necessary, but that work alone will not solve the fundamental problem of utilities being unable to accept electricity that exceeds peak demand.

Renewable energy farms are mostly located far away from cities, where land is cheap. The current situation of surplus energy could have been predicted when the FIT system was first adopted. The system's design must promptly be reworked.

To expand renewable energy, efforts must be made to strengthen transmission grids across utilities, and allow the buying and selling of power across regions. However, this will cost several trillion yen. At a time when there is no clear vision for the future of energy in Japan, it is too heavy a burden for private power companies to shoulder by themselves. Assistance from the government is indispensable.

Assuming that Japan will continue to use nuclear power, the government estimates that a nuclear fuel cycle program will cost close to 20 trillion yen. At the same time, the expansion of renewable energy projects is essential if we are to reduce our dependence on nuclear energy. Our limited funds should be diverted to the latter.

Reviewing feed-in tarifs for renewables

October 16, 2014

Gov't eyes drastic review of renewable energy feed-in system

http://mainichi.jp/english/english/newsselect/news/20141016p2a00m0na015000c.html

The Ministry of Economy, Trade and Industry has begun considering a fundamental review of the so-called feed-in tariff system which obliges utilities to purchase power generated from renewable sources at fixed prices.

The potential overhaul of the FIT scheme, introduced in July 2012, is being discussed by the New Energy Subcommittee of the ministry's Advisory Committee for Natural Resources and Energy. Renewable energy suppliers were baffled by recent decisions by Kyushu Electric Power Co. and four other utilities to stop signing new contracts to buy renewable energy from solar power suppliers in their service regions.

The industry ministry has since come under pressure to deal with the problem swiftly. Meanwhile, measures to hold down power prices for regular consumers have also emerged as a major issue. The government is likely to be tested on whether it is truly serious about boosting renewable energy supplies.

At the subcommittee meeting on Oct. 15, a number of committee members called for a review of the FIT system, with some of them saying, "Unless solar power generation is curbed, plans to introduce other renewable energy sources will be adversely affected," and, "To stop accepting renewable energy will undermine the credibility of the (FIT) system."

Five utilities -- Hokkaido Electric Power Co., Tohoku Electric Power Co., Shikoku Electric Power Co., Kyushu Electric Power Co. and Okinawa Electric Power Co. -- have stopped signing new renewable energy purchase contracts. As of June, the industry ministry had certified planned and completed renewable energy facilities with a combined total output of 71.78 million kilowatts -- which would mean oversupplies in the service areas of all five of the above utilities. The electric companies have explained that the excessive renewable supply could destabilize overall power supply and even cause power outage.

In order to expand renewable energy supplies, measures should be taken to improve power transmission networks to allow surplus power to be supplied to other regions, store it in batteries, and curb renewable energy output, among other steps. If such measures are taken, utilities will be able to accept renewable energy even if the output of that energy is increased. In fact, Germany, Italy and Spain are even now maintaining stable local supplies by adjusting power generation and transmission throughout Europe as needed. In Germany and Italy, solar and wind power generation accounts for more than 10 percent of total electricity supply, and about 25 percent in Spain.

Nevertheless, the Japanese industry ministry and power companies failed to take measures to deal with the problem ahead of time. An industry ministry study group suggested in 2010 that battery installations and energy transmission and distribution networks must be improved if solar power output exceeds 10 million kilowatts. But the government and utilities did not take any specific action until June this year, when the renewable energy output was certain to vastly exceed 10 million kilowatts.

On the delay in taking action, the industry ministry said, "Because facilities are designed almost exclusively for solar power generation and the (cost) burden on the people could be increased in the future, we were not able to enhance power transmission lines without reviewing the system."

According to the ministry's estimates, if all the facilities certified under the FIT system by June this year were to go into operation, the cost to purchase renewable energy would amount to 2.7 trillion yen per year, forcing the utilities to put a monthly 935 yen surcharge on electricity bills for an average household. If power transmission cables were to be enhanced to expand the renewable energy supply system, the **financial burden on consumers** would be increased further.

Because of all this, a proposal was made at the subcommittee meeting on Oct. 15 that a questionnaire be conducted to **ascertain how much extra cost consumers could tolerate**. The subcommittee will also

consider placing priority on introducing low-cost renewable energy by having a bidding system to hold down purchase prices. The subcommittee also discussed the need to address the overemphasis on solar power by promoting geothermal power generation, which is far less vulnerable to weather conditions.
The industry ministry is aiming to make its conclusions by the end of this year, so that it will be able to use them for discussions on purchase prices for next fiscal year. There has, however, been little progress in the question of the future "energy mix" -- the ratios of different energy sources in total generating capacity -- because the target for nuclear power output cannot be set until nuclear reactors are actually reactivated, a senior industry ministry official said. **The target for renewable energy output could, in other words, be affected by the ratio of nuclear power output.**
As such, some experts say that it will be difficult to promote renewable energy. At the subcommittee meeting, many panel members voiced opinions against a move to return to the policy of nuclear power dependence, with one saying: "I fear that the problems with the (electricity) system will lead to renewable energy bashing." Another commented, "Nuclear power generation costs money, too."
The decisions by the five utilities to stop signing new renewable energy contracts have caused a stir among renewable energy suppliers and local governments.

October 16, 2014(Mainichi Japan)

Government looks to reassess feed-in tariff system for renewable sources of electricity

Green energy tariffs draw scrutiny

http://www.japantimes.co.jp/news/2014/10/15/business/green-energy-tariffs-draw-scrutiny/#.VD7Y6BanrIU

by Eric Johnston
Staff Writer

A committee involved with the nation's energy policy met Wednesday to discuss revisions to the 2-year-old feed-in tariff system for renewable energy.
It will also investigate a utility that recently halted renewable electricity purchases under the system by claiming it didn't have the capacity to handle the large amounts being generated.
Since the feed-in tariff system was introduced in July 2012, obliging utilities to purchase electricity generated from solar, wind, geothermal, mini-hydro and biomass sources for a fixed price over a fixed period, growth in renewable energy has been rapid.
As of April, about 10 gigawatts of renewable energy capacity has been installed and is underway. Of this, about 7 gigawatts, mostly in solar panels, was installed in fiscal 2013.
But expansion has brought problems. Last month, Kyushu Electric Power Co. announced it was suspending talks with renewable energy suppliers, except for residential solar arrays under 10 kilowatts.

The reason, the company said, was that its grid doesn't have the ability to transmit generated power from all of the approved projects if they went online, and that there was a risk of overloading the grid and creating instability in the supply.
A subcommittee of the industry ministry's Advisory Committee for Natural Resources will look into whether Kyushu Electric really can't handle more renewable electricity, and review grid capacity at the other major utilities. The committee may also allow utilities to go more than 30 days without purchasing renewable electricity, as a way of making it easier to balance supply, capacity and demand.
Under the feed-in tariff program, over 90 percent of the projects approved have been for solar projects. But concerned about over-relying on one source, the government will look at ways to increase the number of other renewable energy projects, especially wind and geothermal. Kyushu has one of Japan's largest concentrations of geothermal resources, and the government says it wants to prioritize easier grid connections for this power source.
The committee is expected to issue a final report by the end of this year and suggest possible new legislation.
Also to be discussed are proposals for a bid system that gives priority to approval of renewable energy projects that can provide electricity at the cheapest possible rates, and for shortening the period when feed-in tariff rates are revised from once a year to twice a year.

How to promote renewables?

October 18, 2014

Editorial: System to facilitate promotion of renewable energy needed

http://mainichi.jp/english/english/perspectives/news/20141018p2a00m0na002000c.html
An advisory council to the Economy, Trade and Industry Ministry has begun reviewing the so-called "feed-in-tariff" (FIT) scheme for renewable energy, where power companies buy electricity generated from renewable energy sources such as solar light, amid rising fears that the balance between power demand and supply could be disturbed due to utilities being flooded with offers in this regard.
Five power suppliers including Kyushu Electric Power Co. have stopped signing new contracts to buy electricity generated from renewable energy sources. However, since such sources account for only about 2 percent of total power used in the country (excluding hydroelectric power), the introduction of renewable energy should not be systematically hindered even if the FIT scheme needs to be reviewed.
Renewable energy sources play a key role in stepping up countermeasures against global warming, while decreasing the country's reliance on nuclear power. From a long-term perspective, therefore, the government should set a high target for introducing renewable energy while achieving a balance between the spread of such energy sources and the burden on consumers.
The FIT scheme was introduced in July 2012. By this past June, the total output of power generation facilities that operated using renewable energy had reached 11 million kilowatts. This was roughly 50 percent more than the amount before the introduction of the system -- thereby highlighting the FIT's effect in promoting the introduction of renewable energy sources.
The problem is that solar light constitutes an overwhelming majority of renewable energy used for power generation. Unlike wind power, solar power generators are easy to introduce insofar as such facilities do not require an environmental assessment by the national government. Power generation facilities using

renewable energy sources, with a total output of some 60 million kilowatts, are not in operation even though they have been approved by the government. A vast majority of these facilities are solar power generators.
The price at which utilities buy electric power generated from renewable energy sources under the FIT scheme is reviewed every April. Since the price charged is that which is in place when the national government approves such facilities, however, power suppliers were flooded with applications for contracts at the end of last fiscal year shortly before the price was lowered this past April.
Under the ministry's plan to revise the scheme, excessive emphasis on solar power would be reconsidered -- and the price to be charged would be that which was in place at the time of the start of operations at such power generators, rather than at the time of government approval. The ministry will also consider setting an upper limit to the burden on consumers, and introducing a market mechanism for the operators of power generation facilities.
A review of the timing for determining the purchase price and promotion of renewable energy sources other than solar lights is appropriate. However, the introduction of the market mechanism needs to be carefully and thoroughly discussed. An extra burden is placed upon consumers since the price of electric power generated from renewable energy sources is added to power charges. On the other hand, renewable energy has drawn attention as a way to revitalize local economies. Certain consideration should be given to such efforts.
If all of the approved power generation facilities using renewable energy are to be in operation, the cost of buying such electricity would amount to 2.7 trillion yen a year, according to an estimate by the Economy, Trade and Industry Ministry. This would increase the extra financial burden on consumers from the current 225 yen to 935 yen per month on average. However, money paid for such electricity will eventually be passed on to regions that host power generators using renewable energy. Therefore, the promotion of renewable energy should be considered from the viewpoint of investing in Japan's future.
The Economy, Trade and Industry Ministry has also begun reviewing each utility's capacity to accept power generated from renewable energy. Power grids need to be reinforced across power companies' service areas to significantly increase the amount of electricity generated from renewable energy. Still, utilities can increase their capacity to accept such power by effectively and efficiently using lines that connect different utilities' power grids.
Pumped-storage power generation facilities, which are often built along with nuclear power stations, should be proactively utilized as power storage batteries to adjust the output of power generated from renewable energy sources.

Green power: Review the power system

October 23, 2014

Planting a green power grid

http://www.japantimes.co.jp/opinion/2014/10/23/editorials/planting-a-green-power-grid/#.VEjr3Banp1s
The sudden decisions by five power companies to stop purchasing electricity from renewable energy sources under a feed-in-tariff (FIT) system have forced the government to start reviewing the system itself.

The review will include possibly introducing a tender system for green power-generating entities hoping to sell electricity to power firms and increasing the weight of wind and geothermal power in the purchase of green power.

But the government should not forget a more important thing than tinkering with the FIT system — improving the power grid and the related technological basis so that the share of green electricity will greatly increase in Japan's total power output. It also must not use the planned restart of nuclear power plants as an excuse to put a brake on the growth of renewable energy sources.

Backed by a call for greater use of green energy in the wake of the March 2011 meltdowns at Tokyo Electric Power's Fukushima No. 1 nuclear power plant, the then Democratic Party of Japan administration introduced the FIT system in July 2012. The nation's major power companies are required by law to buy, in principle, all the electricity generated by solar, wind, geothermal and medium-to-small-scale hydro-power sources and biomass at fixed prices. But Okinawa Electric Power Co. stopped feed-in purchases in August and last month regional power monopolies in Kyushu, Shikoku, Tohoku and Hokkaido announced they will suspend the purchase of green electricity — a course of action made possible by a clause in the FIT law that exempts the power firms from the duty to buy green electricity if the purchase of such power poses a danger to stable supply of electricity.

Behind their move is a rush of last-minute applications by green energy-generating entities to sell electricity to the power companies before the government lowered purchase prices on April 1. As of the end of June, solar power accounted for 96 percent of green electricity approved for future sale to power companies. The power companies argue that they had to stop accepting the applications because either the anticipated oversupply of green electricity to their power grids could lead to the stoppage of their generators or wide fluctuations in the output of solar and wind power due to weather changes will make adjusting their generators extremely difficult. Both cases, it is feared, could lead to blackouts.

The power companies have failed to provide detailed information to back up their arguments. For example, they have not disclosed how much electricity their power transmission lines can send to, or receive from, other power companies; to what extent their power plants — such as thermal power plants using natural gas whose outputs are easily adjustable — can cope with fluctuations of green supplies; and how much excess electricity supplied from renewable sources could be used by pump-storage hydroelectric plants to pump up water during the day to generate power at night.

It is imperative that the power companies make public these figures and other relevant information. This will enable experts and ordinary citizens alike to determine whether the power companies are making sufficient efforts to buy electricity from renewable sources. Only then can there be a discussion of what concrete steps should be taken, including how much to increase the capacity of transmission lines and the specifications for developing more efficient batteries.

Increasing competition in the transmission and distribution of electricity will also help increase the capacity to handle green electricity supplies. The government should speed up the process of separating power transmission and distribution sections from the major power companies, originally scheduled for 2018 or later, and consider the merits of completely shielding new transmission and distribution entities from the control of power companies.

Green electricity, except large-scale hydraulic power, accounted for a mere 2.2 percent of total electricity generated in Japan in 2013. This volume is too small. Given the inherent risks involved in nuclear power generation and the ethical and environmental problems that semi-permanent storage of high-level nuclear waste will cause for future generations, it is logical that Japan should make concrete efforts to greatly increase the percentage of green energy by setting a clearly defined goals while aiming eventually for ending reliance on nuclear power.

Japan & renewable energy

http://www.renewableenergyworld.com/rea/news/article/2014/09/japan-installs-11-gw-of-renewable-energy-in-two-years?cmpid=rss

Japan Installs 11 GW of Renewable Energy in Two Years
Solar energy makes up the most additional energy capacity.

Chisaki Watanabe, Bloomberg septembre 29, 2014 |
Tokyo -- Japan has added 11,090 megawatts of clean energy capacity since July 2012, when it began an incentive program to encourage investment in renewables, according to the Ministry of Economy, Trade and Industry.
Of the total, Japan has added 10,880 MW of solar capacity through the end of June, according to METI data updated on Sept. 26.
Japan, which has a total population of 127 million, has approved 71,780 MW of renewable energy projects, according to the ministry data. Solar accounts for 96 percent of the approved capacity.
In related new, a unit of General Electric Co. and partners will get a 90 billion yen ($822 million) loan from Japanese banks to build a 231-MW solar power station in western Japan.
GE Energy Financial Services, Toyo Engineering Corp., and Kuni Umi Asset Management Co. will build the 110 billion yen station in Okayama prefecture, the companies said in a statement today.
Construction will start in November and the station will start running in 2019, according to the statement.
The Bank of Tokyo-Mitsubishi UFJ, Mizuho Bank, and Sumitomo Mitsui Banking Corp. will serve as lead arrangers of the 22 1/2- year syndicated loan, which will also be provided by regional financial institutions.
Yasuyo Yamazaki, the president and chief executive officer of Kuni Umi Asset Management and a key player in the project, said: “In addition to the Setouchi solar project, we developed a mega-solar power plant in Mito-city Ibaraki Prefecture and started the construction of a woodchip biomass fuel power plant in Kawaminami-cho, Miyazaki Prefecture. Now we are planning a wind farm in Nakadomari-cho, Aomori Prefecture. With these projects, we are contributing to the Ideal Region Development with renewable energy.”
Sushil Verma, a managing director and Japan business leader at GE Energy Financial Services, said: “Japan’s favorable regulatory policies make solar power attractive and diversify the country’s power generation sources. For us, the Kuni Umi project expands our international and renewable energy footprints, which already include investment commitments of $1.8 billion in equity and debt in more than one gigawatt of solar power projects worldwide.”
In addition to capital, GE will supply some of the inverters — marking the debut in Japan of the GE *1 MW Brilliance Solar Inverter,* which eliminates the need for an intermediate transformer, resulting in higher conversion efficiency and superior grid performance, according to GE.

"Drastic reform" needed

November 6, 2014

As I See It: Total picture needed for future electric power system

http://mainichi.jp/english/english/perspectives/news/20141106p2a00m0na005000c.html

Five utilities including Kyushu Electric Power Co. have suspended signing new contracts to buy power generated with renewable energy, such as solar power and wind power, under a system in which major electricity suppliers are required to buy such power at a fixed price. This is because these firms were not fully prepared to accept renewable energy, highlighting the inadequacy of the government's institutional program.

The government, which is now reviewing the system, should proactively and patiently work on drastic reform of the electric power generation and supply system.

The system was launched in July 2012 largely out of reflection of the crisis at the tsunami-hit Fukushima No. 1 Nuclear Power Plant that broke out in March 2011. The spread of renewable energy is effective in preventing global warming and power generation using such energy sources has a low risk of accidents. Since businesses that use renewable energy to generate electricity do not have their own power grids, the government requires major power companies to purchase power generated by designated businesses using renewable energy for up to 20 years.

The system is modeled after one in Germany that is an advanced country in terms of the use of renewable energy. However, the five utilities stopped signing new contracts to purchase power generated with renewable energy on the grounds that the amount of such power is likely to exceed their capacity. No wonder the system, which Japan introduced by imitating one in Europe despite power companies not being prepared to accept such power, hit a snag.

To ensure a stable power supply, a demand-supply balance that is perfect must be achieved at all times, according to industry sources. If the supply of power surpasses or dips below demand, it would destabilize the frequency and voltage, which could trigger a power blackout.

However, most renewable energy that utilities are supposed to buy is solar power, which is unstable because the generated amount of such power depends largely on weather conditions. Such being the case, the amount of power could surpass demand on a sunny day, which could cause power outages.

Surplus power should be sold to other utilities that have enough capacity to accept electricity. However, it is technically impossible under the current system. The capacity of power cables connecting power grids owned by different utilities is limited. Therefore, solar power and electricity generated with other renewable energy sources cannot be supplied to these cables in principle because the generating amount cannot be predicted. This is because major power companies have enjoyed regional monopolies and seldom supply surplus power to other firms or receive such electricity from other companies, while the government approved such monopolies.

The service area of Tokyo Electric Power Co. fell seriously short of power following the Fukushima No. 1 plant accident, highlighting the need for power interchange between electric power companies. The government has finally begun to reform the system and set up an organization that will play a leading role in controlling the power interchange next spring. However, the establishment of a broad power interchange system will come later.

A senior official of the Economy, Trade and Industry Ministry admitted that many officials knew that the current system under which power companies are required to buy power generated with renewable energy at a fixed price would be deadlocked sooner or later. Numerous solar power generation companies were set up one after another for the sole purpose of making profits, contributing to the confusion.

Three years have already passed since the law regulating the power purchase system came into force. Nevertheless, the government failed to take any action while being aware of problems with the system, nor did it set a numerical target for expanding the use of renewable energy for power generation. It highlights the irresponsibility of the government while the administration of Prime Minister Shinzo Abe is enthusiastic about restarting nuclear power stations.

The Fukushima Prefectural Government, which regards the spread of renewable energy as the pillar of its disaster recovery efforts, has solicited solar power generation companies to set up power stations in the prefecture. Therefore, an official of the prefectural government expressed concern that the five major utilities' suspension of signing new contracts to purchase renewable energy could adversely affect the prefecture's recovery plans.

Japan lags behind many other countries in the introduction of renewable energy. According to the International Energy Agency, the ratio of renewable energy to the total power generation amount is high among European countries -- 20.9 percent in Germany and 26.4 percent in Spain. The figure comes to 6.2 percent in the United States, but in Japan it is a mere 2.2 percent. The ratio has doubled from the pre-nuclear disaster period, but still remains low. Therefore, Japan needs a system under which utilities are required to buy renewable energy at a fixed price.

Japan should learn from European countries' efforts to expand the use of renewable energy. The power grids of European countries are connected with each other by cables with sufficient capacity, allowing these countries to supply surplus electricity generated with renewable energy to others within the region. European countries are introducing a system to predict the amount of power that can be generated with renewable energy based on meteorological observations and a device to automatically limit the amount of power generated with such energy sources if the supply of electricity is likely to reach a surplus.

The costs of establishing such systems pose a challenge. A study group within the Economy, Trade and Industry Ministry estimates that it will cost 4 to 6 trillion yen to improve power grids owned by utilities to prevent blackouts if the amount of solar power is increased to 53 million kilowatts -- almost equal to power generated by nuclear plants before the outbreak of the Fukushima crisis -- by 2030. The costs of buying renewable energy are added to utility fees consumers pay. As such, if power grids are reinforced, it will further increase the financial burden on consumers. This is one of the reasons why the government has not reviewed the system under which utilities must buy renewable energy at a fixed price.

However, **power companies are expected to spend a combined amount of over 2 trillion yen on safety measures in preparation to reactivate idled nuclear plants. If utilities are prepared to pay such a huge amount of money, they should trim the financial burden of renewable energy on consumers.**

In the German electric power system, top priority is placed on the use of renewable energy while thermal power is used to make up for fluctuations in generation amounts at power stations using renewable energy.

In contrast, Japan puts priority on nuclear and thermal power while pushing renewable energy to the sidelines. In reviewing the system, it is necessary to rectify Japan's excessive reliance on solar energy among various renewable energy sources. However, efforts to spread renewable energy sources must not be dampened. The government and the electric power industry should present a total picture of the future of Japan's electric power generation and supply system in which renewable energy will play a key role.

(By Masahiro Nakai, Tokyo Economic News Department)

November 06, 2014(Mainichi Japan)

Robots help

A decontamination robot developed by Sugino Machine Ltd. is shown in Namerikawa, Toyama Prefecture. (Makoto Ukai)

November 8

Robot brings safety, dexterity to Fukushima cleanup arsenal

http://ajw.asahi.com/article/business/AJ201411080026

By MAKOTO UKAI/ Staff Writer

UOZU, Toyama Prefecture--A machinery maker here has developed a "crawling" robot capable of penetrating hard-to-reach areas for decontamination work at the crippled Fukushima No. 1 nuclear power plant.

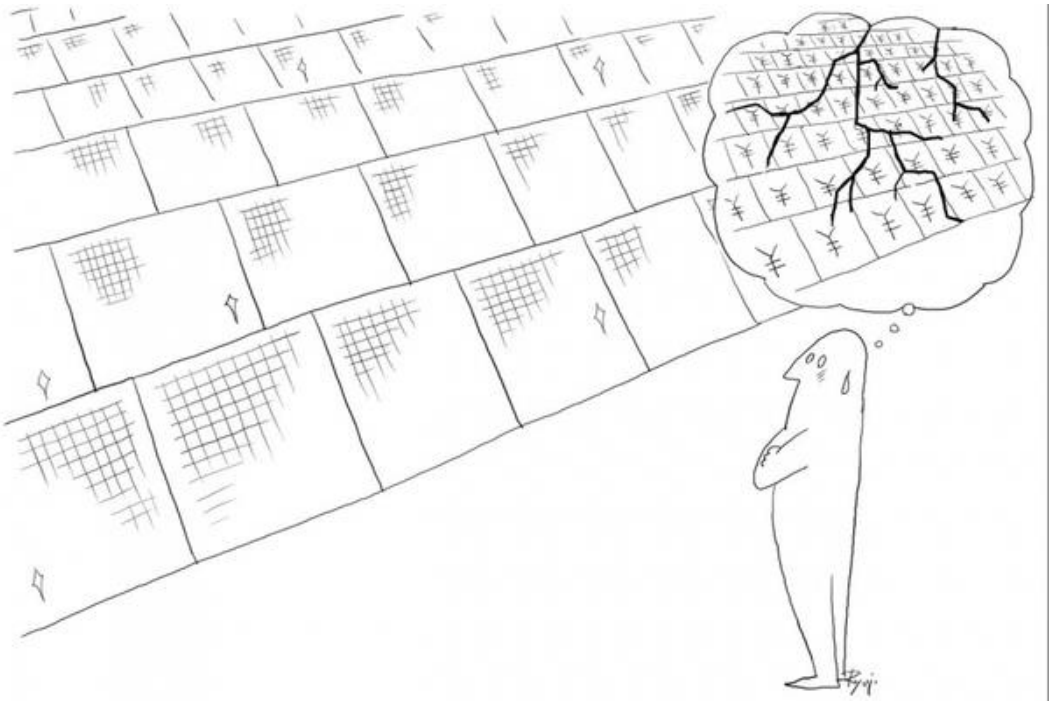
The device, built by Sugino Machine Ltd., moves along on a caterpillar track comprising a belt wrapped around a set of wheels. A user can safely manipulate it up to 100 meters from a contaminated area while viewing live footage from a built-in camera.

The Fukushima plant is scheduled for decommissioning after it was devastated in the Great East Japan Earthquake and tsunami on March 11, 2011.

"This is the first radio-controlled robot in Japan that can get into every nook and cranny of a building. We want it to be used to help decontaminate the Fukushima nuclear power plant," a Sugino Machine official said.

The robot is 110 centimeters long, 70 cm wide and 80 cm tall, making it more compact than a conventional work robot. It is capable of traversing rubble and uneven surfaces to travel to the work site, then use interchangeable equipment mounted on top to suck up dust and dirt, remove contaminants by discharging high-pressure water and perform other tasks.
The device is capable of carrying a load of up to 100 kilograms and has a battery life of five hours. It went on sale in October with a price tag of about 10 million yen ($86,750).
Sugino Machine, known for its high-pressure cleaning and cutting equipment, has been developing machines for use in nuclear-related facilities for nearly 50 years, since Japan started building nuclear power plants.
The company began working on the decontamination robot following the March 2011 disaster, which triggered a triple meltdown at the Fukushima plant.
"Robots that can enter hazardous environments that are off-limits to humans and fully perform work there have a big role to play," said Hideaki Sakai, the 57-year-old manager of the production control department. "We want to promote technological development to help the post-disaster recovery process in Fukushima."

Japan & green energy



A losing bet on green energy

http://www.japantimes.co.jp/opinion/2014/11/25/commentary/japan-commentary/a-losing-bet-on-green-energy/#.VHSXIMl5B1s
“What if our company goes bankrupt?” shouted an official of a company seeking to generate electric power with solar photovoltaics at a meeting on Oct. 3 at which Kyushu Electric Power Co. explained its decision to suspend receiving applications for sale of electricity from renewable energy sources to the power firm.
Under a scheme known as feed-in tariffs (FIT) that the government instituted in 2011, power utilities are required to purchase at fixed prices electric power generated by other entities by using renewable energy

sources. But the scheme has proved to be unworkable as Kyushu Electric's action was followed by Tohoku, Shikoku, Okinawa and Hokkaido Electric Power companies.

The utilities' actions have dealt a serious blow to entities planning to build solar power generating facilities and manufacturers of solar panels. Moreover, entities that have already entered into contract with the utilities for green power sales also fear that the deals might prove unworkable.

When the Diet passed the law to create the FIT scheme, the lawmakers failed to learn from the experiences of Germany, where a similar scheme introduced earlier only was causing heavy burdens on both households and businesses. The most ardent proponent of FIT at the time was then Prime Minister Naoto Kan, who was so enthused about spread of green energy that he made the Diet's passage of the FIT legislation a condition for his resignation.

The current trouble "could have been prevented even after the introduction of the system, had the purchase prices of electricity generated through renewable energy sources been kept at reasonable levels," comments a newspaper reporter who specializes in energy issues.

Kazuhiro Ueta, a Kyoto University economics professor who argues that Japan should free itself from nuclear power and that a broader use of renewable energy sources is key to solving energy problems, served as head of a committee responsible for determining the prices and duration for the purchase by power companies of electricity generated through renewable energy sources. Ueta set the purchase price for electricity from solar panels at ¥42 per kilowatt hour for the initial year of 2012. He contended that by 2030, electricity coming from renewable energy sources should account for 20 percent of the nation's total electricity. But that price was very high compared with the ¥30 per kilowatt hour that was being contemplated by those who were thinking of entering into the solar power generating business. The high purchase price quickly caused bubbles of solar panel installation plans.

Ueta insisted that Japan can't hope to attain a broad use of green energy unless suppliers of such energy are given favorable treatment for the first three years. He said that this would not place a financial burden on citizens because the purchase price will be lowered commensurate with technological progress.

His words now sound like a joke as the scheme has hit a snag halfwaythrough the third year of its existence.

During the past two years, the per kilowatt-hour purchase price of electricity from solar panels was lowered to ¥36 and further to ¥32. But the utilities were flooded with applications from those seeking to sell them electricity from solar panels since the prices of solar panels also fell. As of April, there were solar power facilities with a combined capacity of 71 million kilowatts nationwide. This staggering number came as a surprise even for a high official of the Ministry of Economy, Trade and Industry, which is in charge of the FIT system.

The sudden action on the part of the utilities to suspend acceptance of power-sale applications under FIT has hit the market hard. A company in Miyagi Prefecture had bought property adjacent to its stocking yard in preparation for building a giant solar power generating facility. Its executive says, "We bought the land because we thought that it would have been cheaper than paying rents for the next 20 years. But our project has come to naught."

In Kyushu, there was a boom of building houses equipped with solar panels that can generate more than 10 kilowatts — the upper limit for ordinary households. Their major selling point was that excess power generated by the panels cold be sold to Kyushu Electric Power, thus generating money to pay back housing loans. Following the utility's change of course, many troubles are said to have surfaced with customers' refusal to accept such houses or demand for canceling the contracts.

An example of a large corporation hard hit by the latest change on the part of the power utilities is found in Sanix, Inc., whose stock is listed on the First Section of the Tokyo Stock Exchange. The main line of

business for this Fukuoka-based company is termite extermination. Participation in the FIT scheme was to serve as a shot in the arm for Sanix, whose balance sheets had remained in the red for nine consecutive years before returning to black in March 2012. In the 12 months through last March, the company reported a record ¥84.2 billion in sales and an operating profit of ¥4.5 billion.

But Sanix started facing financial problems after Kyushu Electric Power stopped receiving new applications for electricity sales under the FIT scheme. Sanix is said to have been forced to ask banks for new loans and have fallen into arrears in its payments to other companies, while its stock price, which exceeded ¥1,600 in May, has fallen to a third of that level. Sanix has thus been pushed into an inferno as the banks that know its past history are reluctant to provide new loans, according to an official of a business research company.

Those who made exorbitant profits in the bubbles created by the FIT scheme were not limited to corporations selling and installing solar panels. Leasing companies made contracts for solar panels throughout the country to the point of forming a bubble.

But should a company like Sanix falter, disasters would fall on those leasing companies because they can only claim ownership of the solar power generating facilities. If the landowners of the property on which such facilities were installed demand that the land be returned to its original condition, leasing companies would have no other choice but to dispose of the facilities.

In the case of solar panels with an expected power-sale period of 20 years, many of the leasing contracts were made valid for an unusually long period of 15 years on the assumption that the purchase by power companies of electricity generated by the solar panels is guaranteed and that the market values of the panels are unlikely to depreciate much.

But with the recent change of attitude by the utilities, there has emerged an oversupply of solar panels on the market. There is also a risk of the market values of the panels being pushed down further because no one has confirmed that they will last 20 years.

Uncertainties confronting leasing companies have been aggravated as they themselves have started entering into the solar power generation business on their own. A high-ranking official of a major leasing firm says that Orix Corp., the leader in the leasing business, has committed to solar power projects in a scale exceeding ¥200 billion while other major leasing firms each have committed in a scale of about ¥100 billion. Although an official in charge of credit control of a certain leasing company warned about the risk, the top management did not listen.

A high-ranking executive of a leading leasing company has been quoted as saying at a board meeting, “We will no longer be here when any problem arises.” His statement is irresponsible but he apparently does not notice the imminent dangers.

The about-face by the utilities has shocked many of those who jumped at the solar power business. And there is no prospect at all for the situation to turn better.

This is an abridged translation of an article from the November issue of Sentaku, a monthly magazine covering political, social and economic issues.

Detecting radioactive strontium in less than 30 minutes

December 1, 2014

New technology to speed up detection of radioactive strontium tenfold

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201412010027

THE ASAHI SHIMBUN

New updated equipment that is scheduled to go into operation at the Fukushima No. 1 nuclear power plant in December will detect radioactive strontium 90 in contaminated water in less than 30 minutes, compared to the seven to 10 days it now takes.

The advanced detection equipment was developed as part of a group effort centered on the work of Yoshitaka Takagai, an associate professor of analytical chemistry in the Faculty of Symbiotic Systems Science at Fukushima University. Researchers from PerkinElmer Japan Co., based in Yokohama, were also involved in the research.

University officials discussed the plan to deploy one of the new devices Nov. 27.

"We want to reduce the burden on the small number of people working at the plant site," said Takagai. "We also hope that improved efficiency in analysis will, in the long run, lead to a shortening of the time it takes to decommission the reactors."

The improved technology involved making changes to an analytical device so that it automatically separates strontium 90 in order to analyze it in a shorter period of time.

Tokyo Electric Power Co., the operator of the Fukushima No. 1 plant that was damaged by the 2011 Great East Japan Earthquake and tsunami, will use the equipment to test rainwater that has accumulated within containment barriers set up around tanks that store radioactive contaminated water.

The university first announced the completion of the new equipment in September 2013. Further improvements were made after consulting with officials from the plant with an eye toward actual operations. As a result, the accuracy of the analysis has improved tenfold from the first version.

The equipment is now also capable of measuring even lower concentrations of strontium. The minimum level it can detect is 0.3 becquerels per liter. That analysis can be completed in as little as 23 minutes.

Two more of the devices are scheduled for installation in the next fiscal year. The new equipment is designed to screen fresh water, but further efforts will be made to develop the technology so it can also analyze seawater.

Renewable challenge

Midori Goto shows off the solar farm operated by Shizen Energy and its partners in Koshi, Kumamoto Prefecture. (Mari Fujisaki)

December 4, 2014

RENEWABLE CHALLENGE: Shizen Energy oriented to communities hosting solar farms

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201412040006

By MARI FUJISAKI/ Staff Writer

Editor's note: This is the first of a two-part series on efforts being made to promote renewable energy sources.

* * *

When fears spread across Japan after the Fukushima nuclear accident started, Ken Isono decided to scrap his plans to travel abroad.

He said the triple meltdown at the Fukushima No. 1 nuclear plant in March 2011 made him feel that his generation had a responsibility to increase power sources that do not harm the natural environment.

That led to the creation of Shizen Energy, a company that promotes renewable energy sources and gives back to the host communities.

The Tokyo-based company started out with just Isono and two of his friends. It now employs about 60 people and has set up solar farms in five prefectures ranging from the Tohoku region to Kyushu that generate a total of 7.5 megawatts of electricity.

Shizen Energy is also involved in an additional 155 power generation plans in 26 prefectures.

One of the company's projects is unfolding in Koshi, Kumamoto Prefecture, located northeast of Kumamoto city. The Koshi area is known for its dairy and vegetable farming because it is blessed with abundant sunlight and fertile soil created by nearby Mount Aso.

In February 2014, about 14,500 square meters of idle land owned by the Koshi municipal government was transformed into a solar power generation facility with a capacity of 1 megawatt.
The facility, situated amid onion fields, features 3,920 solar panels capable of generating enough electricity for about 360 households.
It is jointly operated by Shizen Energy, the Koshi municipal government and Kumamoto Flour Milling Co., a company based in Kumamoto city.
The project is expected to generate about 40 million yen ($347,000) in annual revenue through sales of the electricity to power companies under the feed-in tariff system. The system purchases electricity at higher prices to encourage the promotion of renewable energy sources.
A number of electric power companies have recently said they would temporarily stop buying energy through the feed-in tariff system because the limited capacity of their distribution networks could cause blackouts and other glitches.
At least five utilities have made that decision, affecting about 20 projects that Shizen Energy is involved in. However, Isono, 33, is unfazed.
“We expected this to happen,” he said. “In the meantime, we will proceed with plans that require more time to construct than solar farms, such as wind power generation. We will stop blaming others for our problems.”
Shizen Energy and its partners believe their projects can continue because they help the host communities. For the Koshi project, the company agreed to set aside several million yen a year from its revenues to support local agriculture.
“We hope to have the solar farm here for 20 years,” Isono said. “We want to develop ties with the local community so residents will be able to say they were glad to have the facility.”
Local farmers in their 20s and 30s will decide how the money is used. At a meeting in autumn 2013 to hash out what projects to support, Midori Goto, a dairy farmer, proposed starting an “izakaya” bar and cafe that uses locally grown produce.
In explaining why she became involved in the project, Goto said, “Unlike subsidies, we were able to freely think about how to use the money.”
After graduating from university, Isono developed an interest in environmental business on a visit to the Caribbean. He learned that the blue ocean and mangrove forests were being threatened by oil exploration projects.
Although he later joined Recruit Co., he continued to feel the need to resolve environmental problems through business.
He left Recruit after two years and joined a wind power generation company. However, the reality of wind power was somewhat different from Isono’s ideal.
For one thing, many local residents were opposed to wind power projects because they marred the landscape and the windmills caused noise pollution.
Isono considered moving abroad to work on renewable energy sources. But the accident at the Fukushima No. 1 nuclear power plant changed his plans.
Personal connections were used to get Shizen Energy started. In one case, the father of a company member was asked for permission to install solar panels on the roof of his factory.
Through trial and error, the company developed the ability to handle all aspects of managing a solar farm, from searching for available land to designing, constructing and running the facility.
The start of the feed-in tariff system in July 2012 gave Shizen Energy added momentum. Local governments seeking to install solar farms on idle land were impressed by the stance of Isono and his colleagues to revert benefits to the local community, and orders started coming in to Shizen Energy.

In January 2013, the company entered a partnership with juwi, one of the world's largest solar power generation companies, that has a similar business model as Shizen Energy.
In keeping with the local orientation of the company, Isono also plans to move the company headquarters from Tokyo to Fukuoka city in Kyushu by the end of the year.
"The nuclear accident demonstrated the risks of having businesses concentrated in Tokyo," Isono said. "Rather than being centered in Tokyo, we want to conduct business that leads to more jobs in outlying areas."

Shizen energy & renewables

Midori Goto shows off the solar farm operated by Shizen Energy and its partners in Koshi, Kumamoto Prefecture. (Mari Fujisaki)

December 4, 2014

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We just cannot afford to stop

December 11, 2014

COMMENTARY: Fukushima battling utilities' 'no more green energy' decision

http://ajw.asahi.com/article/views/column/AJ201412110019

By TOSHIHIDE UEDA/ Senior Staff Writer
FUKUSHIMA--Officials and entrepreneurs in Fukushima Prefecture remain undaunted by the decision of regional power utilities to suspend purchases of electricity generated with renewable energy sources.
During a meeting in Tokyo on Nov. 18, Fukushima prefectural government officials argued squarely against the rationale being made by the utilities.
"It's like discussing a sentence to punish a case that has yet to take place," said Shuzo Sasaki, director of the prefectural government's energy division. "That could end up shutting out people who are steadily pursuing their renewable energy projects."
He was speaking at an expert subcommittee of the Fukushima prefectural government's coordinating council for promoting the introduction of renewable energy sources.
Five regional utilities--Hokkaido Electric Power Co., Tohoku Electric Power Co., Shikoku Electric Power Co., Kyushu Electric Power Co. and Okinawa Electric Power Co.--announced in succession at the end of September that they were no longer signing new contracts to purchase electricity generated from renewable energy sources under the feed-in-tariff system.
They said the supply potential could far outstrip demand if the introduction of renewables were to proceed at the current pace.
The expert subcommittee, headed by Ryuichi Yokoyama, a professor of energy engineering with Waseda University, was assembling a recommendation calling on power companies to resume accepting more renewable energy sources since the end of October.

In the case of Tohoku Electric, the provider of electricity to Fukushima Prefecture, the output capacity of solar power plants in its service area, authorized by the industry ministry under the feed-in-tariff system, totaled 10.73 gigawatts as of the end of May.
That compares with a weekday demand of 9.7 gigawatts in May, when the use of electricity is at its lowest, apparently showing that supply would exceed demand if all the plants were to go online.
The figures are deceptive, however.
To start with, solar power cannot be generated at night, and its daytime output depends on the weather.
The power supply would never exceed demand unless multiple chance developments come together, such as a long spell of fine weather over all seven prefectures served by Tohoku Electric--all of the Tohoku region along with Niigata Prefecture--and winds strong enough to keep wind turbines operating at capacity across all that area.
The prefectural government's expert subcommittee finalized the recommendation at the end of November to call on relevant central government ministries and agencies, as well as utilities, to take prompt response measures.

PLANTS AUTHORIZED ONLY ON PAPER

In a draft recommendation to the central government and utilities presented on Nov. 18, the subcommittee pointed to another reason why supply is unlikely to exceed demand.
“The national government and power utilities should eliminate ‘paper-only authorizations’ of power plants by disqualifying operators of stalled projects and create room for accommodating late starters,” part of the document read.
The purchase price for green energy under the feed-in-tariff system is determined at the time of authorization, and remains unchanged for 20 years in the case of a solar power plant with an output capacity of 10 kilowatts or more.
Paper-only authorizations, whereby an operator is granted the right to a project while the locked-in price for power remains high but does not know if it will ever start the project, are spreading throughout Fukushima Prefecture.
The output capacity of solar power plants authorized under the feed-in-tariff system in the prefecture totaled 4.41 gigawatts at the end of July, the largest of all 47 prefectures of Japan. But only 210 megawatts, or less than 5 percent of that figure, were up and running.
For example, no construction project is under way at any one of the 16 authorized large-scale solar power plants in the prefectural capital of Fukushima.
The 16 plants have an average output of 40 megawatts. Building plants of that dimension would require some 80 hectares of land, along with farmland conversion permits, forest development permits, environmental impact assessments and various other procedures.
“But no single application has been received by the prefectural government,” said Sasaki, director of the energy division. “The prefectural government is not aware of any single project.”
Things are no different with smaller plants. Nishigo, a village in the south of the prefecture, has more than 3,800 authorized plants under 50 kilowatts in output capacity, but only 23 of them are up and running.
In the meantime, no power plant has been authorized in the towns of Futaba and Okuma, which co-host Tokyo Electric Power Co.’s Fukushima No. 1 nuclear power plant, the site of the 2011 nuclear disaster.
That is presumably because all residents were evacuated from those towns and are not expected to return any time soon.
The Law on Special Measures for Fukushima Reconstruction and Revitalization says, “As one of the national policies concerning the reconstruction and revitalization of Fukushima following the nuclear disaster, the national government shall take the financial measures necessary for developing and

introducing renewable energy, the financial measures necessary for diversifying energy sources, or other measures as necessary."

But the door was shut to the two towns before they could ever start any efforts for reconstruction and revitalization.

UNRELENTING PURSUIT OF GREEN ENERGY

The utilities' "no more green energy" decision has failed to discourage entrepreneurs from seeking to produce electricity with renewable energy sources for local consumption.

A ceremony in Kitakata, Fukushima Prefecture, on Oct. 29 celebrated the completion of the Oguni solar power plant with an output capacity of 1 megawatt. It was the first megawatt-class solar power plant built by Aizu Denryoku, a company established last year to pursue local production of energy for local consumption.

The group affiliated with the electric power company, headed by President Yauemon Sato, plans to start generating solar power to a total output capacity of 2.54 megawatts by the end of this year.

Aizu Denryoku had planned to expand its operations further the next fiscal year. Tohoku Electric's decision to suspend purchases of electricity generated with renewable energy sources has left most of the company's projects in limbo, but the company knows it cannot afford to wait for Tohoku Electric's response if it wants to proceed.

Aizu Denryoku continues requesting municipal governments and other parties to provide land plots or assistance in other ways so that the company can still expand its operations, be it only slightly, by building more small-scale power plants under 50 kilowatts in output capacity, which are not affected by Tohoku Electric's new policy.

I wrote in a previous commentary about moves by the Tonokuchiseki land improvement agency to initiate micro-hydropower generation along the Tonokuchiseki canal, which draws water from Lake Inawashiroko to the city of Aizu-Wakamatsu, both in Fukushima Prefecture.

"We just cannot afford to stop," Tetsuyuki Sato, chief of the land improvement agency, told me when I visited him a second time. "We have decided to add another employee."

Micro-hydropower plants are also being affected by the utilities' suspensions, but so few of them have been authorized. The industry ministry said it would map out incentives to promote new purchase agreements for micro-hydropower, along with geothermal power and other forms of renewables.

"We will just go on, unaffected, with our project," said Ichiro Endo, president of the Tonokuchiseki micro-hydropower generation company and head of the geotechnical consulting department with Asano Taiseikiso Engineering Co., a Tokyo-based partner in the project. "We hope to begin selling electricity to Tohoku Electric in fiscal 2016."

Hope (maybe) for renewables

December 12, 2014

Eased rules on renewable energy to encourage resumption of utilities' purchases

http://ajw.asahi.com/article/business/AJ201412120058

By KUNIAKI NISHIO/ Staff Writer

The government plans to scrap the limit on electricity generated through solar and wind power stations, paving the way for five power utilities to resume purchases of electricity from renewable energy suppliers early next year.

The government introduced the feed-in tariff program in July 2012 to double Japan's renewable energy dependence from around 10 percent to more than 20 percent.

However, the five utilities--Hokkaido Electric Power Co., Tohoku Electric Power Co., Shikoku Electric Power Co., Kyushu Electric Power Co., and Okinawa Electric Power Co.--stopped signing contracts with solar and wind power companies earlier this year. They feared the surge of applicants could hamper the stable supply of electricity.

The economy ministry had been considering raising the ceiling on the amount of power the utilities could receive from the renewable energy suppliers. But it instead decided to lift restrictions on the amount of electricity that could be generated by the suppliers.

Currently, electric power companies can order renewable energy suppliers to restrict power generation without providing compensation on 30 days a year.

Under the revisions, utilities can still order suppliers to restrict power generation but on an hourly basis. Under the current rules, the orders are issued a day in advance.

The revisions mean that every power station will need communication devices to allow the utilities to directly control the supply levels.

In addition, the utilities can now only order such restrictions on renewable energy facilities with a capacity of 500 kilowatts or more. The new rules will allow utilities to give such orders to any kind of power station, including those for ordinary households.

The ministry will make its final decisions by year-end.

If the revisions take effect, all renewable energy businesses accepted into the government's feed-in tariff project will be able to provide power to the utilities.

However, the utilities' prices and conditions for buying energy from the suppliers will likely become more stringent, and the government may be forced to restructure the overall project to produce a more profitable business model for the suppliers.

Under the current guidelines, Kyushu Electric and Tohoku Electric will only be able to use about half of the 29 gigawatts of power generated through the project, according to the ministry.

Too much solar for utilities

December 16, 2014

Seven utilities only capable of accepting 58% of solar power energy

http://www.japantimes.co.jp/news/2014/12/16/business/economy-business/seven-utilities-capable-accepting-58-solar-power-energy/#.VJBdIXt1Cic

Kyodo

A study has found that seven of the nation's utilities lack the transmission network capacity to accept all of the solar power energy that suppliers plan to generate under the feed-in tariff system, the Ministry of Economy, Trade and Industry said Tuesday.

Combined, they can only accept 58 percent of the total, METI said, underscoring a major flaw in the scheme introduced two years ago.

The planned amount already exceeds the network capacities of six of the seven utilities.

METI was looking into the transmission capacities of power companies after five utilities recently placed limits on their clean energy intake, citing network limitations and dealing a blow to the government's plan to increase renewable energy supply following the 2011 Fukushima nuclear crisis.
Under the feed-in tariff system, utilities are obliged to purchase all electricity generated from such sources as solar, wind and geothermal power at fixed rates for a set period.
Bu the system ran into a roadblock after new suppliers flooded the solar power business, prompting the utilities to suspend signing power-purchasing contracts in September amid fears that overcapacity could cause blackouts.
METI plans to introduce a system that would allow utilities to ask suppliers to be more flexible with their electricity output.
Solar power suppliers have been approved to provide 40.54 million kilowatts of electricity, but the seven utilities — Hokkaido Electric Power Co., Tohoku Electric Power Co., Hokuriku Electric Power Co., Chugoku Electric Power Co., Shikoku Electric Power Co., Kyushu Electric Power Co. and Okinawa Electric Power Co. — can only accept a total of about 23.69 million kw, according to METI.
The failure of the feed-in tariff scheme has brought about confusion in suppliers and local municipalities that have sought to promote renewable energy, including prefectures in northeastern Japan hit by the March 2011 earthquake and tsunami.

Buying renewable energy again

December 23, 2014

Five major utilities resuming purchases of renewable energy

http://mainichi.jp/english/english/newsselect/news/20141223p2a00m0na007000c.html

Five major utilities have unveiled plans to resume their signing of contracts to buy renewable energy, with three of them intending to do so in mid-January.
Kyushu Electric Power Co. announced on Dec. 22 that it would resume buying electricity generated through solar power in mid-January. Hokkaido Electric Power Co. and Tohoku Electric Power Co. are also set to follow suit at about the same time. Shikoku Electric Power Co. and Okinawa Electric Power Co. resumed their signing of contracts to buy such renewable energy on Dec. 18.
The utilities decided to resume buying renewable energy after the Ministry of Economy, Trade and Industry decided to introduce a new rule from mid-January to allow utilities to rein in the amount of renewable energy they purchase if their renewable energy output exceeds the capacity of their transmission networks.
Under current rules, power companies can tell suppliers to limit their output of energy generated through solar and wind power without paying compensation for up to 30 days a year, but only for levels reaching 500 kilowatts or more. Under the new rule, the 500 kilowatt restriction will be removed. Additionally, the industry ministry decided to do away with the 30-day limit for the five utilities, as well as for Hokuriku Electric Power Co. and Chugoku Electric Power Co.
Under the change, the seven companies will be allowed to restrict the amount of renewable energy they buy from suppliers without limit if the amount exceeds the purchasable amount calculated by the industry

ministry. The new rule could slow the pace of new entrants into the so-called feed-in tariff system, as suppliers will have a higher risk of failing to sell electricity.
Junichi Komiya, president of Oita Builder, which builds and maintains solar power facilities, voiced concern that there could be a sharp increase in the number of clients cancelling their solar power projects after the 30-day cap on purchase restrictions is abolished. "It might mean withdrawing from projects," he said.
A representative of the industry ministry commented, "Utilities need to carefully explain to what extent they are going to restrict output, so that prospective solar power plant operators can calculate the risk."
December 23, 2014(Mainichi Japan)

Promote renewable energy without overburdening customers

December 24, 2014

EDITORIAL: Rules for renewable energy suppliers should not overburden consumers

http://ajw.asahi.com/article/views/editorial/AJ201412240023
With the nation's major electric power companies suspending the signing of new purchase contracts with suppliers of solar energy and other renewables under the feed-in tariff program, the government has come up with a set of countermeasures.
The utilities suspended accepting suppliers' applications for contracts because the potential supply amounts exceeded the utilities' handling capacities.
The government's countermeasures aim to change the existing rules of sustainable energy supply to render it easier for utilities to control the volumes they purchase from suppliers. In exchange, more suppliers will be able to access the grid. The new rules apply only to suppliers that are newcomers to the business and have no standing contracts yet with the utilities.
Since these are only stopgap measures, they are inevitably imperfect. For one, suppliers that are already generating energy or have signed contracts with the utilities are excluded from the new rules.
The date of the conclusion of the contract is the key element under the new rules. Even if a new supplier were to run its business more efficiently than an established supplier, the latter would be given priority for supplying electricity. One can hardly expect fair competition if the winner is decided by when it started its business, not by its efficiency. The government definitely needs to rework its measures to ensure the survival of competent operators.
We are also concerned that the new rules may overburden consumers.
Since energy purchase costs are calculated by adding a set amount of profit to the supplier's costs and are reflected in electricity charges paid by users, the consumers ultimately bear the additional costs.
According to calculations based on various materials, nearly half the projects have profit rates exceeding the system's initial projections.
The feed-in tariff system guarantees profit to sustainable energy suppliers to encourage newcomers and reduce purchase costs once raw materials come down in price along with wider use of renewable energy. The goal is to enable the renewable energy industry to become self-reliant. But if even all this still places an excessive burden on consumers, the system would have to be improved.
Under the current system, renewable energy suppliers are under no obligation to disclose management information. This prevents consumers from knowing the costs and profits of each operator or power plant.

The government needs to introduce a mechanism that requires operators to disclose business data to consumers. If the government ascertains the financial conditions of established operators and applies the same purchase rules to them and new operators, the feed-in tariff system would be more equitable and should enable additional newcomers to join the club.
If changes are made to the established rules too frequently, operators would be unable to make business projections, and the system itself would lose credibility. However, the renewable energy industry is a new, growing industry where regulations and competition go hand in hand. Certain trials and errors are unavoidable. Germany has implemented a policy of retroactively applying new rules to established operators.
We hope our government will keep trying to improve the system for the bigger goal of promoting renewable energy while minimizing the burden on consumers.
--The Asahi Shimbun, Dec. 24

Multiplying solar power capacity in Tokyo

January 3, 2015

Tokyo aims to quadruple solar power generation capacity by 2024

http://mainichi.jp/english/english/newsselect/news/20150103p2g00m0dm004000c.html
TOKYO (Kyodo) -- The Tokyo metropolitan government has set a goal of quadrupling solar power generation capacity in the capital to 1 million kilowatts by 2024, installing solar panels on the rooftops of buildings including houses and schools, officials said Friday.
The target will be introduced to promote Tokyo as an environmentally friendly city in the run-up to the 2020 Olympics and Paralympics to be hosted by the metropolis, they said.
As of late March in 2013, Tokyo had solar power facilities capable of generating 260,000 kw in total. About 10 percent of newly built detached houses had such facilities, while the ratio was 0.5 percent among existing housing.
It is difficult to set up mega solar power plants in Tokyo due to the lack of land, the officials said.
In fiscal 2015, the Tokyo government is planning to introduce measures to support those who install solar power generation facilities when they renovate their houses.
The metropolitan government also aims to roughly double electricity generated by solar power at schools and housing estates it runs from 10,000 kw in 2014 to 22,000 kw by 2020.
The government will install solar panels on the roofs of its facilities' parking areas in fiscal 2015 and promote the renting of rooftop space by building owners to solar power generators.
"Although Tokyo land prices are high, we'd like to increase solar power generation by utilizing rooftop spaces," a Tokyo government official said.
January 03, 2015(Mainichi Japan)

Renewable energy to secure power in case of a disaster

January 9, 2015

Moves grow to use renewable energy as power source during disasters

http://mainichi.jp/english/english/newsselect/news/20150109p2a00m0na013000c.html

Moves to introduce renewable energy to secure power in case of serious natural disasters have been spreading throughout the country.
In most cases, solar panels are installed on rooftops, and power generated by such systems is usually sold to utilities and used for self-consumption in case of a disaster-triggered power blackout.
Hirotada Hirose, 72, who manages a five-story office building in Shibuya Ward, Tokyo, set up 200 rooftop solar panels, each measuring 1 meter by 1.6 meters, for roughly 20 million yen. The building houses a legal firm office, a beauty parlor and other establishments. The solar panels generate 4,500 kilowatts-hour a month, which is equal to power consumed by 15 ordinary households.
Most electricity generated by the panels is stored in batteries while surplus power is sold to Tokyo Electric Power Co. (TEPCO).
If a serious disaster triggers a power outage, electric power stored in the batteries will be used for lighting and to operate pumps for restrooms among other devices inside the building.
"Evacuation shelters set up after the Great East Japan Earthquake (in March 2011) often got dark because of power blackouts and gasoline used for emergency power generators was in short supply," says Hirose. "Renewable energy is reliable in case of emergencies."
Houtoku Energy, a company in Odawara, Kanagawa Prefecture, which generates electricity using renewable energy, has launched a project to supply power to facilities that will be used as evacuation shelters in case of serious disasters.
The company leases the rooftops of two municipal elementary schools, which will be used as shelters in case of disasters, at low costs to set up solar panels. The company will sell power generated by the solar panels to TEPCO and supply power free of charge to be used for evacuees if the schools gymnasiums are turned into shelters in case of disasters and a power failure occurs.
Odawara was included in areas where TEPCO planned to conduct rolling power blackouts shortly after the outbreak of the crisis at the tsunami-ravaged Fukushima No. 1 Nuclear Power Plant.
"We hope to prevent power outages in case of natural disasters and help the local community," said a company official.
Five major utilities -- Hokkaido, Tohoku, Shikoku, Kyushu and Okinawa electric power companies -- suspended signing new contracts to buy power generated with renewable energy in September last year. However, these power companies have decided to resume signing new contracts after the Economy, Trade and Industry Ministry is set to enforce rules that will allow utilities to restrict the amount of power they purchase.
Hiroshi Takahashi, senior researcher at Fujitsu Research Institute who is knowledgeable about energy policies, calls for government support for the use of renewable energy to secure power in case of emergencies.
"**The government should provide support for the introduction of renewable energy to generate electricity at the time of natural disasters and other purposes that will contribute to the public utility,"** he said.

TEPCO to promote renewables in Fukushima Pref.

January 9, 2015

TEPCO to provide more support for renewable energy

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Jan. 9, 2015 - Updated 10:19 UTC+1
Tokyo Electric Power Company says it will support Fukushima Prefecture's plan to promote renewable energy as a pillar of reconstruction from the 2011 disaster and nuclear accident.

TEPCO President Naomi Hirose met economy minister Yoichi Miyazawa on Friday. Hirose said his utility will make efforts to fulfill its responsibility as the company that caused the accident.

Hirose said **the utility will renovate a seldom-used transformer substation near the damaged Fukushima Daiichi nuclear plant so it can buy electricity generated from renewable energy sources in the prefecture.**

The president of Tohoku Electric Power Company, Makoto Kaiwa, was also at the meeting.

Kaiwa said his company will preferentially buy electricity generated in former evacuation zones in the prefecture.

The utility's service area covers mainly northeastern Japan, including Fukushima and two other prefectures worst-hit by the disaster.

Economy minister Miyazawa said the government will allocate funds to buy battery cells and transmission lines in the draft extra budget for this fiscal year to help introduce green energy sources.

METI proposes reducing buying price of solar energy

January 16, 2015

METI eyes lowering solar energy buying rate under feed-in tariff system

http://mainichi.jp/english/english/newsselect/news/20150116p2a00m0na012000c.html

The Ministry of Economy, Trade and Industry (METI) has proposed lowering the buying rate of solar power but maintaining the prices of other renewable energy at current rates under the feed-in tariff system in fiscal 2015. METI advanced the proposal during a meeting of experts on the system under which utilities are obliged to buy all clean energy at fixed rates.
The system is coming under scrutiny because an unexpectedly large number of new suppliers have entered the solar power business, triggering fears that Kyushu Electric Power Co. and other utilities may face a shortage of capacity to accept such energy leading to blackouts.
The focus now is on how much the panel on assessing procurement prices would lower the price of photovoltaically-generated electricity as it addresses the issue of curbing the costs needed to purchase the electricity on top of electricity prices. METI will set the buying prices of solar and other renewable energy for fiscal 2015 sometime in March after getting the results of the panel's findings.
The buying rate of electricity under the feed-in tariff system is calculated by adding certain profits to power generation costs. But the government has set the buying rate at high levels over the first three-year

period following the launch of the system to promote renewable energy in the aftermath of the 2011 Great East Japan Earthquake and tsunami and subsequent Fukushima nuclear disaster. During the panel's meeting on Jan. 15, METI proposed scrapping the plus profit scheme for corporate solar energy and lowering the price after July this year when the feed-in tariff system marks its third anniversary.
However, METI plans to promote wind, geothermal and other renewable sources at a profit. No such profit is added to photovoltaic power generation for ordinary housing.
METI, citing lower operating costs for photovoltaic power generation, proposed reducing the buying price. But it proposed keeping the current buying prices for other renewable energy sources, saying there are too few examples of power generation through such sources and there is not enough data to warrant a review of their operations.
Since the introduction of the feed-in tariff system in July 2012, the government has sanctioned 73.49 million kilowatts of renewable energy through November last year, with solar energy accounting for more than 90 percent of the total. According to METI's projections, annual purchases would amount to nearly 2.702 trillion yen if all sanctioned renewable energy projects start power generation. Such costs are added to power bills and Japan faces the twin challenges of correcting an overreliance on solar energy and reducing the financial burden on the public.

Power companies reopen doors to solar

January 28, 2015

4 power companies resume purchases of solar power with more control

http://mainichi.jp/english/english/newsselect/news/20150128p2a00m0na004000c.html

Four major power companies in Japan reopened their doors to buying solar power on Jan. 26, as government regulations making it easier for them to restrict their purchases came into force.
The move by Hokkaido Electric Power Co., Tohoku Electric Power Co., Shikoku Electric Power Co. and Kyushu Electric Power Co., was a response to new rules from the Ministry of Economy Trade and Industry that give the utilities more flexibility in asking renewable energy suppliers to restrict the amount of power they provide, should the need arise.
At the same time, suppliers of renewable energy now face an increased risk of not being able to sell all the electricity they produce. This could discourage market newcomers.
Major power companies in Japan are required to purchase power generated through renewable sources at fixed prices. However, by October last year, the four power companies, together with Okinawa Electric Power Co., had halted procedures to purchase new units of solar power. The utilities explained that they faced too many applications from solar power suppliers wanting to sell them electricity, and that the amount they would receive would exceed their capacity.
In December, the ministry introduced rules allowing utilities to flexibly control generation of renewable energy when they had too much, making it easier for power companies to accept renewable energy.

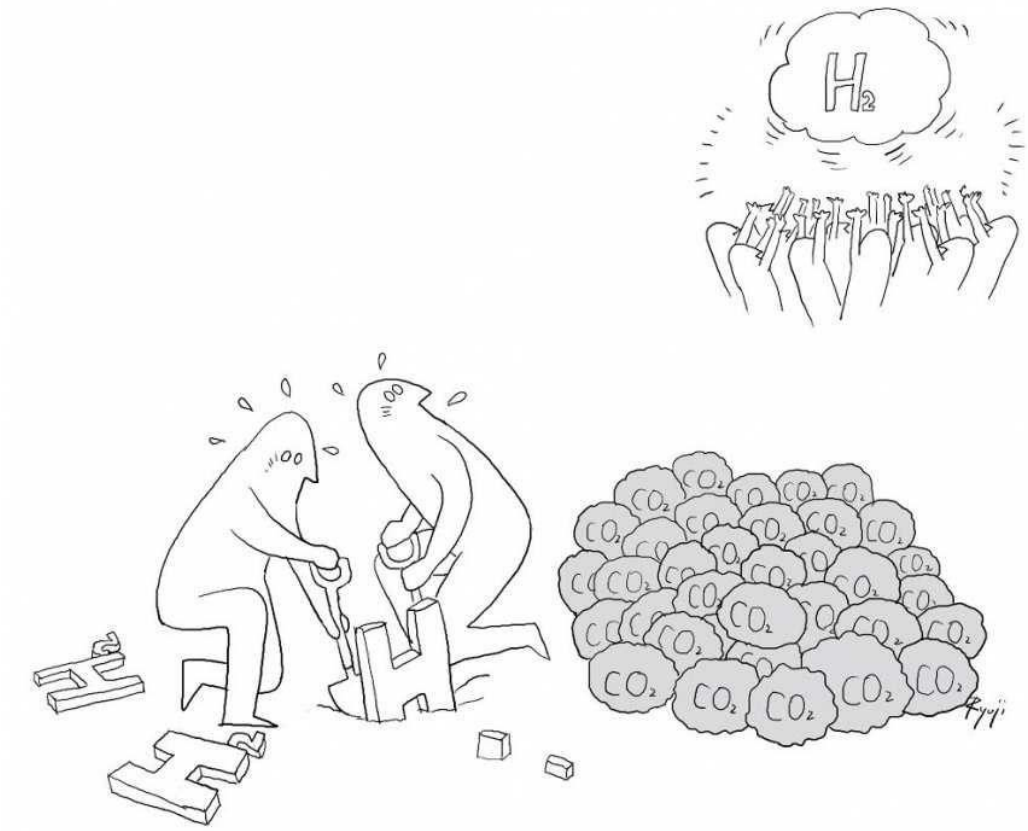
Originally, power companies were able to restrict purchases of solar and wind power only when the generating capacity was 500 kilowatts or more. Under the rules that came into force on Jan. 26, the generating capacity provision was removed, allowing restrictions for all solar and wind power, including power for homes. Furthermore, the length of time they could retain restrictions was changed from 30 days per year to 360 hours per year for solar power and 720 hours for wind power, allowing them to implement restrictions by the hour rather than by the day.
Furthermore, since the Hokkaido, Tohoku and Kyushu power companies had already topped the limit for solar power that the Ministry of Economy, Trade and Industry had calculated that they could receive, they will face no limits on the length of time over which they can implement restrictions on purchases. However, with no upper limit on restrictions, the risks for renewable energy suppliers increase. This could result in companies giving up on entering the market one after another. The Hokkaido, Tohoku and Kyushu power companies accordingly decided this fiscal year to announce forecasts for the length of time over which they would implement restrictions. Furthermore the Organization for Cross-regional Coordination of Transmission Operators will be set up in April, to check whether power companies' restrictions on power generation are appropriate.
In order for renewable energy to spread nationwide, it is necessary to boost transmission lines feeding the Tokyo, Chubu and Kansai power companies. In fiscal 2015, the Ministry of Economy, Trade and Industry plans to formulate targets for introducing renewable energy in the future, and decide on how to cover the cost of boosting transmission lines.

Hydrogen future: exaggeration and fabrication

January 27, 2015

Japan’s hydrogen energy hype

http://www.japantimes.co.jp/opinion/2015/01/27/commentary/japan-commentary/japans-hydrogen-energy-hype/#.VMoNBS51Cos



Much excitement is permeating within the industrial segments related to hydrogen energy, following the government's announcement in June 2014 of the "Strategic Road Map for Hydrogen and Fuel Cells." It calls for creation of a "hydrogen-based society" as **a trump card to prevent a further global warming** and designates 2015 as the "first year"of the age of hydrogen.

In reality, however, the clean image of hydrogen-based energy and its economic viability are much exaggerated.

The government and business enterprises are rushing to building a hydrogen society in order to create huge public works largely funded by government subsidies, and gain rights and interests from them.

Creating demand for a hydrogen fuel and distributing it would require infrastructure preparations of enormous scales like mass-marketing of fuel cell-powered automobiles, building networks of hydrogen supply stations, construction of hydrogen liquefaction plants and creation of transport systems for liquefied hydrogen.

In contrast, the popularization of electric vehicles would not require large investments. Although battery cars represent another candidate for the next generation of motor vehicles, they can rely on facilities already existing throughout the country to generate and transmit electricity and, besides, quick recharging stations can be built for only around ¥5 million each.

As **the infrastructure needed for a broad use of hydrogen is virtually non-existent**, hundreds of billions of yen would have to be invested in construction of new hydrogen plants throughout the country. In addition, ¥600 million will be needed to build one hydrogen station to supply hydrogen to fuel cell vehicles — 120 times more than the cost of setting up a quick charging station for battery cars.

With an eye on making the 2020 Tokyo Summer Olympic Games an arena to showcase Japan's hydrogen energy technologies, the government is working on plans to run fuel cell buses around the sports facilities

and expanding networks of hydrogen fuel supply stations in the four metropolises of Tokyo, Nagoya, Osaka and Fukuoka.

Under the plans, the number of hydrogen stations will increase to 1,000 by 2025 nationwide from 100 in 2015, with the government bearing one half of the costs. This alone would represent splashing more than ¥300 billion in the taxpayer money.

In support of the plans, rosy statistics have been released by the government and think tanks. One corporation estimates, for example, that by 2020, the size of the fuel cell auto market will expand to the scale of ¥500 billion while the market for electric power generation using hydrogen will reach ¥900 billion.

Similarly, Deloitte Tohmatsu Consulting Co. forecasts that the sale of fuel cell cars will expand so rapidly that in 2025, 850,000 such cars will be sold in the United States, another 710,000 in Europe and 200,000 in Japan.

Lots of efforts are being made to drive home to the public the clean image of hydrogen as an energy source. The government is feverishly publicizing that hydrogen is the "ultimate clean energy source." Hydrogen may appear to be the most appropriate substance to be touted as capable playing the principal role in building a carbon-free society because when it reacts with oxygen, only water is emitted. Moreover, some experts claim that if the exhaust heat is utilized in an energy supply system, the overall energy conversion efficiency could reach 90 percent, far surpassing 40 percent for thermal power generation.

These views would be correct if hydrogen was a primary energy source existing independently in nature. But hydrogen is a secondary energy source that must be obtained by reforming the composition and characteristics of hydrocarbons, which are the main components of natural gas and kerosene.

Since carbon dioxide is emitted in the process of producing this secondary energy source, it becomes clear that the government's claim that hydrogen is the "ultimate clean energy source" is fishy.

Furthermore, hydrogen will have to be liquefied and refrigerated at 253 C below zero in order to be transported. This process would consume large amounts of energy and generate carbon dioxide. Thus it is no exaggeration to say that the claim of hydrogen being carbon free is a sheer fabrication.

Studies are being conducted on directly combusting hydrogen to power cars and generate electricity, rather than using it for fuel cells. Although no carbon dioxide is emitted in this process, **nitrogen oxides**, which form when nitrogen in the atmosphere combines with oxygen, are emitted, as in the case of gasoline-powered automobiles and thermal power stations.

Another shortcoming is the small size of the hydrogen molecule and a technological solution has yet to be found to prevent hydrogen leakage from pipe seams.

The aforementioned rosy statistics about the impact of the use of hydrogen on the economy are a pie in the sky because they are based on an optimistic assumption that all problems related to technologies and costs would be resolved easily. In other words, it represents a wishful thinking of those hoping to make windfall profits from colossal investments.

Some people say that even from a geopolitical standpoint, Japan is not fit to become a hydrogen society. European countries, for example, have closely meshed networks of pipelines that supply natural gas from Russia and they can easily obtain hydrogen with a simple method of reforming natural gas. The abundance of facilities to generate electricity through renewable energy sources, like solar and wind power, will make it possible to obtain hydrogen by using excess electricity to electrolyze water almost free of cost.

These processes are not feasible in **Japan, which doesn't have gas pipelines or excess electricity. As a result, it faces the high costs of obtaining hydrogen by reforming expensive liquefied natural gas and liquefied petroleum gas imported from the Middle East**. There is no prospect in sight of the costs of producing hydrogen dramatically falling.
The recent fall in crude oil prices has reduced the cost competitiveness of hydrogen as an energy source. Moreover, hydrogen cars costing ¥7 million each cannot be expected to be sold in large volumes in the most competitive, Asian auto market.
If the present trends continue, fuel cell automobiles made in Japan may survive solely with large subsidies provided by the government and may be sold and used only in Japan.
In the long run, it is essential to continue research on fuel cells. Development of an alternative material to platinum, which is used as catalyst in the production of hydrogen but is the cause of the high costs, is necessary.
While a number of domestic organizations are engaged in such research projects, **the government appears to be making the foolish move of providing subsidies to spread immature technologies that have not yet reached the level of practical use**. This could turn out to be a repeat of a similar folly the government committed in the promotion of solar power generation.
Politicians, bureaucrats and business circles are all rushing to the hydrogen-related projects, for which huge investments will be made, on the pretext of "reducing reliance on Middle Eastern oil" and "creating a low carbon society."
Ultimately, the taxpayers would have to pick up the bill for the public works projects the government will undertake blindly without assurance for their economic viability.
This is an abridged translation of an article from the January issue of Sentaku, a monthly magazine covering political, social and economic scenes.

Can lignin be an answer?

February 3, 2015

Plant-Based Molecule 'May Be Key' To Fukushima Cleanup, Say Scientists

http://www.nucnet.org/all-the-news/2015/02/03/plant-based-molecule-may-be-key-to-fukushima-cleanup-say-scientists
Research & Development
3 Feb (NucNet): A team of scientists from Japan and the US say they may have discovered a way to remove radioactive caesium from the millions of litres of contaminated water being held at Japan's Fukushima-Daiichi nuclear power station following the 2011 accident.
The team's discovery stemmed from their work with **lignin, a component of plant cell walls that is a hugely abundant by-product of pulp and paper production.**

Yuichiro Otsuka, a researcher at the Forestry and Forest Products Research Institute in Tsukuba, Japan, and Tomonori Sonoki, professor of biochemistry and molecular biology at Hirosaki University in Japan, have been working with scientists from Virginia Tech in Blacksburg, Virginia, on ways to use waste lignin to produce more useful "platform chemicals" that can be used as precursors for the production of biofuels and biopolymers.

Through a bacterial fermentation of lignin waste compounds, the team was able to produce **a unique molecule known as PDC, which can be combined with other molecules, or polymerised, into a variety of useful bioplastic compounds**. The team determined the process for making large amounts of PDC from several types of lignin from pulp mills.

Although the targeted PDC molecule was intended as a platform chemical for biopolymer production, a surprising finding by the team led to a discovery that may help clean up radioactive caesium.

"Caesium is a unique compound known as an alkali metal," said Barry Goodell, professor of sustainable biomaterials in Virginia Tech's College of Natural Resources and Environment. "Metals like this can be removed from solutions if appropriate binding compounds can be identified, but finding an appropriate compound for the binding of caesium has been very difficult. **The Japanese have been desperate to find an alkali metal binding compound that is specific to caesium."**

Because of the chemical structure of PDC, the team surmised that it might also be able to bind certain alkali metals. In the lab, when the PDC compound was tested on a nonradioactive isotope of caesium, the scientists discovered that **PDC is especially good at both binding to caesium and pulling it out of a solution in a manner so that it could be readily collected.**

When tests of the PDC were done with mixtures of other metal salts such as sodium chloride, the common table salt that is also the major salt in seawater, caesium was selectively bound by the PDC, allowing it to be pulled out of the solution for selective disposal.

"This could be a finding of major importance for the cleanup of the Fukushima-Daiichi reactor disaster," a statement on Virginia Tech's website said.

Japanese researchers are now exploring how the PDC compound can be further scaled up and how it can be applied to wastewater in Japan contaminated with radioactive caesium.

Details are online: www.vtnews.vt.edu/articles/2015/01/012815-cnre-nuclearcleanup.html

New robot for Fukushima Daiichi (2)

February 7, 2015

Robotic snake set to examine innards of melted Fukushima reactor

http://www.japantimes.co.jp/news/2015/02/07/national/robotic-probe-set-examine-inside-melted-fukushima-reactor/#.VNXn4C51Cos

AP
HITACHI, IBARAKI PREF. – A snakelike robot designed to examine the interior of one of the three meltdown-hit reactors at the Fukushima No. 1 nuclear power plant is ready to begin its expedition.

Assessing the damage in the reactors is a crucial step in decommissioning the poorly protected plant, which was crippled by core meltdowns triggered by the Great East Japan Earthquake and tsunami in March 2011.
Remote-controlled robots are essential for the job because the radiation in the reactors chambers is so high it would kill any person who got close.
Using information gathered by the robot, Tokyo Electric Power Co., the plant operator, plans to repair the damaged chambers enough so they can be filled with water in preparation to remove the melted radioactive debris, an operation planned to begin in about a decade.
The 60-cm-long robot, developed by electronics giant Hitachi and its nuclear affiliate Hitachi-GE Nuclear Energy, was demonstrated this week at a Hitachi-GE facility northeast of Tokyo. It is expected to enter the No. 1 reactor as early as April, officials said.
It has a lamp at the front and is designed to crawl like a snake through a 10-cm-wide pipe into the containment vessel. From there it must dangle and descend onto a platform just below the reactor core's bottom, an area known as the pedestal.
There, the robot is to transform into a U-shaped crawler and capture live images and temperature and radiation levels and transmit them to a control station outside the building.
Expectations for the robot probe are high after earlier efforts at assessment met with limited success.
"Depending on how much data we can collect from this area, I believe (the probe) will give us a clearer vision for future decommissioning," Hitachi-GE engineer Yoshitomo Takahashi said.
After its exploratory trip, which will make the robot extremely radioactive, technicians plan to store it in a shielded box. They have no plans to reuse it.
Different robots must be designed for each reactor, since each is slightly different.
According to computer simulations, all of the fuel rods in unit 1 probably melted and pooled at the bottom of the containment chamber, but there had been no way of confirming that until now.
A brief fiberscope observation conducted in 2012 produced images that were scratchy and of limited use.
To assess the debris at the bottom of the damaged reactor chambers, which are usually filled with water, an amphibious robot is being developed for deployment next year.
The damage from the melted fuel burned holes in the reactors, thwarting efforts to fill them with cooling water. As a result, water must be pumped into them continuously, producing an endless stream of radiation-contaminated water that is hampering the plant's cleanup process.

295 billion kWh of renewable energy by 2030?

February 21, 2015

Ministry estimates Japan can produce 295 billion kWh of renewable energy in 2030

http://mainichi.jp/english/english/newsselect/news/20150221p2a00m0na018000c.html

The Ministry of the Environment has estimated that up to 295.2 billion kilowatt hours (kWh) of renewable energy including solar, wind and geothermal power could be produced in Japan in 2030, the Mainichi has learned.
That equates to about 31 percent of Japan's total energy production in fiscal 2013, which stood at 939.7 billion kWh. In fiscal 2013, renewable energy accounted for just 2.2 percent of the total.
The ministry outsourced calculation of the estimates to Mitsubishi Research Institute, and they were reported in a closed panel meeting in December last year. It does not plan to officially release the estimates until around June this year.
The estimates cover three scenarios. One is if energy policies remain as they are now, in which case 2030 would see 203.2 billion kWh of renewable energy (21 percent of the total production in fiscal 2013). However, if policies were expanded as much as possible, with electricity widely transferable across the country, then in 2030 solar power would generate 113.4 billion kWh, and wind power 56.9 billion kWh. With geothermal and small- and medium-scale hydroelectric power factored in, a maximum of 295.2 billion kWh could be produced, according to the estimates.
The Ministry of Economy, Trade and Industry predicts that if all the renewable energy sources it authorized through June 2014 were to operate, it would cost over 2.7 trillion yen a year to buy the power in a feed-in tariff system. However, the Ministry of the Environment, anticipating reduced prices for the feed-in tariff system, estimates that even with the largest predicted amount of renewable energy production in 2030, costs for buying the power could be kept to 2.25 trillion yen. If today's energy policies were maintained, it predicts the figure would only be around 1.36 trillion yen.
Furthermore, the Ministry of the Environment predicts that since renewable energy would serve as a replacement for fossil fuels, by 2030 Japan could save 11 trillion to 25 trillion yen that would otherwise end up overseas.
Under the basic energy plan that the Cabinet passed in April last year, it was stated that the government would aim to exceed the goal it had held until then of raising the level of renewable energy production in 2030 to 20 percent. As early as April, the Ministry of Economy, Trade and Industry plans to finish compiling its own energy analysis. Its views on energy sources for 2030 and the amount of power that would come from nuclear power plants will be the focus of debate.
The Ministry of the Environment's estimates could affect the panel's discussions, but the ministry has not officially released its estimates and does not plan to do so until around June this year. An Environment Ministry official said, "The numbers change based on the conditions. They are not an expression of the ministry's views, and we do not want them to cause undue speculation, so we cannot release them yet."
February 21, 2015(Mainichi Japan)

New drone for Fukushima Daiichi

February 21, 2015

Japan's 1st mass-produced drone takes maiden flight

http://ajw.asahi.com/article/business/AJ201502210031

By RYO SHIMURA/ Staff Writer

MINAMI-SOMA, Fukushima Prefecture--The nation's first mass-produced drone underwent a test flight here Feb. 20 ahead of work assisting cleanup crews near the stricken Fukushima No. 1 nuclear power plant.

The drones will be manufactured just north of the stricken Fukushima plant and some of them will be used to record radiation levels during cleanup and decontamination work in areas affected by the 2011 nuclear disaster.

The drone was developed by the Autonomous Control Systems Laboratory, which is headed by Kenzo Nonami, a robotics professor at Chiba University.

The production base for the drones is a factory in Minami-Soma owned by Kikuchi Seisakusho Co. of Hachioji, Tokyo. The company is a major manufacturer of precision parts.

The plan calls for producing 400 drones this year. Each drone will be 90 centimeters in diameter, weigh 3 kilograms and be capable of carrying a load of up to 6 kg.

The drones will navigate via a global positioning system and will be able to fly continuously for about 30 minutes.

Each drone will cost between 2 million and 3 million yen ($16,800 and $25,200).

There are currently an estimated 2,000 drones flying in Japan, but most are foreign-made robotics that cost about 100,000 yen. Most of the foreign-made drones are flown by drone enthusiasts as a hobby and lack the durability to be put to practical uses.

"We want to engineer a comeback (for Japan) by using a domestic model," Nonami said.

This will reproduce just any quake

March 7, 2015

FOUR YEARS AFTER: Seismic device can reproduce any quake

http://ajw.asahi.com/article/0311disaster/quake_tsunami/AJ201503070019

A 1/40 scale model of a building undergoes a seismic test at a Shimizu Corp. facility in Tokyo on March 4. (Takashi Kamiguri)

By TAKASHI KAMIGURI/ Staff Writer

To promote protection against natural disasters, Shimizu Corp. developed a device that can reproduce the vibrations of the strongest earthquakes ever recorded, including the magnitude-9.0 temblor that struck the Tohoku region four years ago.

Measuring 7 meters by 7 meters, the square-shaped device supports buildings or replicas weighing up to 70 tons and assesses their quake-resistance levels and other features.

The equipment has the highest vibration-generating ability in the private sector, officials of the general contractor said.

In a demonstration experiment on March 4, Shimizu officials used the device to reproduce the vibrations observed in Sendai during the Great East Japan Earthquake on March 11, 2011. A 1/40 scale model of a 40-story, 150-meter high-rise was placed on top of the device. When the machine vibrated, the model deformed like a real building and wildly swung from side to side.

According to the officials, the shaking equipment can reproduce an earthquake even with a maximum intensity of 7 on the Japanese seismic scale.

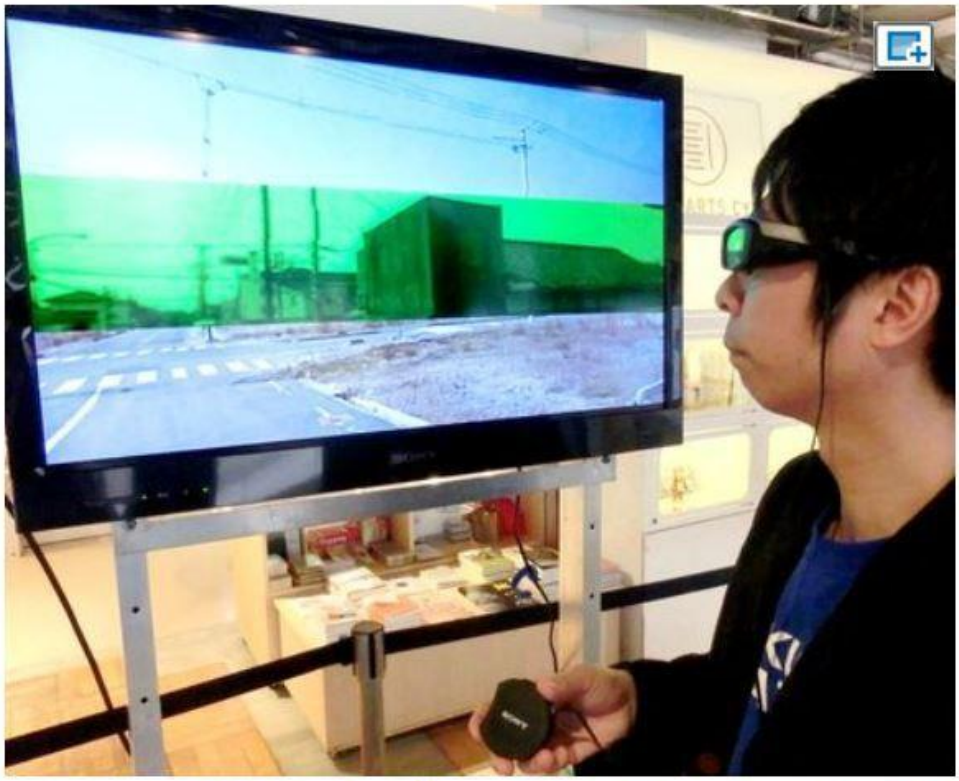
The maximum amplitude of vibrations is 80 centimeters horizontally and 40 cm vertically, double the scale of the Great Hanshin Earthquake that devastated the Kobe area in 1995.

The device also makes it possible to simulate how construction methods would fare if hit by an earthquake stronger than the March 2011 disaster and any other quake observed around the world, the officials said.

Tokohu: Before and after

March 10, 2015

FOUR YEARS AFTER: Students' vision realized with smart glasses that show pre-quake Tohoku
http://ajw.asahi.com/article/0311disaster/quake_tsunami/AJ201503100092



Prototype smart glasses show how a Tohoku town appeared before the 2011 Great East Japan Earthquake and tsunami. (Shinya Takagi)

By SHINYA TAKAGI/ Staff Writer
Sendai website development firm DMP and Sony Corp. have teamed to create a pair of smart glasses that will show how the Tohoku region appeared before the devastation caused by the March 2011 Great East Japan Earthquake and tsunami.
The concept for the wearable computer device was the brainchild of students at the Miyagi Prefectural Agricultural High School in Natori. After DMP learned of the students' idea, the company pitched it to Sony, which assisted in the development of the smart glasses.
When the device is worn at a location in Tohoku, the wearer will see an overlaid photo of the scene as it appeared before the disaster struck on March 11, 2011.
"It's easier to use this device than simply using photographs to help people imagine how things were before the disaster," said Kei Sato, a 32-year-old DMP project planner.

A prototype of the smart glasses will be unveiled during the U.N. World Conference on Disaster Risk Reduction to be held in Sendai between March 14 and 18. The developers plan on having the final product ready within fiscal 2015. They also plan to include a simultaneous smartphone narration of what occurred in each locale during the disaster.
Currently, the prototype contains only images of Natori before the earthquake and tsunami. Guests at the conference will be invited to use the glasses to see how Natori formerly looked.
DMP plans to cooperate with municipalities and other establishments to add more images of the cities and towns in the region prior to the disaster

More precise radiation measurements from the air

March 17, 2015

Measuring radiation from airship

http://www3.nhk.or.jp/nhkworld/english/news/20150317_37.html

Mar. 17, 2015 - Updated 13:01 UTC+1
A research team at Fukushima University has developed a system to measure radiation levels on mountains using an airship.

The group showed the system to media on Tuesday.

The 14-meter-long unmanned airship has 2 devices on its bottom that measure radiation levels and types of radioactive substances on the ground.

The craft took off from the university and slowly circled a mountain in the suburbs of Fukushima City to take measurements.

The group says the system is expected to obtain data more accurately than airplanes because airships can fly lower and more slowly.
The state uses airplanes to measure radiation from the air.

The system is expected to show where radioactive substances traveled from and accumulated after the accident at the Fukushima Daiichi nuclear power plant in March 2011. The group hopes it will help develop efficient methods for decontaminating mountains.

Team leader Professor Akira Watanabe says providing scientific data is the first step in ensuring a sense of safety, so his team will work to carry out precise measurements.

On Tuesday, strong wind blew the airship off its initially planned route, reportedly causing it to fall in a

mountain forest. The team faces the challenge of achieving stable flight in windy and other poor weather conditions.

Large potential for renewables

April 4, 2015

Renewable energy could account for 35 percent of 2030 power supply: ministry

http://mainichi.jp/english/english/newsselect/news/20150404p2a00m0na013000c.html

Renewable energy sources could be expanded to account for 24 to 35 percent of Japan's power supply in 2030, according to estimates released by the Ministry of the Environment on April 3.

"The potential for the introduction of renewable energy is large. There are also large policy problems to tackle, however, such as handling the cost of reinforcing the power line network," a ministry official commented.

An expert committee for the Ministry of Economy, Trade and Industry is considering how much higher the country can go than the goal of at least 20 percent for renewable energy sources put forth by the nation's basic energy plan, and the new estimates could influence the committee's conclusions.

Out of the national power output of 939.7 billion kilowatt-hours for fiscal 2013, renewable energy sources including hydroelectric power accounted for only 10.7 percent. According to the newly released estimates, if the full extent of possible preparations were made -- such as reinforcing power lines to allow power exchange across wide areas, and setting up batteries to store charge -- as much as 356.6 billion kilowatt-hours of renewable energy generation would be possible by 2030.

Even if these preparations are not made, however, renewable energy is still predicted to rise to 241.4 billion kilowatt-hours. By these calculations, assuming demand of 1 trillion kilowatt-hours, at least 24 percent should be possible to provide with renewable energy.

The estimates predict that the financial burden on the country's citizens caused by the government buying up renewable energy will be between 1.78 to 2.56 trillion yen. It also predicted between 1.1 to 2.3 trillion yen in average annual economic ripple effects, however, from factors such as construction and infrastructure investment, as well as between 93,000 and 187,000 new jobs per year.

Furthermore, due to less import of fossil fuels, the estimates show that between 15 and 29 trillion yen of funds could be kept from leaving the country through 2030. Annual carbon dioxide emissions could drop by between 86.06 million and 172.8 million tons, while a goal of cutting carbon dioxide emissions by around 10 percent compared to 1990 levels would also be possible.

These estimates were put together by the Mitsubishi Research Institute at the request of the environmental ministry. They were originally planned to be released around June, but members of both the ruling and opposition parties requested that they be released before the expert committee makes its conclusions, which could come as soon as mid-April.

April 04, 2015(Mainichi Japan)

Renewables: METI vs Environment Ministry

April 7, 2015

Miyazawa doubts estimate of renewable energy use

Apr. 7, 2015 - Updated 08:49 UTC+2

http://www3.nhk.or.jp/nhkworld/english/news/20150407_21.html

Japan's Economy, Trade and Industry Minister Yoichi Miyazawa has doubts about the feasibility of the Environment Ministry's plan regarding the nation's energy mix.

The Environment Ministry said earlier this month that energy from renewable sources can supply up to 35 percent of the country's total energy demand in the future. The Industry Ministry also plans on boosting the ratio of renewable energy from the current goal of 21 percent, but has not set a specific target.

Miyazawa told reporters on Tuesday that he has no idea how the Environment Ministry's estimate is viewed by insiders. He said the estimate does not fully take into account a possible increase in costs that would occur as a result of the increase in renewable energy.

Miyazawa said it is difficult to use the estimate to work out Japan's energy mix.

Also on Tuesday, Environment Minister Yoshio Mochizuki said his ministry's estimate is different from those of other ministries because it has yet to calculate the necessary technology.

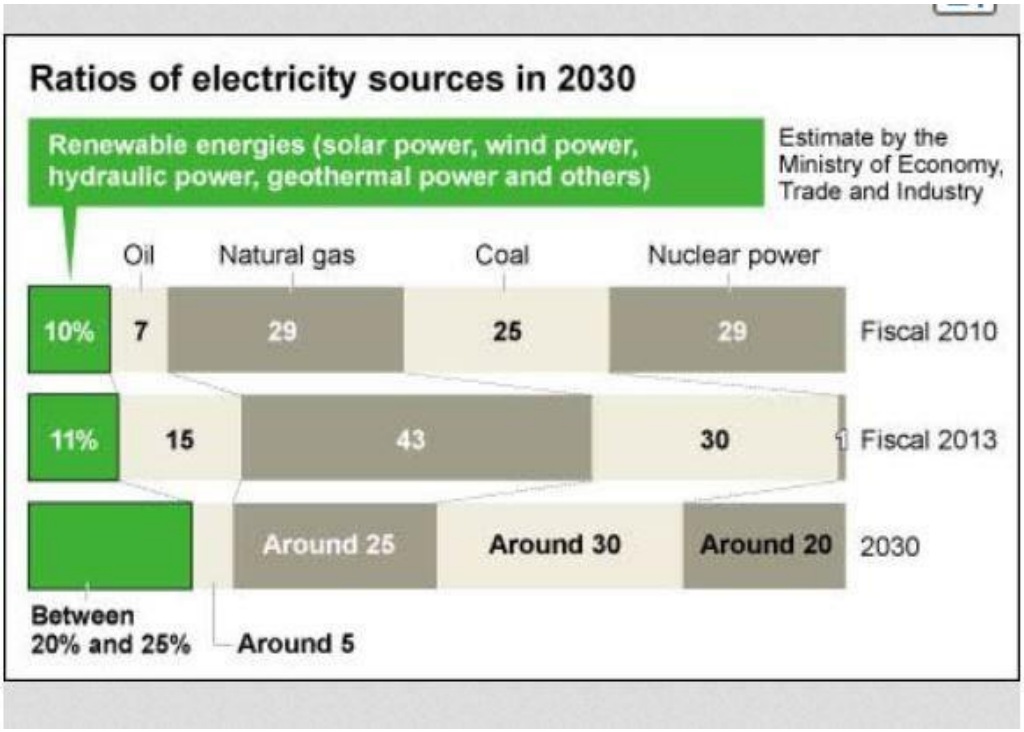
Mochizuki said it is obvious that the figure cannot be achieved through hope alone, but that his ministry would like to increase power from renewable sources as much as possible.

What electricity mix for 2030?

April 8, 2015

Industry ministry seeks renewable energy ratio of 20% to 25% in 2030

http://ajw.asahi.com/article/behind_news/politics/AJ201504080030



By TOMOYOSHI OTSU/ Staff Writer

The industry ministry rejected a proposal by the Environment Ministry and is calling for renewable energy sources to supply "between 20 and 25 percent" of Japan's electricity in 2030, sources said April 7.

The Environment Ministry on April 3 had called for a range between 24 percent and 35 percent.

However, the Ministry of Economy, Trade and Industry said that plan was unrealistic, and it proposed a lower range to avoid increases in electricity charges and to curb the costs for corporate activities.

Prime Minister Shinzo Abe on April 7 received a report from a ruling Liberal Democratic Party task force on the nation's "energy mix" for 2030. The contents are almost identical to the proposals of the industry ministry.

"Based on the ideas described in the report, I want to proceed (with the energy mix plan)," Abe said.

Renewable energies include not only solar power, wind power and geothermal power but also hydraulic power.

In fiscal 2013, renewable energies, centering on hydraulic power, accounted for 11 percent of Japan's electricity supply.

The industry ministry plans to double the ratio by 2030. During the period, the combined ratio of solar power and wind power is expected to increase from 2 percent to 10 percent.

The ratios of hydraulic power and geothermal power will likely remain unchanged because it is difficult to construct large-scale dams and environmental assessments for constructing geothermal power plants requires much time.

The ratio of nuclear power will be around 20 percent in 2030, according to the ministry's plan. The proposal does not mention replacing old nuclear reactors or building new ones. It assumes that current nuclear reactors will continue operating even after they have reached their lifespan of 40 years.

The industry ministry plans to coordinate its opinions with the LDP, junior coalition partner Komeito and the Environment Ministry about the energy mix plan for 2030.

The industry ministry will submit a draft of the plan to its experts' council at the end of this month. The proposal is expected to be completed by the end of May.

The ministry calculated the power generation capacities of renewable energy sources and the costs for 2030 based on several factors, including the amount of electricity that can be accepted on the current power grid and construction plans for wind farms.
It calculated that a ratio of renewable energies much higher than 20 percent would require more than 1 trillion yen (about $8.3 billion) for expansion of the power grid and other measures, resulting in sky-high electricity charges, the sources said.
The Environment Ministry's calculations showed that the ratio of renewable energies could be raised to between 24 percent and 35 percent.
But industry minister Yoichi Miyazawa refused to use that result, saying, "It does not pay sufficient consideration to feasibility."
The industry ministry places importance on nuclear power, coal-fired thermal power, hydraulic power and geothermal power as "base-load electric sources," which indicate their power generation costs are low and their facilities can be operated around the clock.
The ministry wants to raise the combined ratio of those base-load electric sources to more than 60 percent, matching the ratios in the United States and some European countries.
It is difficult for Japan to raise the ratio of coal-fired thermal power because of concerns about the large quantities of greenhouse gas emissions.
But the ministry also does not want to depend on solar power or wind power, citing their high operational costs and unstable power supplies.

Renewables: Japan can afford to be more ambitious

April 10, 2015

EDITORIAL: A more ambitious renewable energy target is feasible

http://ajw.asahi.com/article/views/editorial/AJ201504100031

The Ministry of Economy, Trade and Industry is considering an energy policy target of raising the renewable energy share in Japan's overall energy mix to the lower half of the 20-percent range by 2030.
The ministry is expected to make a formal decision before this summer on the composition of energy sources 15 years down the road.
The government's Strategic Energy Plan, approved last year, called for increasing the ratio of renewable energy to a level above 20 percent. The target set in 2010 before the disaster at the Fukushima No. 1 nuclear power plant was about 20 percent.
This modest rise in the target cannot be a sign that important lessons from the nuclear disaster have been learned and absorbed.
With 15 years still left until 2030, the ministry should consider an additional increase in the target.
At the same time, the ministry stresses the advantages and necessity of nuclear power generation and plans to set a target of around 20 percent for the future share of nuclear energy.
The harrowing accident at the Fukushima plant brought to light the fact that nuclear power is a highly unstable and costly power source in Japan, which is prone to natural disasters including earthquakes.
To raise the rate of self-sufficiency in energy supply without depending on nuclear power while trying to stop global warming, it is vital to make renewable energy a major power source as quickly as possible.

There are, of course, many challenges that must be overcome to promote renewable energy.
Sufficient measures should be taken to prevent sharp rises in electricity rates because of the huge costs needed to finance the feed-in-tariff system that requires utilities to buy electricity generated with renewable energy sources at fixed prices. Big expenses are also required to develop power transmission networks to send electricity produced in areas fit for renewable power generation to areas where power is consumed.
Still, there are many steps the government can and should take to increase the use of renewable energy.
It should promote, for instance, operational technology to adjust output fluctuations in renewable power generation, which is susceptible to natural conditions, and support the development of new materials to raise the efficiency of solar panels. More policy incentives should also be given to promote cogeneration systems for efficient heat utilization and micro-power generation for local consumption.
The government should map out more specific plans to promote technologies and systems that are likely to make significant progress by 2030.
The way the decisions concerning the energy mix are made by the industry ministry alone is also questionable.
A report released on April 3 by the Environment Ministry contained an estimate showing the target for renewable energy could be higher than the one being considered by the industry ministry.
Industry minister Yoichi Miyazawa brushed aside the Environment Ministry's estimate as "unfeasible."
But Hidefumi Kurasaka, a professor at Chiba University who chaired the Environment Ministry's working group that produced the estimate, tweeted, "Reading the report shows you (Miyazawa's argument is) clearly wrong."
Both ministries are working on the issue by using taxpayer money. The government should clearly explain to the public what kind of differences there are between the two sides and which claim is more reasonable.
The government should also make more serious efforts to develop a fair and unified view on the issue.
We suggest that members of the Environment Ministry's panel be invited to take part in the industry ministry's decision-making process on the energy mix.
A major reform usually entails bearing a new burden. Whether the burden is justifiable depends on the benefits to be gained.
Japan has learned bitter lessons from the nuclear accident and strongly felt the need to switch from nuclear power to renewable energy.
No matter how difficult making this shift may be, returning to the old energy regime before March 11, 2011, is no option.
--The Asahi Shimbun, April 10

Energy choices depend on how you look at safety

April 12, 2015

Reactor closures to test Abe's green energy pledges

http://www.japantimes.co.jp/news/2015/04/12/national/reactor-closures-to-test-abes-green-energy-pledges/#.VSqdTpPwlLM

by Chisaki Watanabe **and** Emi Urabe
Bloomberg

Japan's plan to mothball at least five aging nuclear reactors highlights the challenge Prime Minister Shinzo Abe faces as his administration debates how to replace lost electricity generation with power sources that are cheap, clean and safe.

The decision announced by the reactors' operators last month to decommission the plants, all dating from the 1970s, will eliminate output equivalent to about 65 percent of the power produced by all the solar panels currently installed nationwide. That's even after solar use has surged, making Japan the second-biggest solar market in the world for two years running.

The policies are under a microscope as Abe's ruling Liberal Democratic Party indicated earlier this month it wants to see nuclear energy play a prominent role in generating the nation's electricity, a plan opposed by most voters following the 2011 meltdowns in Fukushima. In the meantime, policymakers are wrestling with how to mix in renewables with traditional forms of energy and determining what scale of greenhouse gas cuts it can promise for a United Nations deal on global warming this year.

"It is possible to partially replace nuclear with clean energy, but we need to turn to coal at the moment," said Keigo Akimoto, chief researcher at Kyoto-based Research Institute of Innovative Technology for the Earth. "I support increasing renewables. We should not be misguided about the scale."

The implications are global, since countries such as the United States and Germany face the question of what to do with their own aging atomic plants. In Germany, Chancellor Angela Merkel has announced that her country would gradually turn off all nuclear. The reactor fleet in the U.S. is one of the oldest in the world, and a wave of retirements is expected beginning in the 2030s, the International Energy Agency estimates.

Environmentalists in Japan, mindful of the Fukushima No. 1 nuclear disaster, say the country has shown it can do without nuclear through efficiency gains and renewables.

Utilities, meanwhile, say they're having difficulty accommodating all the new electricity from clean sources such as solar that is testing their grids.

Japan's biggest business lobbies argue industry can't do without nuclear power and the steady supply of reliable power it produces. The nation's 48 viable reactors are shuttered pending new safety checks by the nation's regulator.

"The most important thing is to optimize different power sources such as nuclear, thermal and renewables," Hajimu Yamana, a professor at Kyoto University Research Reactor Institute, said at a meeting at the Ministry of Economy, Trade and Industry on March 30. The ministry oversees the nuclear sector.

For all the concerns about the safety of nuclear energy, one fact is unassailable: Since the triple meltdown, the nation's utilities are getting the bulk of their electricity from fossil fuels, despite a government-backed push to expand sources of renewable energy such as solar.

The five reactors that the utilities said in March they planned to decommission, among the smallest and oldest in Japan, annually produced about 13 terawatt-hours on average before the 2011 disaster, according to Bloomberg calculations using data supplied by the plant operators. Compare that with contributions from solar, which totaled 19.9 terawatt-hours in the year to March 31, based on estimates by Bloomberg New Energy Finance.

"We are at a crossroads, and yet we are still evaluating power sources in the same way we did before the earthquake," said Yasuko Kono, secretary-general of Shodanren, a union of consumer groups urging policymakers to consider the potential of renewables and energy savings. **"The choices we will make will depend greatly on how we look at safety."**

The Abe government is under increasing pressure to set a long-term plan for how much electricity should come from what sources. Divided views on nuclear's role are preventing the nation's policymakers from making international pledges on greenhouse gas emissions ahead of climate talks in December.

"Our discussions on nuclear power have been focusing too much on negative aspects," Kyoto University's Yamana said. "Four years have passed and we need to look at nuclear calmly," he said, adding that atomic power helps Japan cut greenhouse gas emissions.

Nuclear's share of the electricity mix is at the center of the policy debate. In fiscal 2010, the nation derived nearly 30 percent of its power from nuclear while renewables provided almost 10 percent, with the majority of that coming from hydropower.

Four years after the triple core meltdown at the Fukushima No. 1 plant, the public remains cautious about nuclear.

According to a March poll by the Nikkei newspaper and TV Tokyo, 62 percent of respondents said reactors shouldn't be restarted, while 27 percent supported the resumption of nuclear power.

Meanwhile, power rates have risen 20 percent for homes and 30 percent for industry use since the nuclear crisis began in March 2011, according to date from the Ministry of Economy, Trade and Industry.

Keidanren, the nation's top business lobby, said April 6 that nuclear power should supply more than 25 percent of electricity by 2030, while renewables should be around 15 percent.

The panel of LDP lawmakers that presented their findings to Abe on Tuesday recommended the nation get its electricity from base-load sources on a par with other developed countries, which is currently above 60 percent.

"For utilities, there is no economic incentive to add clean energy," said Ali Izadi-Najafabadi, a Bloomberg energy finance analyst in Tokyo. He said Japan's current approach may benefit utilities in the short term. "In the long term, it hurts the country including manufacturers," as domestic companies may miss out on opportunities to compete in fully liberalized markets abroad because they lack such experience at home, he said.

If all of the nation's reactors are to be decommissioned after the 40 years considered the operational age limit by Japanese regulators, only 20 will be in working condition by 2030, accounting for about 15 percent of power supply, according to an analysis by Keizai Doyukai. To keep nuclear capacity at 20 percent, utilities would need to seek government approval to extend operations, the group said in a report.

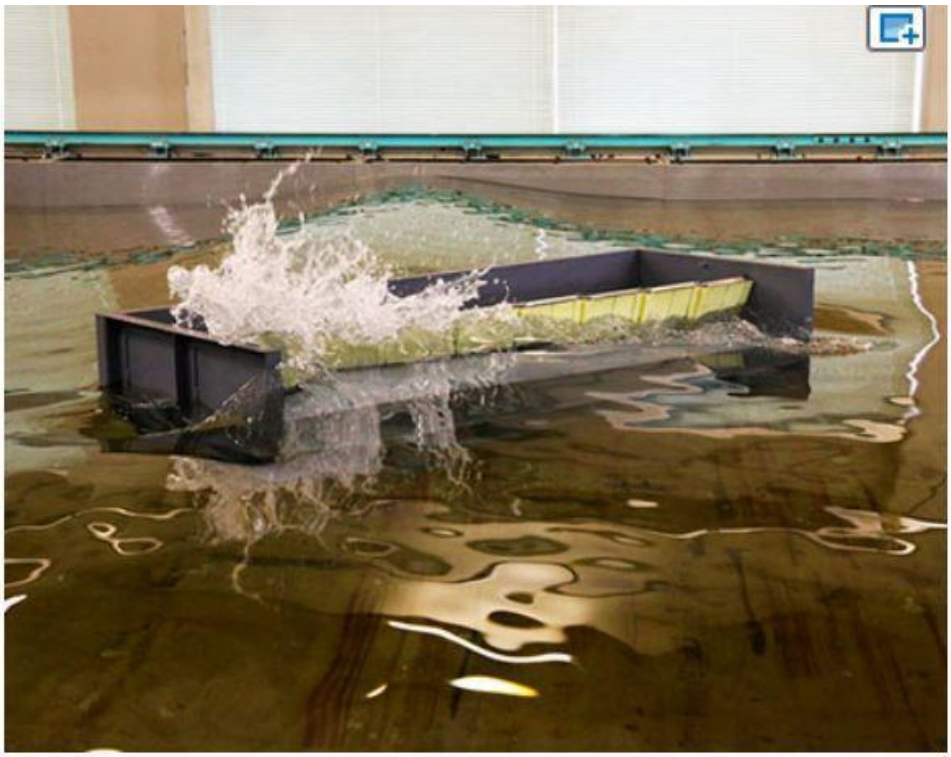
"Renewable energy has to be more stable and cheaper, and energy storage needs to develop further," Teruo Asada, who heads the group and also serves as the chairman of major trading company Marubeni Corp., told reporters in March.

New anti-tsunami walls

April 15, 2015

Self-elevating sea walls able to counter tsunami hundreds of meters wide

http://ajw.asahi.com/article/0311disaster/quake_tsunami/AJ201504150067



Flap gates rise in a test at Nagoya University on April 7. (Taku Hosokawa)

By AYAKO TSUKIDATE/ Staff Writer

NAGOYA--Researchers say coastal barriers that use the force of waves to elevate automatically, and so spread the impact of tsunami or storm surges, proved effective in simulated tests and could offer an alternative to erecting massive sea walls.

Researchers at Nagoya University performed the experiment in laboratory conditions on April 7 with assistance from Hitachi Zosen Corp. and a number of organizations.

They found that the barriers can handle a tsunami measuring several hundred meters across.

When placed atop conventional sea walls, the so-called flap gates provide additional height and a buffer but do not mar the scenery as long as they remain flat.

Researchers created a scale model of a comprehensive coastal barrier because structures in the past were only capable of dealing with waves of up to around 10 meters across. This limited their use to openings in sea walls and other small spaces.

"This mechanism raises a sea wall just in the nick of time," said Norimi Mizutani, a professor of civil engineering at the Nagoya University Graduate School of Engineering. "So this is the answer that local residents have been looking for because it preserves the scenery but counters tsunami at the same time."

Many municipalities have been under pressure to erect higher sea walls since the magnitude-9.0 Great East Japan Earthquake of March 11, 2011, triggered towering tsunami that devastated coastal areas of the Tohoku region.

However, gaining the consent of residents has been a challenge due to concerns that such massive structures will wreck the landscape.

When water rises and pushes up against the flap gate, the buoyant force raises the structure to form a wall, thus blocking the inundation.

A model with eight panels connected with a metal cable and one-fourth the size of the envisioned design was used for the test.

115 megawatts of solar power in Rokkasho in November

April 17, 2015

Japan's largest solar-powered plant in Rokkasho set for July start

http://ajw.asahi.com/article/business/AJ201504170039

Solar panels cover a large area at Eurus Rokkasho Solar Park in Rokkasho, Aomori Prefecture, on April 16. (Takashi Kamiguri)

THE ASAHI SHIMBUN

ROKKASHO, Aomori Prefecture--Japan's biggest solar power plant is scheduled to start a trial run in July in this village where the opening of a planned nuclear fuel reprocessing plant has been repeatedly delayed.

Construction of the Eurus Rokkasho Solar Park is almost complete. It is capable of generating 115 megawatts, which is enough to supply 38,000 households and makes it the largest solar-powered producer of electricity in the nation.

The facility uses 513,600 solar panels, most of which were produced by Mitsubishi Electric Corp. After the trial period, the power plant is expected to enter full operation in November.

In contrast, the Rokkasho plant to reprocess spent nuclear fuel, a key element of Japan's nuclear recycling program, has been postponed a number of times due to technical difficulties.

Thinking outside the box

April 19, 2015

Determined sake brewer seeks to revive Fukushima with renewable energy

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201504190028
By TOSHIHIDE UEDA/ Senior Staff Writer
KITAKATA, Fukushima Prefecture--Yauemon Sato's determination to forge ahead with his ideas, no matter how unorthodox, has led fellow workers to describe him as "a dump truck with broken brakes."
This way of thinking has apparently helped to keep his family's sake brewery in business since 1790. It could also be the reason why local governments are investing in the 64-year-old's plan to revitalize Fukushima Prefecture.
After the triple meltdown at the Fukushima No. 1 nuclear power plant in March 2011, Sato decided that the only way the prefecture could be revived was through renewable energy sources.
In August 2013, he established Aizu Denryoku, an electric power company, and brought together individuals with diverse backgrounds to serve as executives and advisers. One was a special adviser of the Japanese subsidiary of a major U.S. semiconductor manufacturer, while another once headed the Fukushima prefectural board of education.
Another member of the group was an ethnologist who promoted Tohoku area studies.
They were all impressed by Sato's fortitude.
Sato is the ninth-generation chief of the Yamatogawa Shuzoten sake brewery in Kitakata of the Aizu region in western Fukushima Prefecture. When explosions rocked the Fukushima No. 1 nuclear plant operated by Tokyo Electric Power Co., Sato thought the 200-year old family business was done for.
However, **radiation levels in the Aizu region never reached alarming levels.**
Sato felt somewhat guilty because he continued with his life and business while compatriots in other areas of Fukushima Prefecture were evacuating by the thousands.
"All I thought about was what the Aizu region could do," Sato said. "Nothing will begin as long as all we say is, 'The central government is to blame and TEPCO is to blame.'"
Sato took note of the many power plants already established in the Aizu region, which boasts a bountiful water supply that has helped foster a vast expanse of forest.
Construction of hydraulic power plants in the area started in the Meiji Era (1868-1912), and those plants today have a total generation capacity of about 4 gigawatts.
Much like the Fukushima No. 1 nuclear plant, most of the power generated at those hydraulic plants has gone to the greater Tokyo metropolitan area.
"The water used in hydraulic power plants originally was the rain and snow that fell in the great outdoors of Fukushima," Sato said.
He felt that bringing back such resources would allow Fukushima to generate all the electricity it needed without relying on outside sources.
He also believed that such a move would be important to allow Fukushima to move away from being "a colony" of sorts to the Tokyo area.

Sato started with solar power because installation was much easier than constructing hydraulic power plants.
As a first step, **Aizu Denryoku** built the Oguni solar power plant in Kitakata with an output capacity of 1 megawatt. Smaller facilities were then set up in 23 locations.
By fiscal 2014, Aizu Denryoku and its subsidiaries were operating plants with a combined capacity of 2.54 megawatts and selling the electricity to Tohoku Electric Power Co., which is in charge of supplying all of Fukushima Prefecture.
Aizu Denryoku plans to increase its generating capacity to 5 megawatts by the end of fiscal 2015.
But even at that level, the capacity would only be 0.1 percent of the capacity of the existing hydraulic power plants in the Aizu region.
Moreover, Tohoku Electric in late 2014 introduced a maximum limit on the volume of electricity it would purchase from renewable energy sources.
Such moves are not enough to stop the "dump truck with broken brakes."
"We will move to our next stage," Sato said.
By focusing on the initial target of the bountiful water and forests of the Aizu region, **Sato plans to start micro-hydro power generation and the use of woody biomass.**
Thinking outside the box is in Sato's genes.
In the late 1970s, his father opposed the redevelopment plan put together by the Kitakata municipal government. Instead, he wanted to promote Kitakata as a "town of warehouses" by capitalizing on the heritage of numerous old warehouses remaining in the city.
On one occasion, he spent 70 million yen to move and restore old warehouses. That led some to speculate that the older Sato had lost his mind.
However, there was huge untapped interest in viewing those old warehouses, and the tourism business took off in Kitakata.
The popularity of Kitakata ramen shops also helped to increase the number of tourists from about 50,000 in 1975 to about 1.2 million today.
The younger Sato says **his battle with major utilities will require his own financial resources combined with the power of local communities.**
To bring about that goal, Sato contacted all 17 municipalities in the Aizu region about investing in Aizu Denryoku. In March 2015, four towns and villages decided to inject capital.
"Things are looking more interesting now," Sato said.

Fukushima must do away with "caldrons of hell" (Sato)

May 1, 2015

INTERVIEW/ Yauemon Sato: Fukushima must reclaim energy resources to avoid 'caldrons of hell'

http://ajw.asahi.com/article/views/opinion/AJ201505010047

By TOSHIHIDE UEDA/ Senior Staff Writer

KITAKATA, Fukushima Prefecture--Yauemon Sato, the ninth-generation chief of a sake brewery operating here since 1790, likens the crippled reactors at the Fukushima No. 1 nuclear power plant to "caldrons of hell."

In a recent interview with The Asahi Shimbun, Sato said the nuclear disaster "continues to recur every day," referring to the huge stockpile of radioactive water that keeps growing--and often leaks--more than four years after the core meltdowns.

Aizu Denryoku, an energy company that he founded in 2013, was his answer to the question of what direction the "Fukushima rebirth" should take after the nuclear disaster.

As a corporate manager, Sato was determined not to be content with a "mere social movement."

He now runs more than 20 solar power plants.

Sato also plans to venture into micro-hydropower generation and the use of woody biomass, which will allow his business to tap into resources generated by the bountiful water and forests of the Aizu region in western Fukushima Prefecture, where Kitakata is located.

"Aizu has enough energy resources to be self-sufficient," Sato said. "The water of Lake Inawashiroko and the water of the Tadamigawa river initially used to be ours. It's probably time to have them returned to us."

Excerpts from the interview follow:

* * *

Question: What drives you to be so active, including in the use of renewable energy?

Sato: You know the caldron of hell? You will be sent to hell and will be boiled in that caldron if you do evil. And there are four such caldrons in Fukushima Prefecture, at the Fukushima No. 1 nuclear power plant operated by Tokyo Electric Power Co.

Q: You mean the No. 1 through No. 4 reactors that succumbed to accidents, right?

A: Yes. And the disaster has yet to end. It continues to recur every day.

More than 300 tons of water, contaminated with intense levels of radioactive substances, are being generated every day at the nuclear plant, right? We have a family business of a sake brewery, with a yearly turnover of about 350 million yen ($2.9 million). We brew about 300 kiloliters of sake, which weighs some 300 tons, every year. More radioactive water is being generated day after day than the amount of sake we produce in a year.

Q: The whole village of Iitate, Fukushima Prefecture, remains evacuated to this day because of the nuclear disaster. You had been supporting Iitate even before the nuclear disaster was triggered by the Great East Japan Earthquake and tsunami. Could you elaborate on your work?

A: Everything started when the chamber of commerce and industry in the village asked me to brew sake with rice from Iitate. I agreed to be a "Madei ambassador" to support the village, and the appointment ceremony took place in January 2011. The nuclear disaster broke out only two months later.

Iitate has nothing to do with nuclear power. "I will have to help in some way or other," I thought to myself.

Q: "Madei," which means something like "cordially" in the local dialect, is a catchword of Iitate's community development efforts, right?

A: Yes. Norio Kanno, mayor of Iitate, said at the appointment ceremony that community development of a "Madei village" was almost complete. But all that was ruined by the nuclear disaster.

Why, to begin with, did Fukushima Prefecture host as many as 10 nuclear reactors? Well, it did so to send electricity to Tokyo. But Fukushima Prefecture residents were not asserting themselves loud enough in the face of the central government and TEPCO.

These were some of the ideas I shared with Yumiko Endo, former head of the Fukushima prefectural board of education, and with Norio Akasaka, a Gakushuin University professor of ethnology who is

promoting “Tohoku studies.” And the first thing we did was to set up Fukushima Kaigi, a forum for citizens to think about a “Fukushima rebirth,” in the summer of 2011.

Q: That forum gave you an opportunity to get to know Jun Yamada, a senior adviser to Qualcomm Japan, the Japanese arm of the major U.S. chipmaker, right?

A: Yes. Yamada and I discussed what we should be doing from that time on, and we agreed that we were both corporate managers who were by no means living aloof in a world of serious literature. It was no use just cursing the central government and TEPCO. We should not content ourselves with a mere social movement. So we eventually agreed: Why not set up a business?

Q: And the business you set up was Aizu Denryoku, right?

A: Yes. Just imagine, what are the requisites for human lives? You can maintain your life if only water, food and energy are available.

The 17 municipalities of Fukushima Prefecture’s Aizu region have a combined population of 280,000 or so. And the region has enough rice and energy resources to be self-sufficient. The hydropower plants in Aizu alone have enough generation capacity to cover the power demand of all households in Fukushima Prefecture.

Q: But those hydropower plants belong to TEPCO, Tohoku Electric Power Co. and Electric Power Development Co. Most of the electricity they generate is being sent to the greater Tokyo area. What do you think about this arrangement?

A: The rights to use water for generating power are not in our hands. But the water of Lake Inawashiroko and the water of the Tadamigawa river initially used to be ours. It’s probably time to have them returned to us.

The nuclear plants also stand on the soil of Fukushima Prefecture. Why are our resources always being taken away? Let’s go and reclaim what has been taken away from us--that’s what I am saying.

Q: Tohoku Electric has set a maximum limit on the volume of electricity it would purchase from renewable energy sources. What is your approach to the tough job of breaking vested interests?

A: My father began skipping wholesalers and retailers to sell our sake directly to tourists in Kitakata. That sparked terrible outrage from associations of wholesalers and retailers. But when customers, once they had acquired an appetite for our products, began placing orders with retailers, those retailers had to deal in our products in the end. A clientele will never fail to materialize if only you make fine products.

Q: You have a growing circle of like-minded people. Iitate Denryoku, a solar power generation company, was set up in Iitate in September 2014, with you as vice president. How are these efforts going?

A: Another group of people in Tadami, Fukushima Prefecture, is moving to set up a Tadami Denryoku power generation company. Four of the 17 municipalities in the Aizu region--Inawashiro, Bandai, Nishi-Aizu and Kita-Shiobara--decided in March to invest in Aizu Denryoku.

We are aiming to create what we would call a “stock company of a public nature.” We are still facing various challenges, such as the question of rights over the use of water. But we plan to spread micro-hydropower generation, which uses water from rivers and other familiar sources, and the use of biomass, which relies on wood from forests and other sources, in the years to come.

Solar power generation is something we just began with to solidify the foundation of our company.

Q: You are calling on all municipal governments in Aizu to inject capital in your company. What kind of role do you expect governments to play?

A: Community development is up to local people in the private sector, and it is not something that governments are supposed to take into their hands. Governments are there to back up what the private sector does. That’s how the efforts to promote (Kitakata) as a “town of warehouses” and a “town of ramen” really took off and got on track.

* * *

Born in 1951, Yauemon Sato, a graduate of the Department of Brewing and Fermentation at the Tokyo University of Agriculture Junior College, began serving his apprenticeship at the Yamatogawa Shuzoten sake brewery, his family's business, in 1973.

He was inspired by how his father, Yauemon Sato VIII, scrambled to promote Kitakata as a "town of warehouses" and engaged in architecture preservation efforts of the Japanese Association for Machi-nami Conservation and Regeneration.

Sato, who took over his family business as the ninth-generation chief in 2006, also serves as CEO of the Japan Jizake Cooperative, which organizes local sake brewers, and as chief secretary of an all-Japan association of locally based energy providers, whose founders include power utilities that serve localized areas.

Aizu Denryoku was named after a company that existed before World War II. It was so named in hopes of reviving the tradition of its predecessor, which supplied electricity to local communities.

High costs fo renewables as an excuse for nukes

May 27, 2015

Nuclear power crucial as renewable energy too costly, ministry says

http://ajw.asahi.com/article/behind_news/politics/AJ201505270040

THE ASAHI SHIMBUN

The high cost of renewable energy means Japan has no choice but to rely on nuclear power to provide between 20 and 22 percent of its energy by 2030, according to an industry ministry report.

That would be a small drop in the reliance on nuclear power from the levels before the 2011 Fukushima nuclear disaster.

The shift away from nuclear energy to renewables, including solar power, will generate "pressure for drastic rise in energy cost," stated the report released May 26. The ministry, a staunch supporter of nuclear energy, concluded it is the least expensive method of power generation.

While nuclear energy should provide between 20 and 22 percent of Japan's electricity, renewable energy should account for 22 to 24 percent in fiscal 2030.

About 27 percent of Japan's electricity was provided by nuclear power on a yearly average in the decade up to the 2011 Fukushima nuclear disaster.

The proposal also said that nuclear power was required to keep power costs at a manageable level for corporations and households and also to enable Japan to reduce greenhouse gases to levels set by advanced economies in the West.

The draft report was released by an expert committee at the Natural Resources and Energy Agency headed by Masahiro Sakane, a senior adviser at Komatsu Ltd. It will be finalized at a meeting of the committee in early June and adopted as the government's official energy-mix plan in July at the earliest after going through a public-comment phase.

All the nation's reactors were shut down after the disaster, and hurdles remain high for the government to restart many of them due to strong public opposition and safety concerns of local governments.
In its Strategic Energy Plan released in April 2014, the government underscored its intention to push for reactor restarts but said "dependency on nuclear power generation will be lowered to the extent possible."
At a news conference April 26, the industry minister Yoichi Miyazawa said that high energy costs and other concerns "will be all solved by increasing the ratio of nuclear power."
The minister emphasized that the 20-22 percentage scenario was the minimum possible reliance on nuclear energy.
While the Strategic Energy Plan projected that renewable energy must account for far more than 20 percent of Japan's future plan, the draft report pointed out that solar and wind power output are particularly unstable.
The proposal states that Japan should rely on just 7 percent of energy from solar power and 1.7 percent from wind power.
During the committee sessions, Yukari Takamura, a professor of international law at Nagoya University, and two other members submitted opinion papers that asserted the discussions at the committee do not fully address the need to reduce nuclear energy and increase dependency on renewable energy.
But the figures in the draft proposal are likely to be approved in the committee's next meeting in early June.
(This article was written by Tomoyoshi Otsu and Kenichiro Shino.)
See : http://ajw.asahi.com/article/behind_news/politics/AJ201504280045

Ceramic blocks to store radioactive water?

May 27, 2015

Potter creates ceramic cure to help stop radioactive water leaks at Fukushima

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201505270060

By KEIZO FUKATSU/ Staff Writer
YOKKAICHI, Mie Prefecture--A manufacturer of traditional ceramics has created special blocks that can absorb water, a development that could enable radioactive water at the Fukushima No. 1 nuclear power plant to be stored safely.
"Contaminated water would not leak if it is stored inside the blocks," said Taiji Mizutani, who heads Mizutani Shoten. "We will commercialize the product after verification experiments and hope evacuees from Fukushima will be able to return to their homes as early as possible."
Mizutani came up with the idea of developing water-absorbing blocks with unglazed ceramics when he was working as a volunteer in the Tohoku region, which was devastated by the March 2011 Great East Japan Earthquake and tsunami.

The 37-year-old expressed concern about frequent reports of highly radioactive water leaking from storage tanks at the stricken plant.
Since the disaster, Mizutani has visited affected areas more than 10 times and interacted with people who were evacuated from their homes near the nuclear plant.
“I always wanted to help them return to their hometowns,” Mizutani said.
He first realized ceramics may be useful for storing radioactive water when he found biscuit ware absorbs glaze more easily. Then, Mizutani began testing the water-absorbing quality of ceramics.
He mixed chaffs of grain with soil mainly comprised of clay. Because rice hulls burn away when the soil is fired, hollows remain where the chaffs existed. Mizutani also kept the firing temperature at around 700 degrees to remove water from the clay and create tiny linear cracks.
According to Mizutani, the hollows and cracks help the ware absorb water. It took Mizutani almost a year to develop the highly absorbent material.
While ordinary unglazed ceramic ware absorbs 40 percent of its weight in water, Mizutani's “spongelike” block absorbed a volume equivalent to its own weight in just two minutes in one experiment, Mizutani said.
He has received patents for the special block as well as his original water-storage system, in which contaminated water is stored after being absorbed by the ceramic blocks laid on a huge pool made of high-density concrete.
He intends to reach out to Tokyo Electric Power Co., the operator of the Fukushima plant, so the product can be used in the decommissioning process at the crippled facility.

International contest for nuclear disaster robots

May 29, 2015

Japan's presence grows at contest for nuclear disaster robots

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201505290009

By HISATOSHI KABATA/ Staff Writer
Prompted by government funding, five Japanese teams will compete in an international contest that tests robots’ response and rescue abilities in nuclear disasters.
The Robotics Challenge, inspired by the Fukushima nuclear accident that started in March 2011, will be held June 5 and 6 in Pomona, California.
Twenty-five teams from six countries and one region will enter the event sponsored by the Defense Advanced Research Projects Agency (DARPA) of the U.S. Department of Defense.
The finalist robots must tackle eight tasks within an hour under scenarios that simulate real-world nuclear disasters. For example, they will be tested on their abilities to travel through rubble, drive a vehicle, open doors, operate valves, use a tool to break through a wall, and climb an industrial ladder.
All competing teams can receive research and development funds from the U.S. military.
However, Japanese universities and research institutes have been reluctant to receive such money apparently because of the military connection. The Japanese finalists said they have no intention of accepting prize money even if they win.

The only Japanese team that participated in the Robotics Challenge semi-finals in 2013 was a venture team from the University of Tokyo.
But the Ministry of Trade, Economy and Industry is promoting Japan's strengths in applying robotics for disaster response efforts.
The ministry's New Energy and Industrial Technology Development Organization sought candidates for the Robotics Challenge and offered 100 million yen ($813,000) each to three teams over a two-year period: the National Institute of Advanced Industrial Science and Technology (AIST) based in Tsukuba, Ibaraki Prefecture; the University of Tokyo; and a combined team of the University of Tokyo, the Chiba Institute of Technology, Osaka University and Kobe University.
In early May, the AIST team repeatedly tested a bipedal walking robot on a course featuring a steep ladder, doors and valves. The test area also contained a road where concrete blocks were scattered randomly.
The robot calculated the locations, sizes and shape of the blocks before walking carefully through the course.
"This is a good opportunity to grasp where our team stands in robotics research," said Fumio Kanehiro, the team leader who heads the institute's humanoid research group. "We hope our robot will successfully complete the tasks."
A ministry official said, "There is no possibility of technology transfers to the United States."

Massive solar power plan in Kagoshima Pref.

May 28, 2015

Solar plant for 30,000 households planned in Kagoshima

http://ajw.asahi.com/article/sci_tech/environment/AJ201505280059

An artist's rendition of a mega solar power plant that will be constructed in Kagoshima Prefecture (Provided by Gaia Power)

By SHUSAKU ISOBE/ Staff Writer

Construction of a massive solar power plant on a vast forested mountainside in Kagoshima Prefecture is set to get under way in September.

The plant will be one of the largest in Japan and have an output of 92 megawatts, companies involved in the project said May 27. An estimated 340,000 solar panels will be installed on commercial land covering about 2 million square meters.

A consortium comprising Kyudenko Corp.; Kyocera Corp.; Century Tokyo Leasing Corp.; and Gaia Power, a company in Anan, Tokushima Prefecture, which builds and manages solar power facilities, said annual power generation will be 99.23 gigawatt-hours, which is sufficient to supply 30,500 households.

The project will cost around 35 billion yen ($282 million).

The site, which straddles Kanoya city and the town of Osaki, was originally going to be a golf course. The plant is expected to become operational in October 2017.

Robots challenge in California

June 6, 2015

Disaster-response robots compete in California

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Jun. 6, 2015 - Updated 04:38 UTC+2

Robots from around the world are competing for a 2-million dollar first-prize in the US state of California. Engineers have entered devices designed to respond to natural and man-made disasters.

The 2-day DARPA Robotics Challenge started on Friday.

The competition was launched by a US Defense Department research institute. It aims to help develop robots capable of assisting humans in rescue and restoration operations.

Members of the institute say the Fukushima nuclear accident in Japan in 2011 was one inspiration.

Twenty-three teams are participating in the event.

Four teams are from Japan. Among them are the University of Tokyo, and the National Institute of Advanced Industrial Science and Technology.

At a simulated disaster site, the entrants remotely controlled their humanoid robots in a bid to overcome 8 tasks such as crossing a debris field, driving a vehicle and opening a door.

The teams compete in how many tasks they can complete and the total points earned.

A large crowd has gathered to watch the robots in battle. Spectators cheer whenever a machine clears a challenge.

Robots compete in Fukushima-inspired U.S. challenge

http://www.japantimes.co.jp/news/2015/06/06/business/tech/robots-compete-in-fukushima-inspired-u-s-challenge/#.VXLURUbwmos

AFP-JIJI

POMONA, CALIFORNIA – Robots from six countries, including the United States, Japan and South Korea, went diode-to-diode Friday in a disaster-response challenge inspired by the 2011 Fukushima nuclear meltdown.

The winner of the DARPA Robotics Challenge (DRC), to be announced Saturday after a two-day competition in California, will take home $2 million. The runner-up will get $1 million, and $500,000 will go to the team in third place.

They will also win kudos for triumphing after a three-year robotics contest organized by the Defense Advanced Research Projects Agency (DARPA), which commissions advanced research for the U.S. Defense Department.

"The U.S. military has an implicit mission to respond to humanitarian disaster relief. But in order to do so, you need the tools to effectively respond," said DARPA official Brad Tousley. "In many cases, you'd like to send robots into the places that it's very dangerous for humans to go into," he said, citing nuclear reactor disasters and also earthquakes and epidemics like Ebola

In all, 24 mostly human-shaped bots and their teams — 12 from the United States, five from Japan, three from South Korea, two from Germany and one each from Italy and Hong Kong — won through to the finals.

Over the two days, each robot has two chances to compete on an obstacle course comprising eight tasks, including driving, opening a door, opening a valve, punching through a wall and dealing with rubble and stairs.

The challenges facing them in Pomona, just east of Los Angeles, were designed specifically with Fukushima in mind.

After the March 11, 2011, mega-quake and tsunami, a team of plant workers set out to enter the darkened reactor buildings and manually vent accumulated hydrogen. They had to turn back due to radiation — and in the days that followed, hydrogen built up, fueling explosions that extensively damaged the facility, contaminating the environment and drastically worsening the crisis.

"If the Japanese had had advanced robotics systems that could have used tools that we use in everyday life … they might have prevented some of the damage from the subsequent hydrogen explosions," said Tousley.

While the robotics teams competing in Pomona are focused on the tasks in hand, they also have their eyes on more than just winning the competition.

"Hong Kong is a financial center. … We hope we can inspire the people with more innovation, to be interested in engineering and technology," said Robert Hung from Hong Kong University.

Maurice Fallon of the Massachusetts Institute of Technology said that while robots could become crucial in disaster responses, "the applications outside of this domain are very wide. Eventually we hope that the technology that is being demonstrated here will be used in our daily lives, from home help to elderly care to agriculture and construction — there are many applications."

But watching the competition in Pomona, it must be said that the technology can appear less than impressive. It takes most robots five minutes to open a door, while many of them give up on the task of getting out of a car.

JAXON, the robot from Team NEDO-JSK of the University of Tokyo, is not the only bot to take a tumble, in its case after failing to properly grasp a valve wheel. It had to be carried away on a stretcher.

They are not exactly Transformers yet.

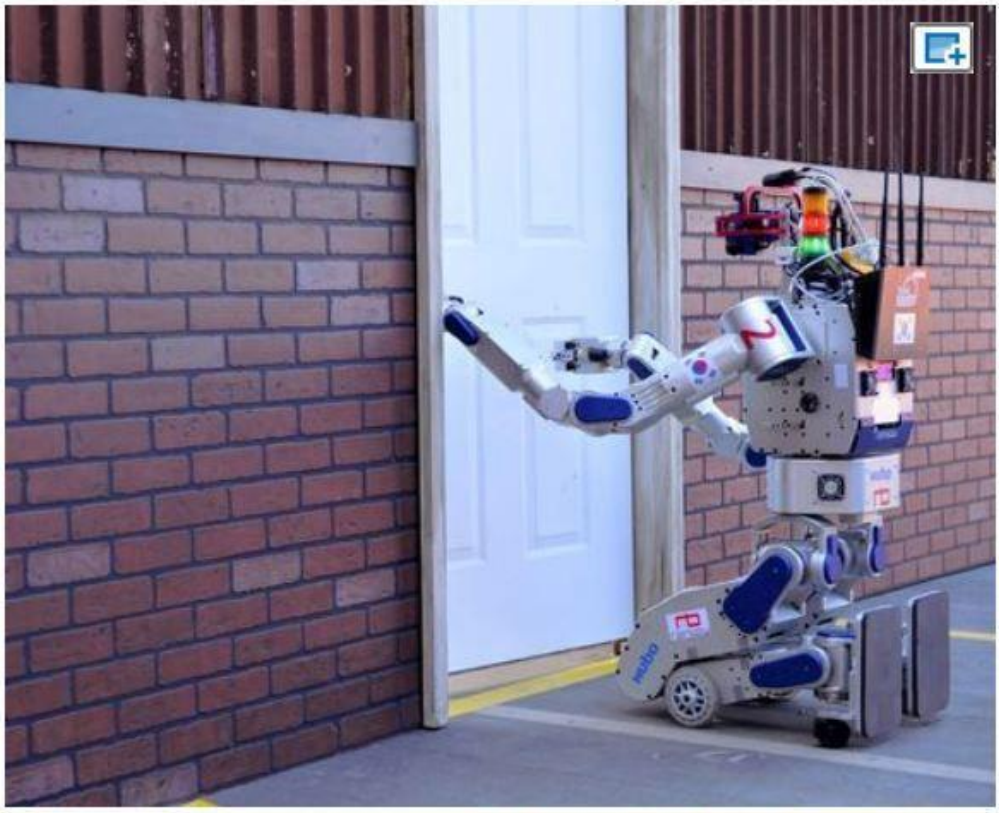
"There is a long way to go," admitted Tousley. "There's fact and there's fiction. There's a lot of fiction out there that robots are much more capable than they really are.

"But part of DARPA's job is to show the possible, and what we can start to do. And then, often, other organizations and other countries or other companies will invest more to bring it along. But it's our job to start that process."

South Korea wins robot challenge

June 8, 2015

South Korean team wins $2 million prize in disaster-response robot test
http://ajw.asahi.com/article/behind_news/social_affairs/AJ201506080009



The South Korean team robot wins the DARPA Robotics Challenge Finals on June 6 in Pomona, Calif. (Provided by DARPA)

THE ASSOCIATED PRESS
POMONA, Calif.--The robots drove, walked through rubble, climbed stairs, turned valves and sometimes fell, amid cheers and groans from a crowd of thousands at the Fairplex here.
After three years of research, development and an obstacle course of competition, a South Korean team on June 6 won the three-year, $3.5 million U.S. contest to create a robot capable of responding to disaster conditions that are unsafe for humans.
Team Kaist of Daejeon took home $2 million in first-place prize money for its DRC-Hubo robot, which successfully completed eight tasks related to disaster response in less than 45 minutes at the DARPA Robotics Challenge Finals.

The contest by the U.S. Defense Advanced Research Projects Agency (DARPA) started after the 2011 Fukushima No. 1 nuclear power plant disaster in Japan. Workers couldn't vent hydrogen from the overloaded reactors without enduring excess radiation. The idea was to create a robot that could do such important emergency tasks in the future and get to the problem site.
Competition was fierce among 23 international teams, including a dozen from the United States and 11 from Japan, Germany, Italy, South Korea and Hong Kong. The robots were timed while navigating eight tasks they would likely encounter in emergency scenarios. The challenge required the teams have their robots face increasingly difficult competitions over two years.
Team IHMC Robotics of Pensacola, Fla., finished second, winning $1 million for its robot Running Man. Tartan Rescue of Pittsburgh, Pa., and its robot CHIMP, designed by Carnegie Mellon University's National Robotics Engineering Center, came in third, winning $500,000.
The event was live-streamed, and YouTube videos culling together clips of the robots taking falls throughout the competition were tweeted out.
"These robots are big and made of lots of metal, and you might assume people seeing them would be filled with fear and anxiety," said Gill Pratt, DARPA program manager and the competition organizer in a statement. "But we heard groans of sympathy when those robots fell. And what did people do every time a robot scored a point? They cheered! It's an extraordinary thing, and I think this is one of the biggest lessons, the potential for robots not only to perform technical tasks for us, but to help connect people to one another."

Special drone for Fukushima reactors

JUne 11, 2015

Drone being developed to fly autonomously inside Fukushima reactor buildings

http://www.japantimes.co.jp/news/2015/06/11/national/science-health/drone-developed-fly-autonomously-inside-fukushima-reactor-buildings/#.VX3PAkbwmot

JIJI
CHIBA – A drone is being developed to survey the interior of reactor buildings at Tokyo Electric Power Co.'s Fukushima No. 1 plant.
The unmanned aircraft will use lasers to detect and avoid obstacles in flight and will be able to land to replace its batteries in the absence of an operator.
A test flight was completed at the plant's No. 5 reactor building, which escaped severe damage in the March 2011 nuclear disaster.
It is not known when the meter-wide hexacopter will be ready to begin inspections inside the buildings housing the No. 1 to No. 3 reactors, which suffered meltdowns, but the team behind it is confident the drone will have a role to play.
"The time will certainly come when drone technology will be of help," said a member of the development team.

The drone is the work of Autonomous Control Systems Laboratory Ltd., a university-based venture headed by Kenzo Nonami, a professor at Chiba University.
The six-propeller drone is equipped with a camera, an instrument to measure radiation levels, and a dust collector.
The aircraft is different from conventional drones in that it can detect walls and other obstacles by laser, even when inside a reactor building, where GPS would not work and where radiation doses may be too high for humans.
The information gathered during a survey flight is converted into three-dimensional data in real time, enabling the production of images of damaged walls and dangling piping, for instance.
The lab has also developed an instrument for automatic battery replacement to eliminate the risk of plant workers being exposed to radiation during battery changes.
When the power begins to run low, the drone automatically lands on a "heliport" on the flatbed of a truck and loads itself with a new battery. This will enable it to prolong its mission.
In the demonstration test at the plant's No. 5 reactor building, the drone was used to carry out an inspection from the first floor to the fifth floor, where a pool for spent fuel is located. The test proved the aircraft's ability to shoot video and measure radiation levels.
Nonami started developing the drone soon after the March 2011 nuclear crisis began, anticipating that there would be demand for a flying robot in what is shaping up to be a decades-long cleanup.
"Once the work shifts to the stage of removing melted nuclear fuel from damaged reactors, radiation doses are expected to rise in the work areas," Nonami said.
"I think the drone will be useful as it can be sent to measure radiation levels and contribute to giving the highest priority to human safety."

7,000 kilowatts wind turbine in Fukushima

June 23, 2015

World's most powerful floating wind turbine unveiled in Fukushima

http://ajw.asahi.com/article/business/AJ201506230043

An enormous floating wind turbine at Onahama port in Iwaki, Fukushima Prefecture, on June 22 (Kenichiro Shino)

By KENICHIRO SHINO/ Staff Writer

IWAKI, Fukushima Prefecture--A floating wind turbine that will have the planet's largest generating capacity was shown to the public at Onahama port here on June 22 ahead of test runs scheduled for late this year.

Ten companies, including Marubeni Corp. and Mitsubishi Heavy Industries Ltd., and the University of Tokyo took part in an experimental study project initiated by the economy ministry to develop the wind turbine.

The turbine has three 82-meter-long blades and rises 189 meters from the ocean surface when the blades are in a vertical position, roughly equivalent to the height of a 50-story skyscraper. It will able to produce 7 megawatts of electricity, which can supply about 6,000 households.

For the trial runs from December, the turbine will be fixed on floats and transported about 20 kilometers off the coast of Fukushima Prefecture where it will generate electricity. The electricity will be transmitted to the coast via underwater cables.

The project team plans to have the turbine operational for practical application as soon as possible after the offshore tests.

June 22, 2015

Largest offshore wind turbine unveiled in Fukushima

http://www.japantimes.co.jp/news/2015/06/22/business/economy-business/largest-offshore-wind-turbine-unveiled-in-fukushima/#.VYksUEbwmid

JIJI
IWAKI, FUKUSHIMA PREF. – A huge floating wind turbine for an experimental offshore power generation project was unveiled Monday at Onahama port in Iwaki, Fukushima Prefecture.
With an output capacity of 7,000 kilowatts, the turbine is the largest piece of offshore wind power generation equipment in the world.
The project, commissioned by the Ministry of Economy, Trade and Industry in fiscal 2011, aims to establish a business model to kick-start domestic wind turbine exports.
The new turbine, some 220 meters high including the floating foundation, will start operating some 20 km off Fukushima in September.
Since the turbine isn't fixed to the sea bottom, it will transmit electricity to land via submarine cable.
Offshore turbines enjoy the benefit of more stable wind than onshore models, and are more efficient because they are not hampered by the constraints posed by land and transportation.
A 2,000-kilowatt wind turbine has already started operations off Fukushima. A third turbine with an output capacity of 5,000 kilowatts will be installed in fiscal 2015.

Scorpion robot for Fukushima

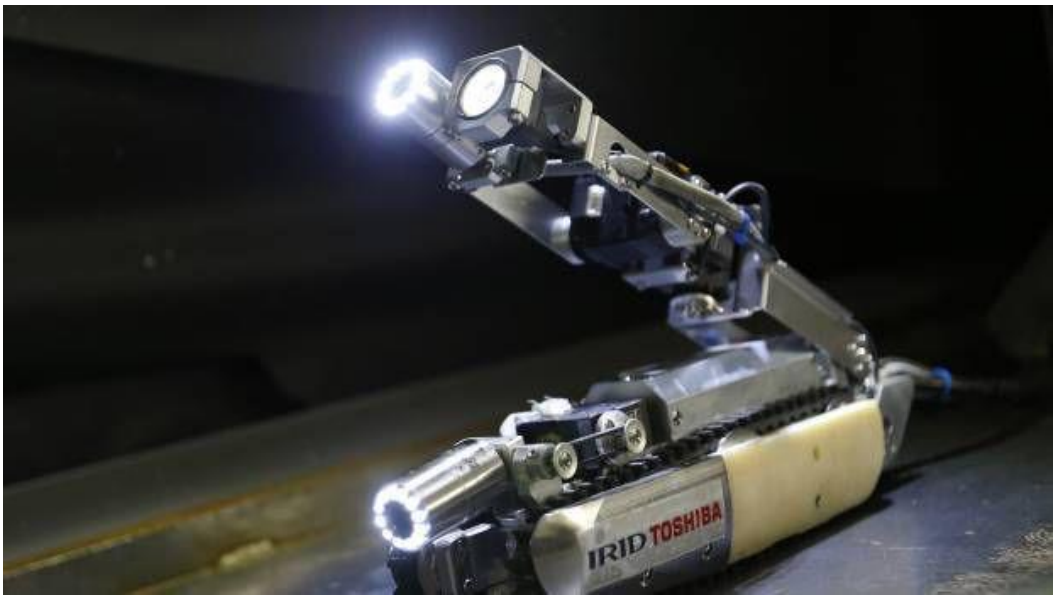
July 1, 2015

Shape-changing robot built to photo melted fuel at Fukushima reactor

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201507010051

By HIROMI KUMAI/ Staff Writer
YOKOHAMA--Toshiba Corp. unveiled a shape-shifting robot that could finally reveal the actual condition of melted nuclear fuel at the crippled Fukushima No. 1 power plant.
The robot will likely be deployed in August in the No. 2 reactor containment vessel for the first survey underneath a reactor core at the plant, Toshiba officials said at a June 30 demonstration for reporters at its Keihin works here.
Equipped with two cameras and light-emitting diodes, the robot will be tasked with taking pictures of the melted fuel.
More than four years after the March 2011 Great East Japan Earthquake and tsunami caused the triple meltdown at the Fukushima plant, high radiation levels are still preventing workers from approaching the reactor containment vessels to accurately assess the damage within.
"We hope the robot will gather as much information as possible with the two cameras," a company official said.
According to Toshiba officials, the probe was developed at the request of the International Research Institute for Nuclear Decommissioning, an organization consisting of electric power companies and nuclear reactor manufacturers.
To pass through narrow spaces, the probe transforms into a 54-centimeter-long tubular shape that measures 9 cm in width and 9 cm in height.

The back part of the robot, which contains one of the cameras, can be rotated to take pictures from different angles.
The device can also right itself if it overturns, Toshiba said.
The probe will enter the central part of the containment vessel through a rail link and operate on the iron-mesh floor beneath the reactor core.
The robot can identify objects up to 3 meters away, even in poor visibility caused by steam or other factors, according to Toshiba.
Robotic probes developed by another company were used to survey the No. 1 reactor containment vessel at the plant in April, but those devices did not enter areas directly underneath the reactor core.
One got stuck between obstacles on the floor, rendering it inoperable.
A monitoring camera installed in the containment vessel to control the second robot later malfunctioned because of high radiation levels, forcing plant operator Tokyo Electric Power Co. to give up its plan to retrieve the robot.



A robot developed by Toshiba Corp. is demonstrated at its laboratory in Yokohama Tuesday. As Japan struggles in the early stages of a decades-long cleanup of the Fukushima nuclear crisis, Toshiba developed the robot, which raises its tail like a scorpion and collects data, to hopefully locate some of the melted fuel in the stricken reactor 2. | AP
Business / Tech

Toshiba rolls out 'scorpion' robot to look inside crippled reactor at Fukushima No. 1

http://www.japantimes.co.jp/news/2015/07/01/business/tech/toshiba-rolls-scorpion-robot-look-inside-stricken-fukushima-reactor-2/#.VZOcnUbwmic

by Mari Yamaguchi
AP

YOKOHAMA – A new robot that raises its tail like a scorpion is scheduled to survey melted nuclear fuel inside one of the three wrecked reactors at Tepco's Fukushima No. 1 plant.
Toshiba Corp., codeveloper of the device, which was demonstrated on Tuesday, said the robot will venture into reactor 2′s primary containment vessel in August after its operators undergo a month of training.

Officials hope the robot can see the fuel in the pressure vessel in the middle of the reactor. The location of the fuel has yet to be pinpointed because of the dangerously high radiation levels nearby.
The unprecedented work of decommissioning the Fukushima No. 1 plant, which was crippled in the 2011 earthquake and tsunami, is expected to take decades.
The scorpion robot is the second to enter a primary containment vessel, after a "snake" robot was sent into the worst-hit reactor 1 in April. The robot stalled inside the reactor and was unable to spot melted-fuel debris there.
This time, the scorpion crawler, which is 54 cm (21 inches) long when it is stretched out, will enter through a duct designed as a passageway for fuel rods.
During the demonstration at a Toshiba lab near Tokyo, the robot slid down a railing and stretched out like a bar, with a head-mounted LED showing its way. After crawling over a slight gap and landing on a metal platform, the robot lifted its tail and looked up the bottom of the control rod drive, a structure above the platform simulating where some melted nuclear fuel might be left.
The scorpion also demonstrated it can roll back upright if it hits an obstacle and rolls over. The ability comes from a tail joint in the middle that bends.
One operator controls the robot with a joystick, and another monitors the video feed from the robot and other data. At the Fukushima plant, the robot will be operated remotely from the command center in a separate building.
The work is expected to take a full day. The robot is designed to tolerate radiation, which should allow it to stay inside reactor 2 for more than 10 hours.

Next-generation robots for Fukushima

The Sakura remote-controlled transfer robot, developed by New Energy and Industrial Technology Development Organization, is operated during a demonstration in Narashino, Chiba Prefecture, in February 2013. | BLOOMBERG

Fukushima in the frame for robot, drone testing center

http://www.japantimes.co.jp/news/2015/07/08/tech/fukushima-frame-robot-drone-testing-center/#.VZzvmfnwmid

JIJI
A center dedicated to testing next-generation robots is set to be built in Fukushima Prefecture under plans being developed by the Japanese government.
Government officials said it was planned to put the center into use around 2017 as a core part of its strategy to boost the use of robots in dangerous locations, such as damaged nuclear power plants, natural disaster-hit areas such as the Tohoku region and workplaces with labor shortages.
The center will also establish a testing field for drones, or unmanned aerial vehicles, which can be used in cases such as surveying buildings after a disaster.
An association of companies and research institutes engaged in the development of drones opened an airfield for test flights in Tsukuba, Ibaraki Prefecture, in May. However, at 100 meters long and 38 meters wide, Japan still lacks a facility for long-distance flights.
Tomoyuki Izu, president of enRoute Co., a drone developer in Fujimino, Saitama Prefecture, welcomed the government plan and called for an airfield big enough for "unrestricted" trial flights.
Shuji Yumitori, head of the Robot and Machinery System Technology Department at the government-affiliated New Energy and Industrial Technology Development Organization, said areas such as Fukushima were "full of the raw data needed for development."
He urged the government to set the world's highest technological standards of innovation and safety.
If Japan created an image that robots meeting the "Fukushima Standards" can be readily used in any disaster site, Japanese-made robots will be "highly rated" in the global market, especially in Asia, Yumitori added.

Onuma goes solar

August 20, 2015

Nuclear slogan writer who saw the light now banks on solar power

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201508200003

By AKEMI KANDA/ Staff Writer
NASU-KARASUYAMA, Tochigi Prefecture--It's the dawn of a sunny new day for a man who as a schoolboy dreamed up an upbeat slogan for a signboard used to promote the now crippled Fukushima No. 1 nuclear power plant.
Yuji Onuma, 39, recently launched a solar power plant here to bring about a "bright future" without nuclear energy.
Onuma, the creator of the iconic "Nuclear energy is the energy of a bright future" sign that still hangs in Futaba, Fukushima Prefecture, hopes his new venture will mark a fresh start for his life, which was greatly affected by the country's energy policy.

“Until the Fukushima accident occurred, I thought my life relied on the prosperity of nuclear energy, but I lost everything when the nuclear plant ended up as a failure,” he said. “My life is still intertwined with the electric industry, but I could make a fresh restart this time thanks to this renewable energy project.”
In 1988, Onuma, then an elementary school sixth-grader in Futaba, which co-hosts the damaged plant, came up with the signboard slogan as a homework project.
The slogan became a local fixture on an overhead signboard that greets visitors at the entrance to a central shopping street of the town. After growing up, he became a real estate agent and operated apartments for plant workers in the town.
But in the wake of the Fukushima nuclear disaster, triggered by the Great East Japan Earthquake and tsunami in March 2011, his family's life has been turned upside down, just as it has for all Futaba residents.
The family has spent more than four years living as evacuees, first in Anjo, Aichi Prefecture, and elsewhere. These experiences have made Onuma reflect on his elementary school slogan and his naive acceptance of nuclear energy.
Thus, in building his solar power plant in Nasu-Karasuyama in eastern Tochigi Prefecture, Onuma and his wife, Serina, 40, decided to place a signboard with the modified message, “Renewable energy is the energy of a bright future” in its compound.
It is the sixth solar power plant he has built in Tochigi and Ibaraki prefectures since he opened the first in Sakura, Tochigi Prefecture, in May last year.
The six power plants are capable of generating a total of 236 kilowatts of electricity, which ironically is sold to Tokyo Electric Power Co., the operator of the Fukushima No. 1 nuclear plant, using the government’s feed-in-tariff system for renewable energy. The system, introduced in July 2012, obligates electric utilities to purchase renewable energy generated by developers at fixed rates.
Onuma’s solar power plants bring in about 200,000 yen ($1,600) a month for his family after the loan payments for their construction are deducted.
“I thought I could contribute to the creation of a nuclear-free world through the renewable energy business,” Onuma said.
He added that he became even more motivated to create a nuclear-free society in Japan after his two children were born while the family was living as evacuees.
Meanwhile, Futaba town officials now plan to remove the brittle signboard later this year at the earliest and preserve it elsewhere.
Onuma has advocated preserving the overhead signboard as is to serve as a reminder of the devastating effects of the nuclear disaster as a "negative legacy."

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Budget for renewables to be increased

August 21, 2015

Budget request for renewable energy to be boosted

http://www3.nhk.or.jp/nhkworld/english/news/nuclear.html

Aug. 21, 2015 - Updated 13:57 UTC+2
Japan's industry ministry is planning to ask for increased funding to promote renewable energy and energy saving measures for the fiscal year that begins next April.

The move follows the government setting **a new target to raise the ratio of renewable energy in the country to a range between 22 and 24 percent by fiscal year 2030**. That's more than twice the current level.

Officials plan to subsidize the updating of hydroelectric power facilities run by utilities and local governments to increase their output. They will also raise subsidies to help support surveys for geothermal power generation.

The industry ministry is to request about **1.1 billion dollars for renewable energy.**

The officials will also request about **2 billion dollars for energy saving measures. That would nearly double the amount compared to the current fiscal year.**

They say it will seek an energy-related budget of about 8 billion dollars in total. This would be an increase of more than 20 percent from the initial budget for the current fiscal year.

Algae plant in Minami-Soma

August 25, 2015

1st algae-based oil producing facility in Fukushima set up in devastated region

http://ajw.asahi.com/article/0311disaster/recovery/AJ201508250056

THE ASAHI SHIMBUN
MINAMI-SOMA, Fukushima Prefecture--An experimental facility to produce oil from algae was constructed on former farmland that was abandoned after the March 2011 Great East Japan Earthquake and tsunami struck the region.
“The new plant embodies local efforts toward a local energy production and consumption policy in areas hit by the tsunami,” Minami-Soma Mayor Katsunobu Sakurai said recently. “I expect operations at the facility will lead to more job opportunities in the region.”
The Algae Industry Incubation Consortium, operator of the large-size biomass plant, which is headed by Isao Inoue, a professor emeritus of the University of Tsukuba, will compile a commercialization plan for its algae-based technology by the end of the fiscal year.
The Minami-Soma city government bought abandoned fields in coastal areas, and provided the consortium with 1.2 hectares of land, where the joint firm constructed various facilities, such as pools to cultivate Scenedesmus and other native algae, using state subsidies.

The consortium plans to mass-produce algae there by adding nitrogen and phosphorus as nutrients, as well as carbon dioxide for photosynthesis, to the culture fluid, and then stirring it with paddle wheels. The operator will study the profitability of the oil generating technology after conducting experiments to convert algae into crude oil through exposing the organisms to high temperatures and high pressure. During the three-year period until the end of this fiscal year, it plans to spend a total of 1.1 billion yen (9.16 million) for the oil producing facility. The biomass plant is the first such facility in Fukushima Prefecture.
The production efficiency for algae-derived oil is higher than that for other biomass fuel. In addition, algae are typically not edible, so there is no risk that use of algae for generating oil will lead to food shortages, unlike corn.

Kyushu Power & geothermal

August 30, 2015

Kyushu utility to double geothermal power generation by 2030

http://ajw.asahi.com/article/business/AJ201508300012
By JUNICHIRO NAGASAKI/ Staff Writer
KOKONOE, Oita Prefecture--Because it is volcanically active, the island of Kyushu is ideally suited to geothermal power generation. That prompted Kyushu Electric Power Co. to announce an ambitious plan on Aug. 5 to double its geothermal output by 2030.
Even though geothermal power accounts for a miniscule share of overall electricity demand, the regional utility said it plans to gradually add more power stations in years to come. One bonus is that geothermal generation offers a more stable electricity supply source compared with solar or wind power.
Kyushu Electric held a completion ceremony on Aug. 5 at the Sugawara Binary Cycle Power Station, a geothermal power generation facility in the town of Kokonoe in Oita Prefecture. With an output of 5,000 kilowatts, it will produce approximately 30 million kilowatt hours a year, or enough to power 8,000 typical homes.
The station's operator is Kyuden Mirai Energy Co., a subsidiary that works with renewable energy.
Including this facility, Kyushu Electric operates seven geothermal power stations in Kyushu. One of them is the Hacchoubaru Geothermal Power Station, an 110,000-kilowatt facility in Kokonoe that is the largest of its kind in Japan. The power company's total geothermal output is around 200,000 kilowatts, accounting for 40 percent of all geothermal generation in Japan.
At the ceremony, President Michiaki Uriu revealed that by 2030, Kyushu Electric will roughly double its current output by adding 180,000 kilowatts. The company has plans for new facilities in Minami-Aso in Kumamoto Prefecture and Ibusuki in Kagoshima Prefecture, but Uriu stated, "That will not be enough. We will add yet more."
Like other utilities, Kyushu Electric is obliged to diversify its power sources in the aftermath of the 2011 nuclear disaster in Fukushima Prefecture.
Solar power generation has rapidly expanded in Kyushu. However, Kyushu Electric has placed restrictions on purchases of solar power because the amount of electricity produced is precariously affected by the weather.
Geothermal power offers a stable supply.

"It doesn't suffer from the disadvantage of fluctuating with weather conditions. So if we can properly manage the resource, we can generate electricity for perpetuity," Uriu said.
While there are expectations that geothermal power will act as a "baseload" power supply around the clock, the technology has been slow to spread. Even at Kyushu Electric, which has the edge over other regional utilities in the development of this technology, geothermal generation only accounted for around one percent of the power supply capacity this summer.
One reason is resistance from local hot spring inns and others who worry that the source of the hot springs will be depleted. The recently completed Sugawara Binary Cycle Power Station uses a well, locally-owned by the town of Kokonoe, to capture steam. In return, Kyushu Electric pays the town about 100 million yen ($830,000) a year as a steam purchase charge.
This mechanism provides a large benefit for the local community.
"We have to have a mutually beneficial relationship with local communities," Uriu said. "We will use this as a model case and continue to develop geothermal power generation into the future."
Geothermal power is typically generated by taking extremely hot and pressurized steam that rises from the ground to spin a turbine, whereas "binary power generation" can produce electricity even if the steam's temperature is relatively low.
With this approach, pentane and other substances with a low boiling point are heated with the steam and evaporated, and the subsequent steam spins the turbine. Although the output is relatively small, it means that more sites can be used as power stations. And it is this factor that is expected to help spread the technology.

New robot to decontaminate No3. building

September 3, 2015

Robot to decontaminate reactor building

http://www3.nhk.or.jp/nhkworld/english/news/20150903_30.html

Sep. 3, 2015 - Updated 13:09 UTC+2
Engineers have tested a robot designed to remove radioactive substances from high places in nuclear reactor buildings at the crippled Fukushima Daiichi power plant in northeastern Japan.

The plant's operator, Tokyo Electric Power Company, plans to use the device as soon as October to decontaminate the building of the facility's No. 3 reactor.

The robot emits high-pressure jets of frozen carbon dioxide grains onto walls and scrapes off the coating along with radioactive substances. The machine's ladder-like structure with a nozzle can reach as high as 8 meters.

Engineers at electronics maker Toshiba tested the robot on Thursday at a factory in Toyohashi City, Aichi Prefecture. Part of the reactor building was simulated at the factory.

The engineers operated the robot remotely while watching footage from 22 cameras attached to the machine. They carefully scraped a blue coating off a 3-meter-high wall.

The device is expected to speed up decommissioning work at the plant, where other robots could not remove radioactive substances from high places. High radiation levels in the reactor buildings prevent workers from entering them.

Toshiba senior engineer Hitoshi Sakai said little is known about contamination at high places in the buildings. He added that his firm wants to create an environment that's accessible for workers by removing radioactive substances.

Solar accounted for 10% of Japan's power needs on hottest days

September 3, 2015

Solar power proved its worth this summer

http://ajw.asahi.com/article/behind_news/social_affairs/AJ201509030045
By DAISUKE HIRABAYASHI/ Staff Writer
Solar power accounted for 10 percent of the nation’s electricity when demand peaked this summer, showing that alternative energy is a key resource in times of need.
A survey by The Asahi Shimbun found that **Kyushu Electric Power Co. covered 24.6 percent of all its electricity needs, or 3.65 gigawatts, with solar facilities from 12 p.m. to 1 p.m. on Aug. 6, when the company said power demand peaked in areas it serves.**
The newspaper asked all major regional power companies what day power demand peaked in areas they serve between July and August, the maximum hourly solar output on that day and the time their solar plants recorded peak outputs.
Valid responses were received from all utilities except Okinawa Electric Power Co.
All nine responding utilities said their highest demand was recorded in early August, and that their solar output peaked between 11 a.m. and 2 p.m.
The reported maximum hourly outputs of the utilities’ solar plants totaled 15 gigawatts--equivalent to the amount of energy produced at around a dozen nuclear reactors in an hour.
The amount of electricity needed across the country during the hours the companies' solar plants were generating maximum output was estimated at 150 gigawatts.
That means **solar power covered 10 percent of all electricity needs during the hottest days of August.**
The survey also showed that **solar power generation accounted for around 16 percent and 12 percent of all power needs for Shikoku Electric Power Co. and Chugoku Electric Power Co., respectively, on their days of peak consumption.**
The nine companies’ ratios of solar power varied, depending on whether their plants received sufficient sunlight and the size of the facilities.

All of the nation's nuclear reactors remained offline until recently due to the nuclear disaster in Fukushima Prefecture that was set off by the March 2011 earthquake and tsunami.
Because of this, utilities have tried to avert power shortages by operating oil thermal power plants, which emit huge amounts of carbon dioxide.
Solar power accounted for just 2 percent of all power generation on an annually adjusted basis.
Even so, **the study showed that clean energy was useful during the dog days of August and helped reduce greenhouse gas emissions.**
Kyushu Electric and Chubu Electric Power Co., however, pointed out that solar power is not 100-percent reliable because "unexpected changes in the weather make it difficult for utilities to correctly estimate solar plants' outputs."
Photovoltaic stations with a total output of 2.84 gigawatts had been introduced as of the end of fiscal 2009. The figure surged to 27 gigawatts by the end of fiscal 2014, due largely to the government feed-in tariff system for clean energy.

Solar & Fukushima

September 16, 2015

Solar farms grow in shadow of Fukushima plant

http://www.japantimes.co.jp/news/2015/09/16/national/solar-power-farms-grow-shadow-fukushima-plant/#.VfmQ0ZfwlLN

JIJI
FUKUSHIMA – Parcels of farmland totaling 250 hectares near the crippled Fukushima No. 1 nuclear plant are returning to life and being covered with solar panels, amid government incentives to invest in renewable power.
At least one village has set up its own tiny power company, and together the solar farms are scheduled to generate about 160 megawatts of electricity.
Tohoku Electric Power Co. will buy the output, according to prefectural and municipal officials in Fukushima Prefecture.
Japan strictly regulates the conversion of farmland to other uses, to keep a lid on disorderly development.
The cases in Fukushima Prefecture were made possible after the central government eased restrictions as an exceptional measure to promote reconstruction following the quake, tsunami and nuclear disaster in Tohoku in March 2011.
Under the measure, such farmland conversion needs to be part of municipal governments' reconstruction plans.
It was driven by a program that the central government adopted in July 2012 requiring major power suppliers to purchase electricity generated from solar, wind, geothermal and other renewable sources at set prices.
Solar power is the easiest renewable to install because the equipment is simple. It was also considered profitable due to relatively high purchase prices, a prefectural official said.
Now, an unexpected rush of entries into the solar power sector has been pushing down purchase prices.

“Further increase in solar power generation is unlikely because of dwindling profitability,” said an official in the village of Iitate, where two large solar power plants are currently planned.
Given the circumstances, an effort is now underway to promote solar power generation while trying to keep farmland intact. Under the so-called solar sharing system, solar panels are positioned so that crops can grow beneath them.
Solar sharing is being tested by Iitate Denryoku, a power company set up by residents of Iitate, which initially pursued large-scale solar power generation but has shifted its approach due to the glut of solar power.
“Whether crops grown there will be sold is uncertain, given public concern about radiation,” said Iitate Denryoku President Minoru Kobayashi, who was a dairy farmer in the village until the disaster. “If solar power generation provides a stable revenue source, this will become an incentive for people to resume farming here. ”

New robot

October 29, 2015

Robot for decontaminating high places to be deployed at Fukushima nuke plant

A new radioactive cleanup robot is seen. (Mainichi)

A new radioactive cleanup robot is seen. (Mainichi)

http://mainichi.jp/english/english/newsselect/news/20151029p2a00m0na011000c.html

A new robot designed to help decontaminate high, hard-to-reach places at the disaster-stricken Fukushima No. 1 nuclear plant will go into service in mid-November, plant operator Tokyo Electric Power Co. (TEPCO) has decided.

The tracked robot is a compact 2 meters high, but can extend cleaning equipment about 8 meters up. Decontaminating the upper reaches of the reactor buildings has hitherto been impossible, obstructing cleanup efforts, and TEPCO hopes the new robot will help solve the problem.

The utility plans to deploy the robot on the first floor of the No. 3 reactor building, home to one of three reactors that melted down in March 2011 and especially radioactive. Decontamination work on the building's floors and other easily reachable areas has been ongoing, but piping and other spots higher up are more complicated to get to and have not been cleaned yet. Some 70 percent of the radiation inside the No. 3 building is from contaminants in its higher reaches.

The remote-controlled robot sprays dry ice onto contaminated equipment such as piping, scrapes off the ice and sucks it up -- along with the radioactive materials.

The new cleanup robot is seen extended to its full 8-meter height. (Mainichi)

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The new cleanup robot is seen extended to its full 8-meter height. (Mainichi)

Maximum radiation levels now stand at 9 millisieverts per hour on the first floor of the No. 1 reactor building, 30 millisieverts in the No. 2 reactor building, and 125 millisieverts in the No. 3 building. TEPCO

has stated that those radiation levels must be brought down to 3 millisieverts per hour or less before it will send human workers into the buildings.
October 29, 2015 (Mainichi Japan)

Feed-in tariffs review: Public consensus essential

October 31, 2015

Review of feed-in tariff system

http://www.japantimes.co.jp/opinion/2015/10/31/editorials/review-feed-tariff-system/#.VjTi0yt1BLN

A review of the feed-in tariff system, introduced in 2012 to promote introduction of renewable energy following the shutdown of nuclear reactors in the wake of the 2011 disaster at Tokyo Electric Power Co.'s Fukushima No. 1 power plant, is underway by a panel of experts at the Ministry of Economy, Trade and Industry.
Planned amendments to the system, aimed at addressing several problems that came to light in its first three years, should be implemented in ways that contribute to boosting the scant share of renewable sources in the nation's electricity supply. The reform should also be accompanied by greater efforts to build a public consensus on what cost the nation is ready to shoulder to establish a sustainable energy supply.
Currently, electricity generated by renewable sources accounts for only 12.2 percent of the nation's total. The share of sources such as solar and wind but not including hydro stands at a mere 3.2 percent. To achieve the government's goal of boosting the renewable share to 22 to 24 percent in 2030 — and hopefully beyond — the system to expand renewable energy supply needs to be based on a long-term vision.
The feed-in-tariff system, which began in July 2012, makes it mandatory for power companies to buy electricity generated by renewable sources at fixed prices set by the government, so that the prospect of stable revenue will facilitate investment in renewable power generation. The system has indeed sharply boosted the introduction of solar power, whose facilities can be built relatively easily and quickly. Solar power output during the peak-demand period in summer 2014 reached 6.33 million kilowatts — the equivalent of six nuclear reactors.
However, much of the increase in renewable energy output capacity under the system — more than 90 percent of the total — has been concentrated in solar. This sharp increase in output led several major power companies to suspend purchases of electricity from solar power operators, on the grounds that their power supply system could be disrupted.
It has also been pointed out that many operators of solar power businesses that have obtained a government permit to sell the electricity at a high fixed price have not started producing power because they're waiting for the cost of solar panels and other items to decrease.
The system should be corrected to prevent distortions in the way renewable energy develops. And yet it appears indisputable that the system is contributing to expansion of the use of renewable energy in this country. In the ongoing review, t**he government should not lose track of the system's basic**

purpose — to reduce the risks for businesses that are serious about developing renewable energy, and to get all of society to share the cost of expanding the use of renewable energy.
The fixed prices for purchase of electricity from renewable sources are set high to ensure a profit margin for the producers. The power companies' cost of buying such electricity is passed on to households and businesses.
During the current fiscal year, the total cost of purchasing renewable energy is projected to reach ¥1.8 trillion. The cost is expected to rise to as high as ¥4 trillion in 2030 if the renewable supply is doubled from the current level in line with government targets.
Reportedly under consideration in the ministry's review of the system is a mechanism to introduce an auction for energy operators if the output of solar power reaches a certain level, so that the purchase of power from more efficient operators would be prioritized and trim the overall cost.
Also called for in the review is a more balanced promotion of various renewable sources whose output is less affected by weather conditions than solar. The ministry is believed to be weighing whether to fix purchase prices for wind, hydro, geothermal and biomass for several years ahead — instead of revising them annually — to promote investments in energy facilities that require a long period to be completed. This could reduce the risk of price fluctuations for prospective operators and encourage them to cut costs.
Under the feed-in-tariff system, the additional charges that consumers pay for electricity will increase as the power supply from renewable sources rises. While the government and power producers should make sustained efforts to win the understanding and support of consumers, the latter will also need to think about the benefits and problems of the system as they weigh the impact on their pocketbooks.
To help build a popular consensus on the issue, discussions of the feed-in tariff system and other measures to promote introduction of renewable energy should be made transparent, rather than being monopolized by the bureaucracy and business interests.

Renewables for Fukushima

January 9, 2016

Foundation supporting renewable energy business operators to be set up in Fukushima

http://mainichi.jp/english/articles/20160109/p2a/00m/0na/009000c

FUKUSHIMA -- Corporations and organizations working to promote renewable energy in the wake of the nuclear meltdowns at the Fukushima No. 1 nuclear plant announced Jan. 8 that they will establish a fund to support renewable energy projects in the prefecture.
A foundation to operate the Fukushima shizen energy kikin (Fukushima natural energy fund) will be founded as early as the end of February, and donations will be accepted beginning in early March. The group is also planning to build a museum to pass down lessons learned from the nuclear disaster to future generations.

The chief representative for the group is Yauemon Sato, the president of Aizu Electric Power Co., which promotes solar power generation in the Aizu region of Fukushima Prefecture. Sato, along with Tetsunari Iida, executive director of the nonprofit organization Institute for Sustainable Energy Policies (ISEP), and Tsuyoshi Yoshiwara, adviser to Jonan Shinkin Bank who has continued to call for Japan to phase out nuclear power, made the announcement at a press conference in Fukushima. Internationally renowned musician Ryuichi Sakamoto is also among the fund's founders.
It was a donation of approximately 3 million yen received from a German civic energy company that prompted Aizu Electric Power's Sato to propose that the fund be set up. Not only will the foundation provide funds to renewable energy business operators, but will also be involved in the development of business plans and in helping companies and organizations work with each other. The aim is for the fund to reach several billion yen in scale; the foundation will also call for land donations.
Since the outbreak of the nuclear disaster, the Fukushima Prefectural Government has set a goal of switching all energy sources within the prefecture to renewable energy by the year 2040. "It's important that the nuclear phase-out begins with Fukushima," Sato said. "We want to achieve recovery based on natural energy through civic power -- without relying on government agencies."
A symposium with former Prime Minister Junichiro Koizumi -- who in recent years has been calling for the elimination of nuclear power -- will be held March 9 to commemorate the foundation's launch. For more information, contact ISEP at 03-5942-8937.

Amending feed-in tariff system

January 24, 2016

Reviewing the feed-in tariff system

http://www.japantimes.co.jp/opinion/2016/01/24/editorials/reviewing-feed-tariff-system/#.VqSrcVKDmov

The trade and industry ministry plans to revise the law governing the feed-in tariff system introduced in 2012 to promote introduction of renewable energy. Through the amendment, the government hopes to achieve a cost-effective expansion of green energy use and hold down the financial burden on consumers.
Since renewable energy in Japan remains more expensive than in other countries, it is reasonable to devise measures to reduce the cost added on to electricity bills. But in so doing, the government needs to take the utmost care so that its emphasis on efficiency will not discourage potential renewable energy producers from entering the market or force out community-based small-scale operators.
The system started in July 2012, following the shutdown of the nation’s nuclear reactors in the wake of the March 2011 disaster at Tokyo Electric Power Co.’s Fukushima No. 1 plant. By requiring the major power companies to purchase at fixed prices electricity generated by solar, wind, geothermal, biomass and medium- to small-scale hydro power, the system aims to facilitate investments in renewable energy sources and expand the use of electricity from such sources. The cost the utilities have paid for the purchases is tacked on to consumers’ electricity bills.

Japan adopted the feed-in tariff system based on the experiences of other countries, especially in Europe, where it contributed to expanded use of renewable energy. The system has indeed led to a steady increase in the amount of electricity generated from renewable sources, although its share in the nation's total power supply still remains small. As of the end of March 2015, the amount of such electricity grew 1.9 times from before the system was introduced. The share of such energy rose from 10.4 percent of the power market in fiscal 2011 — 9 percent from hydro power and 1.4 percent from other renewable sources — to 12.2 percent in fiscal 2014 — 9 percent from hydro and 3.2 percent from other sources. However, solar power accounts for a lopsidedly large portion of power generated from green sources — 96 percent of such electricity produced in the first three years after the system was introduced. Since the prices at which the utilities were required to buy electricity from solar power suppliers were set relatively high, large numbers of businesses sought certification as power suppliers. Yet fewer than 30 percent of the certified solar power-generation facilities have so far gone into operation. Many of the certified operators are believed to be putting off installing solar panels until the cost of panels goes down so they can maximize their profits.

The trade and industry ministry's plan to revise the feed-in tariff system is largely motivated by the prospect that the amount the power companies pay to buy green-source electricity — which is added to electricity bills — will increase greatly. The cost for fiscal 2015 is expected to reach ¥1.32 trillion, translating into a yearly burden of ¥5,688 for each household, according to the internal affairs ministry.

The trade and industry ministry is considering introduction of a bidding system in which prospective renewable power producers submit tenders — in place of the current system of setting fixed prices — if it would be effective in reducing the burden on consumers. As a first step, it is thinking of using a bidding system for solar power facility operators. In certifying the operators as power suppliers under the system, priority will be given to those who offer their electricity at the cheapest prices. There is a certain limit to the total cost of purchasing the power. Certification for the operators may be revoked if they fail to install and start operating solar panels.

For green energy sources whose lead time from the planning phase to the launch of operation is longer, such as wind and geothermal power, a system of presenting to prospective operators in advance the fixed purchase prices to be in force for the coming several years will be introduced.

The bidding system may make it difficult for prospective operators to correctly predict future price trends, thus complicating their investment plans. Hesitation on the part of operators to make new investments may create a situation in which the combined supply of electricity will fall short of the quota. The ministry needs to make sure that the steps under consideration will not hamper or disturb prospective operators' investments and entry into the green energy market.

Community-based small-scale operators may give up offering tenders from the beginning due to their weak technological and commercial footing. Since these operators can play an important role in reviving local economies, the ministry should take necessary steps to prevent large-scale operators from eliminating smaller firms and effectively securing regional monopolies.

The structure of Japan's electricity industry, in which major utilities own and manage transmission lines in addition to generating electricity, is partly responsible for the high cost of renewable energy. The setup allows the major power firms to refuse or reduce the purchase of electricity from green operators under certain conditions. The separation of power generation and transmission under the ongoing wave of liberalization has to wait until 2020. The ministry should review the overall power industry structure and take necessary steps to help lower electricity bills while expanding the use of green energy.

Worldwide more wind than nukes

February 20, 2016

Global wind power capacity tops nuclear energy for first time

http://www.japantimes.co.jp/news/2016/02/20/national/global-wind-power-capacity-tops-nuclear-energy-for-first-time/#.VshjTeaDmot

Kyodo

The capacity of wind power generation worldwide reached 432.42 gigawatts (GW) at the end of 2015, up 17 percent from a year earlier and surpassing nuclear energy for the first time, according to data released by global industry bodies.

The generation capacity of wind farms newly built in 2015 was a record 63.01 GW, corresponding to about 60 nuclear reactors, according to the Global Wind Energy Council based in Brussels. The global nuclear power generation capacity was 382.55 GW as of Jan. 1, 2016, the London-based World Nuclear Association said.

Both wind power and nuclear energy are being touted as alternatives to fossil fuel power as they produce fewer greenhouse gases.

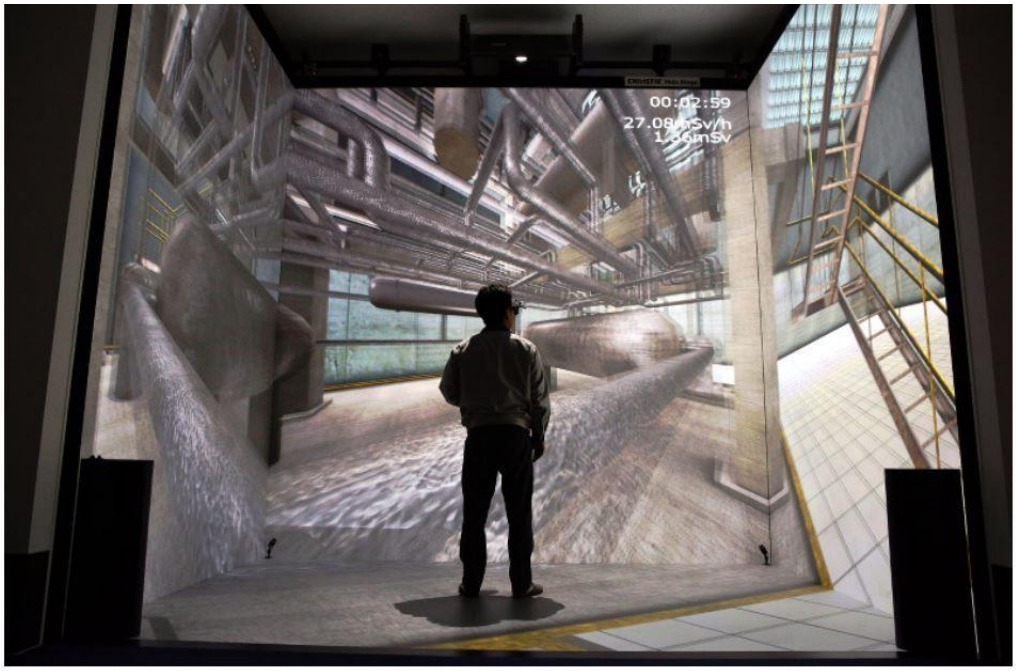
Wind energy has captured renewed attention as technological innovation has considerably lowered its generation costs while nuclear power continues to suffer a backlash following the 2011 Fukushima meltdowns.

Wind power is the leading energy source in the transition from fossil fuels to renewables, the wind energy council said as it released the data last week.

China led all other countries in wind energy generation capacity with 145.10 GW. Beijing is promoting wind power to shift from coal and other fossil fuels to combat air pollution and global warming.

Coming in second behind China is the United States with 74.47 GW, followed by Germany with 44.95 GW, then India with 25.09 GW and then Spain with 23.03 GW. Japan produced 3.04 GW.

Virtual reality to train nuclear workers



A virtual reality image of a reactor building at the stricken Fukushima nuclear plant is seen at Japan Atomic Energy Agency's Naraha Remote Technology Development Center in Naraha, Fukushima Prefecture. (Mainichi)

February 21, 2016

Nuclear plant workers to begin training in virtual reality reactor building in April

http://mainichi.jp/english/articles/20160221/p2a/00m/0na/002000c

NARAHA, Fukushima -- A virtual reality representation of the nuclear reactor buildings at the stricken Fukushima No. 1 Nuclear Power Plant is set to begin operation in April, for use in devising decommissioning plans and for plant workers to practice what they'll be doing once they're inside the actual reactor buildings.

Set up at the Naraha Remote Technology Development Center of the Japan Atomic Energy Agency (JAEA) in the Fukushima Prefecture town of Naraha, the system includes a 3.6-meter-high screen onto which the interior of a reactor building is projected. Specially made glasses allow the user to see the scene -- recreated based on the original design plans and data collected by robots sent inside the buildings by plant operator Tokyo Electric Power Co. -- in 3D. Users can experience walking up and down stairs and see dimly lit pipes throughout the building. Radiation levels and time spent "inside" are indicated at the top of the screen so that users can keep track of how much radiation they've been virtually "exposed" to.

"If plant workers train in this virtual reality environment before they actually go into the reactor buildings, we anticipate that their work inside the plant will go a lot more smoothly," a representative for the center said.

The decommissioning process for the nuclear plant is expected to take 30 to 40 years.

Japan & wind power

February 27, 2016

Japan behind on wind power

http://www.japantimes.co.jp/opinion/2016/02/27/editorials/japan-behind-wind-power/#.VtLNMuaDmot

As nuclear power plants are being restarted in Japan, the government should stop to consider what the rest of the world is doing. Last year, global wind power capacity surpassed nuclear for the first time. Japan, however, is already far behind this global trend, with only a small fraction of its energy coming from wind.

Data released by the Global Wind Energy Council, a body that tracks worldwide energy usage, shows that a record 63.01 gigawatts of energy was added to worldwide wind power capacity in 2015 to reach a total of 432.42 GW. That compares with 382.55 GW for global nuclear power capacity, according to the London-based World Nuclear Association.

That small victory for clean energy was not helped much by Japan, where only 3.04 GW of wind power was produced in 2015. The government drafted a plan to boost wind power to 1.7 percent of the nation's energy mix by 2030, but this figure is startlingly low compared with the current percentage — 3 percent — of global electricity supplied by wind power. The Environment Ministry estimates that Japan has the potential to build enough wind power facilities to produce 280 GW, but that potential has not even begun to be tapped.

With its total installed capacity reaching 145.1 GW in 2015, China topped the European Union's 141.6 GW, The United States followed with 74.47 GW. India, with 2.62 GW, pushed past Spain into fourth place. The shift from coal and fossil fuels to wind power is an important step toward reducing air pollution, especially in China. The Japanese government has yet to undertake a future-oriented policy to get in line with these global trends.

Wind power does have some drawbacks, such as the effects of turbines on animals and the environment, as well as conflicts over land-use rights. These are not inconsiderable, but they should be investigated and resolved in the process of development. Japan is not that much different from other countries in this regard, though the energy production and distribution infrastructure for wind power remains another hurdle in many regions of the country. The longer it takes to initiate, though, the more expensive infrastructure will become.

Environmental impact assessments and planning for land use should continue to ensure that wind power increases as part of the total energy mix in Japan. The main problem is a lack of will on the part of the national government. Japan's continued use of nuclear energy and fossil fuels is not a viable energy strategy. Mixing in a higher percentage of wind power is essential if Japan's long-range energy needs are to be met in a rational way.

NRA's new simulator

March 24, 2016

NRA shows how it will train staff to respond to a nuclear crisis

http://ajw.asahi.com/article/0311disaster/fukushima/AJ201603240067

By HIROMI KUMAI/ Staff Writer

The nation's nuclear watchdog showed off its new training facility that simulates the central control room of a nuclear power plant so key staff can respond better to an emergency.

The site, inside a building in Tokyo's Minato Ward, was completed in February at a cost of 1.58 billion yen ($14.01 million). The Nuclear Regulation Authority showed it off to reporters on March 23.Monitors modeled after instruments and other equipment in the central control room line the entire wall of the training facility. It is also fitted with six sets of terminals that can display changes in conditions of the reactor core and a containment vessel in the event of a nuclear accident.

The central control room, as its name implies, regulates and monitors all operations inside a nuclear power plant.

Three people, including individuals who have headed a nuclear operations team at plants around the country, will serve as instructors.

From April, the start of the new fiscal year, the NRA's staff members in charge of examining, inspecting and responding to nuclear emergencies will learn how to form the correct judgement in times of crisis at a nuclear plant.

"Although there has been few chances to touch (the real instruments), we can now experience what it is like," said an official at the facility.

"We want to enhance our staff members' sense of actually responding to a nuclear accident and equip them with the proper expertise as soon as possible."

Nuclear power simulator to help NRA prepare for possible disasters

http://mainichi.jp/english/articles/20160324/p2a/00m/0na/004000c

Employees from the Nuclear Regulation Authority Secretariat are seen in Tokyo's Minato Ward on March 23, 2016, training in a nuclear power plant central control room simulator. (Mainichi)

The Nuclear Regulation Authority (NRA) unveiled to members of the press on March 23 its nuclear power simulator, which has been newly built within its Human Resource Development Center in Tokyo's Toranomon district to provide training for potential situations of nuclear disaster.

Replicating the functions of a central control room, the simulator is equipped with a touch panel featuring 69 different types of control boards and instruments. It can recreate the conditions occurring when a major disaster takes place at both boiling-water and pressurized-water types of nuclear reactors. Plans are additionally in place to add functions for latest model reactors.

The simulator -- which was completed at the end of February, and cost a total of 1.6 billion yen to construct -- is poised to serve as a useful tool during study sessions organized on behalf of NRA Secretariat employees.

While such employees will not operate nuclear reactor equipment during times of actual disaster, NRA Human Resource Development Center Vice Director Juichiro Ito notes that the simulator "will be effective in terms of conferring the ability to provide guidance during times of emergency."

Japan & Solar

April 2, 2016

Japan solar power generation jumps 23 times over 10 years

http://mainichi.jp/english/articles/20160402/p2a/00m/0na/013000c

Solar panels set up along the southern end of the Tottori Airport runway are seen on Feb. 21, 2015. (Mainichi)

Japan is pumping out 23.3 times more solar power than it was a decade ago, with a particularly large generating jump after the introduction of feed-in tariffs, according to estimates by Chiba University and Institute for Sustainable Energy Policies (ISEP) researchers.

Since fiscal 2005, Chiba University and the NGO ISEP have put out a renewable energy generation estimate at the end of March every year. In fiscal 2005, solar power sources produced 1.23 million megawatt-hours, while in fiscal 2014 they produced 28.69 million megawatt-hours, equivalent to the yearly power usage of 5.21 million homes, according to the estimates. Around 80 percent of the jump occurred after the introduction in fiscal 2012 of feed-in tariffs, a system where utilities buy up electricity from private renewable energy producers at fixed rates.

Meanwhile, other alternative energy sources have seen much less growth. Wind power, which requires comparatively large-scale development, grew by 2.2 times over the past 10 years, and biomass power generation grew by 3.5 times. Wind power production rose from 2.25 million megawatt-hours to 5.05 million megawatt-hours, and biomass power production rose from 0.56 million megawatt-hours to 1.96 million megawatt-hours.

Chiba University professor Hidefumi Kurasaka says, "In order to meet the goal of cutting domestic greenhouse gas emissions by 80 percent by 2050, the large-scale introduction of renewable energy is essential. The national government should move forward with frameworks to advance types of renewable energy besides solar. Furthermore, the purchase price for solar energy is being lowered every year, which may weaken the growth of solar power generation."

Under the feed-in tariffs, power companies pay renewable energy producers for a period of up to 20 years at a fixed price. The prices differ per energy type, and are set every year by the economy, trade and industry minister according to factors such as the proliferation of that energy type. In the case of solar power-producing companies, at the start of the tariffs in July 2012 they were paid 40 yen per kilowatt-hour, but with the spread of solar power the price was lowered to 24 yen per kilowatt-hour for fiscal 2016.

Fukushima: What energy future?

May 19, 2016

INSIGHT: Fukushima's 'caldrons of hell' keep questions unanswered

http://www.asahi.com/ajw/articles/AJ201605190001.html

By TOSHIHIDE UEDA/ Senior Staff Writer

A convenience store in Okuma, Fukushima Prefecture, on March 12, 2016, remains as it was when the 2011 earthquake and tsunami triggered the nuclear accident. (Satoru Semba)

A convenience store in Okuma, Fukushima Prefecture, on March 12, 2016, remains as it was when the 2011 earthquake and tsunami triggered the nuclear accident. (Satoru Semba)

After spending slightly more than two years in the capital of Fukushima Prefecture, I was assigned to The Asahi Shimbun's Tokyo head office starting on May 1. I moved house the other day.

I had previously never been based in Fukushima, although I have long covered energy policy and a number of nuclear accidents as a reporter for the newspaper.

On April 11, 2014, shortly after I was assigned to Fukushima, I was told the words that would serve as a starting point for my news-gathering activities there. I am citing that phrase, which I quoted in a previous column, for a second time here:

"Whatever the future of nuclear power generation, it will remain essential to expand renewable energy sources to ensure a stable energy supply and to fight global warming. Fukushima Prefecture has swaths of land and a historical background for doing so.

The energy industry has always been its leading local industry. The prefecture is home to the Joban coal field, and Iwaki was a city of coal mines. Nobody will be able to change Japan unless Fukushima takes it upon itself to do the task."

The remark was made by Yukihiro Higashi, then professor of thermal energy at Iwaki Meisei University.

After the Great East Japan Earthquake and tsunami triggered the Fukushima nuclear disaster in 2011, the Fukushima prefectural government defined "building communities that do not rely on nuclear energy" as a leading principle of its post-disaster rebuilding efforts.

It set a goal of having renewable energy sources cover all energy demand in the prefecture by around 2040. Higashi played a central role in working out that vision.

The goal may seem preposterous, but the professor's remarks led me to realize that it isn't.

LEADING ENERGY PLAYER

Fukushima Prefecture produced 10 percent of Japan's electricity before it was hit by the nuclear disaster. Most of that electricity was sent to the greater Tokyo area, so the prefecture was sometimes sarcastically referred to as a "colony of Tokyo."

But all that would have been impossible had it not been for the "swaths of land" and the "historical background" suitable to having electric power generated there.

Energy has always been the representative local product of Fukushima Prefecture. That history dates back to the late Edo Period (1603-1867), when the Joban coal field was discovered.

Energy created in the prefecture continued to support Japan's modernization even after electricity replaced coal as the leading player.

Living in Fukushima Prefecture provides plenty of opportunities to learn about that history.

A cluster of old hydroelectric plants stands in the environs of Lake Inawashiroko. A dozen of these plants, which were built during the Meiji (1868-1912) and Taisho (1912-1926) eras and taken over by Tokyo Electric Power Co., continue to send electricity to the greater Tokyo area to this day.

A step-like array of hydroelectric plants along the Tadamigawa river in the prefecture's western Oku-Aizu district was built in the postwar period in a desperate drive to "rebuild Japan."

Both hydroelectric undertakings drew on the bountiful water resources that are the blessings of the prefecture's terrain.

Nuclear reactors and a bunch of giant thermal power plants began to spring up along the Pacific coast during the high economic growth of the postwar period.

When cast in the context of that history, the goal set forth by the prefectural government appears to betray the pride of its own "leading local industry." The prefecture's people pledged that they are the ones who will replace the leading player of energy.

Ten days after I met Higashi, I visited the Yamatogawa Shuzoten sake brewery in Kitakata, Fukushima Prefecture, to see Yauemon Sato, the ninth-generation chief of the brewery, which has been operating since the mid-Edo Period.

Sato had founded Aizu Electric Power Co. in August 2013, setting out on an ambitious plan to help rebuild the prefecture by means of renewable energy sources.

"You know the caldron of hell?" Sato asked me. "You will be sent to hell and will be boiled in that caldron if you do evil. There are four such caldrons in Fukushima Prefecture. And they are still gaping."

The No. 1 through No. 4 reactors of TEPCO's Fukushima No. 1 nuclear power plant, which caused a calamity that will go down in the history of humankind, could certainly be called "caldrons of hell."

The use of renewable energy sources is a means for closing those caldrons and for obliterating them from Fukushima Prefecture.

More than two years later, the use of renewable energy sources is steadily gaining ground in the prefecture, covering 26.6 percent of all energy demand as of the end of March. The goal remains far in the distance, but the ratio has been gaining about 1 percentage point every year.

The caldrons are still gaping. TEPCO has yet to solve the question of how to block groundwater from flowing into the reactor buildings, which is only increasing the stockpile of water contaminated by radioactive substances. That is preventing the utility from starting serious work to decommission the reactors.

LEFT IN LIMBO

"What should we do?" a 59-year-old woman, evacuated from Okuma, which co-hosts the crippled nuclear power plant, to Koriyama, also in Fukushima Prefecture, asked me when I interviewed her about a year ago.

“Should we go on with our new life here, or should we return to our hometown? My thoughts remain in limbo, and I cannot get around to making up my mind.”
I did not know how to answer her question.
More than 94,000 people of Fukushima Prefecture continue to live as evacuees. The government of the town of Okuma, where all residents remain evacuated, plans to create a rebuilding base with a “habitable environment,” hopefully by fiscal 2018.
But full rebuilding of the town lies far beyond that goal. And that is leaving many people “in limbo.”
What should we do? My pursuit of that unanswered question will continue.

Wind for Fukushima

May 24, 2016

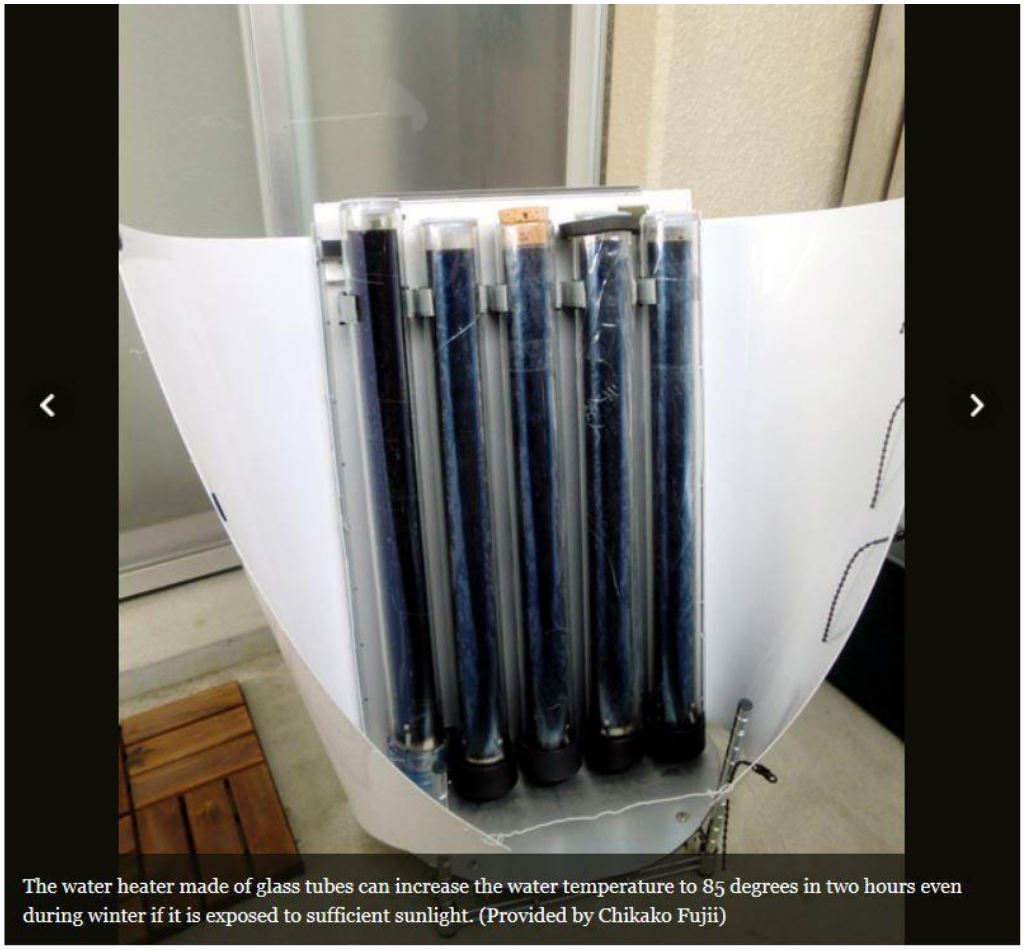
Wind power facilities planned for Fukushima Prefecture

http://mainichi.jp/english/articles/20160524/p2a/00m/0na/015000c
The national government and the Fukushima Prefectural Government have agreed to set up 500 megawatts' worth of wind power plants in Fukushima Prefecture and begin sending the generated power to the Tokyo metropolitan area by 2020, it was learned on May 23.
The project is part of a plan to redevelop Fukushima Prefecture as a leading area in renewable energy. Hundreds of 2- to 3-megawatt wind power turbines are planned to be set up along the coast and in the Abukuma region, where relatively stable wind power can be obtained. At around 500 megawatts, the full amount of power generated is expected to be about one-tenth of what the crippled Fukushima No. 1 Nuclear Power Plant used to produce.
The Fukushima Prefectural Government is proceeding with checks of the wind in potential construction sites along the coast and in the Abukuma region and with assessments of the expected impact on the environment in order to find which areas are best suited to wind power.
The Shin-Fukushima transformer substation, out of use since the 2011 nuclear disaster, is planned to be used in sending the power. The Ministry of Economy, Trade and Industry is moving forward with plans to set up power lines to connect the existing power grid with the new wind power plants.
Within the year, Fukushima Prefecture will invite businesses to participate in the project. Participating businesses will pay 1 million yen per megawatt of power produced to an organization for the promotion of renewable energy in Fukushima Prefecture consisting of the central government, the Fukushima Prefectural Government and Fukushima No. 1 nuclear plant operator Tokyo Electric Power Co., among other groups.
Michiaki Hirose, president of Tokyo Gas Co., one company considering joining in the project, says, "We want to do what we can for Fukushima. If it is economically feasible we will go ahead with the project."
According to Japan's New Energy and Industrial Technology Development Organization, over the 10 years leading up to fiscal 2014, the number of wind turbines in Japan grew from 920 to 2,034, with the total power generation from them growing from 920,000 kilowatts to 2.93 million kilowatts. Since 2012 there has been a system for power companies to buy up wind power generated by others at a fixed price.

However, wind farms over a certain size require an environmental impact assessment to be done beforehand, causing a time delay. There are also cases where local residents conduct protests due to concerns about sound pollution and the effects of wind farms on the environment.
The Electricity Business Act was amended in 2015 after a series of incidents in Japan of wind turbine blades falling, and from fiscal 2017 utilities will be required to perform regular maintenance checks on their wind turbines.

No electricity for 4 years...

Chikako Fujii says she uses a human-powered dynamo remodeled from a bike-type training machine to generate power in emergencies. (Junichi Bekku)



The water heater made of glass tubes can increase the water temperature to 85 degrees in two hours even during winter if it is exposed to sufficient sunlight. (Provided by Chikako Fujii)

June 1, 2016

Woman gives up electricity and goes 'off grid' for 4 years

http://www.asahi.com/ajw/articles/AJ201606010003.html

By JUNICHI BEKKU/ Staff Writer

Chikako Fujii used to leave the TV on all the time, but since the Fukushima nuclear disaster inspired her to go "off grid" nearly four years ago, she has consumed literally no energy supplied from her regional power company.

Fujii, 55, a textile dyeing artist, uses a tiny amount of electricity generated primarily by solar panels set up on her veranda that measure a total of just 1.6 square meters.

The lifestyle choice means that Fujii cannot power an air conditioner, a refrigerator or a TV with such a small quantity of energy, but those things don't concern her.

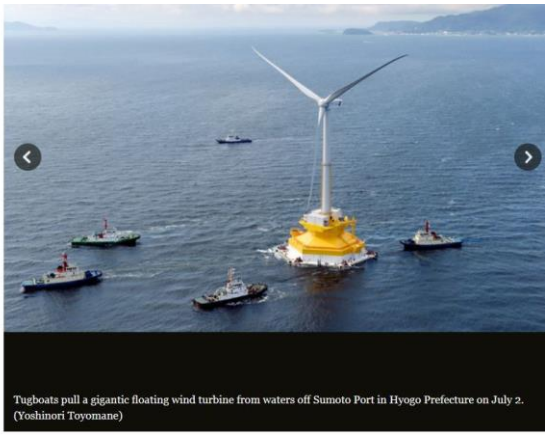
"I enjoy working out how to lead a life without using electricity," she said.

A resident of Kunitachi, western Tokyo, Fujii terminated her contract with Tokyo Electric Power Co. in September 2012, after rolling blackouts were implemented in the wake of the March 2011 Great East Japan Earthquake and tsunami, which triggered a triple meltdown at the Fukushima No. 1 nuclear power plant.

Fujii said that before the disaster struck, she habitually left the TV on so that she could check the time whenever she wanted.

But when she stopped using her home appliances one by one, she found her electricity bill could be reduced.
While she paid more than 4,000 yen ($36) per month for electricity before the disaster, the figure gradually dropped to around 2,000 yen. When she finally unplugged the refrigerator, which requires much power, the bill reached 800 yen.
“I thought I might be able to live without relying on the power company, and decided to start an off-grid life for the fun of it,” Fujii said.
The solar panels installed on the veranda have a power production capacity of 260 watts and can generate more than 1 kilowatt-hour of power on a typical sunny day--enough to operate a washing machine for three hours to dye fabrics with plant-derived materials.
However, when cloudy weather continues for a week during the June rainy season or due to a typhoon, the electricity stored in the battery dries up. When that happens, Fujii uses a pedal-operated sewing machine and an old charcoal-powered iron for her work instead of electric ones.
One night, Fujii was asked by a business partner to send a document by e-mail on short notice.
She pedaled hard a human-powered dynamo remodeled from a bike-type training machine to generate electricity to use her computer.
As Fujii cannot use an air conditioner, she made small holes in a plastic bag containing water and hung it above the veranda to sprinkle water automatically to cool the surrounding air.
In lieu of an electric kettle, she painted plastic bottles black and exposed them to sunlight to heat the water inside.
In December last year, Fujii also introduced a handmade heater made out of a used tempura oil-based lamp and a flowerpot put over the lamp upside down. According to Fujii, 20 milliliters of oil can keep the flowerpot hot for three to four hours.
She said she daily consumes only 500 to 800 watt-hours of power at home, about one-12th that for an ordinary household.
“I always live while being conscious of the weather,” Fujii said. “For example, when I wake up to find it is sunny, I think I should use the washer today. Thinking this way is fun for me.”

Wind off Fukushima



Tugboats pull a gigantic floating wind turbine from waters off Sumoto Port in Hyogo Prefecture on July 2. (Yoshinori Toyomane)

SUMOTO, Hyogo Prefecture--A massive floating wind turbine with an output capacity of 5 megawatts began the slow journey to its final destination off the coast of Fukushima Prefecture on July 2.

The turbine had been undergoing assembly off the coast of Sumoto Port on Awajishima island, Hyogo Prefecture.
With its completion, tugboats began the slow trip to waters off Fukushima Prefecture. Traveling at a speed equivalent to a human adult walking at a brisk pace, or between six to eight kph, the turbine is expected to complete the journey of about 960 kilometers and reach the waters where it will be permanently installed on July 8, according to the schedule.
It will be one of three to be set up about 20 kilometers off the coast of Fukushima as part of an experimental research project of the Ministry of Economy, Trade and Industry.
The electricity-generating windmill was constructed by a group of companies, including Japan Marine United Corp. and Hitachi Ltd.
Each of the three wings on the turbine is 62 meters long. The tip of one of the wings stands about 150 meters above water at its highest point.
According to the industry ministry, the turbine's output of 5 megawatts will make it the second largest capacity in the world behind one already installed off Fukushima Prefecture. The first has an output capacity of 7 megawatts.
The base for the second turbine was constructed in Sakai, Osaka Prefecture.
July 3, 2016

Floating wind turbine begins slow trip to off Fukushima coast

By HIROYUKI YOSHIDA/ Staff Writer

Tugboats pull a gigantic floating wind turbine from off the coast of Sumoto Port in Hyogo Prefecture to its eventual destination off the coast of Fukushima Prefecture. (Makoto Nagano)

What's happening to Japann's solar boom?

July 14, 2016

Sun no longer shines on Japan’s solar boom as subsidies wane

http://www.japantimes.co.jp/news/2016/07/14/national/sun-no-longer-shines-japans-solar-boom-subsidies-wane/#.V4fRIqJdeov

by Chisaki Watanabe and Stephen Stapczynski
Bloomberg

Japan’s solar boom is beginning to falter.
Until recently, the resource-poor nation has been one of the leading markets for photovoltaic (PV) units, helping to prop up an industry hurt by falling prices for the technology and policy changes. But four years after the introduction of generous incentives to promote clean energy in the wake of the March 2011 Fukushima nuclear disaster, data show the boom is losing steam.

The slowdown — after several years of rapid growth — threatens to undermine the government's push to find a clean alternative to nuclear power and dims what has been a bright spot for the global photovoltaic industry.

"As the declining volume of PV module shipments shows, the market is shrinking," said Takehiro Kawahara, an analyst for Bloomberg New Energy Finance.

Repeated tariff cuts and difficulty securing land and grid connections are among some of the reasons that have led to a drop in new applications to develop solar, Kawahara said.

For Japanese panel makers such as Sharp Corp. and Kyocera Corp., "the shrinking domestic market forces them to lower costs to remain in competition with international players or consider exiting the segment," he said.

Solar power-related bankruptcies are increasing, according to Teikoku Databank Ltd. The number of companies that went bust rose to 36 in 2015, from 17 in 2013 and 21 in 2014. Bankruptcies continue to accelerate, with 17 seen in just the first five months of 2016, Teikoku said.

Some question what Japan has got for all the money spent on promoting clean energy. While more solar energy is being produced, it still comprises a fraction of the nation's power generation mix.

The data, drawn from government and industry sources on solar's contribution to the power mix as measured by what is purchased and produced by the nation's 10 regional utilities, show the percentage has gone from about 0.4 percent in 2012 to about 3.4 percent in 2015.

Solar has grabbed the lion's share of what is known as feed-in tariffs — above-market rates awarded to producers of clean energy. With available land for solar in short supply and some utilities saying they cannot accept more intermittent solar power, that is a worry for some. Also, only about a third of the solar projects awarded the preferred rates have actually begun producing power.

The bulk of the clean energy capacity approved by the government under the FIT program since 2012 has been in solar, raising concern that the tariffs do not seem to have stimulated much in the way of other clean energy sources.

"Feed-in tariffs have proved there's potential for 80 gigawatts of solar in Japan," said Masaaki Kameda, secretary-general at the Japan Photovoltaic Energy Association, the country's solar lobby. "But to bring online this potential, various policies need to be applied continuously," he said.

The government has tightened rules for projects that have been delayed and plans to introduce an auction system for large-scale solar next year.

"Now that we know that solar power generation systems can certainly supply energy, it is important to find out how we can make the most of the generated power," Kameda said.

Prime Minister Shinzo Abe has tried to play it both ways — saying he's a supporter of clean energy, while also backing a continued role for nuclear and a big role for coal. Despite clouds over the nuclear industry and repeated failed attempts to get reactors back online, Japan's latest policy pronouncements see nuclear accounting for as much as 22 percent of Japan's power mix by 2030. Similarly, the government sees a bright future for coal at 26 percent.

Japan's solar market is expected to shift to rooftops. Between 2016 and 2040, Japan will add 94 gigawatts of new solar, including 65 gigawatts of rooftop PV, BNEF said in a report last month.

If Japan wants to achieve a much higher penetration of renewables, "an independent system operator would be necessary to ensure the grid connection approval process is neutral," said Kawahara.

Japanese solar

July 22, 2016

Hurdles mar Japan's renewable energy equation

http://www.japantimes.co.jp/news/2016/07/22/business/hurdles-mar-japans-renewable-energy-equation/#.V5IbZ6Jdeot

by Jarni Blakkarly

At Yamakura Dam, 45 km southeast of Tokyo, construction workers are screwing together a 51,000-piece jigsaw puzzle of floating solar panels. When completed, it will be one of the world's largest floating solar projects.

Roughly 30 percent of the work on the project in Chiba Prefecture is complete, and when it comes online in 2018, the 13.7 megawatt facility will provide enough electricity to power almost 5,000 households annually.

However, even attention-grabbing projects like this one will produce less than 1 percent of what's needed for Japan to reach its 2015 goal of doubling its renewable energy use to between 22 and 24 percent by 2030 from around 10 percent at present.

The growth of renewable energy in Japan risks being smothered by a wave of newly approved coal mines across the country, as the government is expected to lower its optimistic goal of reviving nuclear energy.

Experts say the government energy policy review, expected as early as next year, will likely result in a downgrading of the forecast for nuclear power's role in the 2030 energy mix — to between 10 and 15 percent from its current 22 to 24 percent. The move to amend the forecast, initially made in 2015, comes as the government faces ongoing legal challenges and public backlash against the restart of nuclear reactors that were taken offline in the aftermath of the 2011 Fukushima reactor meltdowns.

Downgrading the nuclear proportion of the energy mix will provide a fresh wave of opportunities for alternative energy sources to play a larger role.

However, experts say burdensome environmental assessments for wind and geothermal energy, disadvantaged access to the power grid, as well as 48 approved new coal mines, will mean renewable energy may see few of the benefits.

In almost every prefecture nuclear power and fossil fuels are classified as “baseload” energy sources and given priority access to the electricity grid. While renewable companies have access, they are the first to be switched off in the event of excess power and they aren’t compensated.

Ali Izadi-Najafabadi, head of Bloomberg New Energy Finance in Japan, said this is the opposite of the way systems are configured in Europe, where renewables get first access to the grid because they have the lowest marginal cost of production.

“The government said they wanted to make sure the baseload generators wouldn’t have to adjust the baseload for renewables, which are unreliable. It’s a bit of a flawed argument,” Izadi-Najafabadi said.

He said it was “more about the financial arguments” for the operators of these plants. “These generators are only cheap if you produce at a constant rate,” he said.

Gerhad Fasol, CEO of Eurotechnology Japan, a company that works with European technology companies investing in renewable energy here, says the country has a long way to go to catch up with the rest of the world. “Japan had the initial solar surge in 2011, but now there needs to be a focus on how to broaden and diversify,” Fasol said.

Shortly after the March 2011 Fukushima meltdowns the government introduced generous incentives for investment in renewable energy in the form of feed-in tariffs where the government buys renewable energy at above-market rates.

Data from Japan’s 10 largest regional utility companies showed the share of solar in the energy mix rose to around 3.4 percent in 2015 from 0.4 percent in 2012.

But as the initial feed-in tariffs have since been scaled back, the solar investment boom is fading. Sales in photovoltaic units are on the decline and Teikoku Databank Ltd. said in a recent report that the number of solar companies going bankrupt is rising sharply.

Izadi-Najafabadi said that while large-scale solar energy investment will likely see a “significant slowdown” over the next few years, Bloomberg New Energy Finance expects a massive uptake in rooftop solar, driven by consumers incentivized by favorable loan options from banks.

“The government forecast solar would be 7 percent of the energy mix in 2030; our forecast is closer to 12 percent. We also think the government might exceed their overall 22 percent total renewable prediction. Rooftop solar is really going to drive this,” Izadi-Najafabadi said.

Others, however, are not as optimistic. Shaun Burnie, senior nuclear specialist for Greenpeace Germany, who has analyzed Japan’s nuclear program since 1991, said large-scale renewable investment will continue falling and the government may not reach its renewable energy goals unless hurdles regarding access to the grid are surmounted.

“If you are a solar company and you aren’t guaranteed access to the grid, why would you invest? There is a critical role for the government in untangling the grid and wresting back control from the utility company in the next four years,” said Burnie.

“There is an intentional destabilization of renewables from the utility companies (through denying access to the grid) and it needs to stop.”

One of the reasons the government gives coal and nuclear energy preferential treatment is because they are considered more stable than renewable energy sources, which are reliant on weather.

In Europe, Burnie pointed out, an emphasis on a range of renewable energy sources provides most countries with a stable baseload of energy.

In Japan, the spread of renewable energy to sectors other than solar is thwarted by complicated environmental assessment approvals, which take between two and five years and are not required for nuclear power or coal-fired power plants.
There are only a few wind farms currently operating in Japan and most are offshore and in trial phases. Strong community resistance in parts of the country has also severely limited investment in land-based wind energy.
The country also has significant potential for geothermal energy, with **a** National Institute of Advanced Industrial Science survey in 2008 finding Japan has the third-highest resources for geothermal in the world.
However, investment has also been slowed by the environmental assessment process and resistance from the *onsen* hot springs industry, which is concerned about the impact accessing more geothermal energy will have on their business.
In the U.S., President Barack Obama announced a moratorium on all new federal coal-mining leases in January and many developed countries are slowly weaning themselves off coal. However, in Japan the government is increasingly turning to fossil fuels to fill the energy gap left by idled reactors.
Liquefied natural gas has been used to fill much of the country's short-term electricity needs and the approval of the 48 new coal mines in the past several years appears to indicate the government's medium to long-term goals.
"We say in Japan it's easier to build coal-fire power plants than wind farms," said Nao-yuki Yamagishi, leader of the World Wildlife Fund Japan's climate and energy group.
Yamagishi said that if the 48 new coal plants approved by the government come online, coal will overshoot a 26 percent target in the 2030 energy mix, down from 30 percent in 2013, and block space for further potential renewable energy increases.
Yamagishi said the recent move toward coal has made him skeptical about whether Japan is capable of fulfilling the pledge it made last December at the COP21 climate conference in Paris.
Japan vowed a 26 percent cut in greenhouse gas emissions by 2030, a pledge at the lower end compared with other OECD countries.
"The current administration doesn't place any emphasis on climate change," Yamagishi said, adding that the recent Upper House election campaign had a lot of discussion about nuclear energy, but nothing about climate change.

Goethermal hurdles

Geothermal power promises energy boon for Japan, but hurdles remain

http://mainichi.jp/english/articles/20160724/p2a/00m/0na/002000c

July 24, 2016 (Mainichi Japan)

July 24, 2016 (Mainichi Japan)

Japanese version

Kyushu Electric Power Co.'s Hatchobaru Geothermal Power Plant is seen in Kokonoe, Oita Prefecture, in this Feb. 21, 2012 file photo. The Hatchobaru plant is the largest of its kind in Japan, producing 110,000 kilowatts. (Mainichi)

Kyushu Electric Power Co.'s Hatchobaru Geothermal Power Plant is seen in Kokonoe, Oita Prefecture, in this Feb. 21, 2012 file photo. The Hatchobaru plant is the largest of its kind in Japan, producing 110,000 kilowatts. (Mainichi)

Japan is a country of volcanoes, and the Ministry of Economy, Trade and Industry is looking to take advantage of all that subterranean heat as a major future power source by backing efforts to find the most promising geothermal electricity generation sites.

Japan has the third greatest geothermal energy potential in the world, behind only the United States and Indonesia. However, the costly drilling surveys needed to find optimal generating sites take time, and don't always turn up a viable heat source. These risks have stalled geothermal energy development in Japan, while the nascent industry also faces the need to coordinate with the country's many hot spring resort businesses, among other hurdles.

Geothermal power generation has the potential to provide a steady supply of electricity and requires no fuel. These obvious benefits have prompted the government to target a trebling of Japan's geothermal power output by 2030. However, it generally takes about five years of drill survey work to find just one profitable subterranean heat source. If no viable heat source can be found, investors are left with nothing -- a reality that has made many project developers reluctant to get into the business.

To alleviate the risks inherent in the search for geothermal heat sources, the industry ministry has decided to task the government-backed Japan Oil, Gas and Metals National Corp. (JOGMEC) with identifying likely hotspots, drilling down 500 meters and collecting subterranean heat data to narrow down the list of potential generating sites. The national government will cover a certain amount of these initial exploration costs, and pass on the fruits of the project to private enterprises, thereby alleviating much of the risk and financial burden of developing geothermal power. The ministry will request a budget appropriation for the project in the fiscal 2017 budget.

The government in fact already has a number of geothermal power promotion policies in place, but so far none have produced significant results. When the feed-in tariff system for renewable energy was

introduced in 2012, the government also loosened environmental regulations for projects in national and quasi-national parks, where most geothermal enterprises were being developed. Via JOGMEC, the government is also providing loan guarantees and financial support to geothermal project developers for geological and drilling survey costs.
However, while small-scale enterprises have been multiplying, large-scale projects aimed at pumping out 7,000 kilowatts or more have stagnated. So far, only three such projects -- including one in Yuzawa, Akita Prefecture, which started construction last year -- have come to fruition, producing about 60,000 kilowatts total. The government set a geothermal energy generation target of three times the current 520,000 kilowatt total by 2030 in its energy mix plan released last year, but achieving that goal is a long way off.
However, geothermal energy development's challenges aren't only technical. Geothermal projects require prefectural approval, but it has proven difficult to gain the understanding of local hot spring resort owners worried that the projects will impact hot spring sources. There is also a wide technical knowledge gap between geothermal power businesses and local government officials, making it hard for those officials to moderate between concerned local residents and the businesses.
To try to bridge this gap, the government has set up a 23-member geothermal power generation advisory expert committee within JOGMEC, and will provide information and data analysis to local governments that request it. It will also launch a geothermal energy data exchange network in August to allow local governments to exchange information on the topic.
Experts have called the moves an important first step. However, they have also pointed out that it is hard to expect significant development of geothermal energy unless there is a major change in the attitude of hot spring resort operators, who continue to harbor deep suspicions about the technology. Measures are needed to advance compromise and cooperation among all the interested parties.

Only 33% renewables in 2040

August 16, 2016

Renewable energy likely to only make up 33% of Japan's total output in 2040: research

http://mainichi.jp/english/articles/20160816/p2a/00m/0na/013000c

Renewable energy such as solar and wind power is predicted to account for only 33 percent of Japan's total energy output in 2040 -- the eighth spot among the world's top nine CO2 emitting countries and regions, according to a report released by British research organization Bloomberg New Energy Finance (BNEF).

- 【Related】Geothermal power promises energy boon for Japan, but hurdles remain
- 【Related】Japan solar power generation jumps 23 times over 10 years
- 【Related】What benefits, options will liberalization of electricity industry bring to consumers?

BNEF predicts that renewable energy will account for 45 percent of the world's total energy output in 2040. BNEF's long-term forecast shows that the portion of renewable energy occupying Japan's total power to be generated in 2040 is expected to remain small at a time when the world is moving ahead to shift away from fossil fuels.
BNEF came up with a long-term forecast on the energy mix of the world's 110 countries as of 2040 after taking into account each country's energy policy, costs of generating electricity through each method and their market competitiveness, among other factors.
According to the report, by 2040, Brazil will top the list of countries with the highest ratios of renewable energy to their total energy output at 92 percent, followed by Canada at 83 percent, the European Union (EU) at 70 percent and Mexico at 69 percent. Brazil and Canada are highly expected to introduce hydraulic power generation while the EU is forecast to dominate the market as it is likely to take advantage of lower solar and wind power generation costs in such countries as Germany, the report says.
Because many of the new coal-fired thermal power stations being built in Japan are expected to continue to operate even in 2040, Japan is not expected to have much room for adopting additional renewable energy, the report predicts. Japan set a goal of having renewable energy account for 22 to 24 percent of the country's total energy output, but even if the goal is achieved, BNEF says that Japan will not be able to further increase renewable energy output by 2040 unless it takes new policy measures such as forcing coal-fired thermal power stations to shut down.
Under the so-called Paris Agreement, a new framework adopted late last year for combating global warming, the international community is effectively committed to zero greenhouse gas emissions in the latter half of this century, for which efforts in the power sector to shift away from fossil fuels will play a great role. A BNEF official in Japan said that renewable energy cannot be widely accepted quite easily in Japan partly because it is difficult to cut renewable energy costs due to high labor costs.

Is Japan's nuclear industry really back on its feet?

Japan's big 'nuclear restart' overtaken by conservation and renewables

http://www.theecologist.org/News/news_analysis/2987971/japans_big_nuclear_restart_overtaken_by_conservation_and_renewables.html

Jim Green
12th August 2016

For all Japan's talk of 43 'operable' nuclear reactors, only two are actually running, writes Jim Green, as renewables and a 12% fall in demand eat into the power market. And while Japan's 'nuclear village' defends safety standards, the IAEA, tasked with promoting nuclear power worldwide, has expressed deep concerns over the country's weak and 'fragmented' safety regulation.

As renewables continue to become cheaper and more ubiquitous, customers will be increasingly tempted by Japan's extremely high electricity prices to make and store their own electricity and to drop off the grid altogether.

According to the World Nuclear Association, Japan has 43 'operable' power reactors (they are 'operational' according to the IAEA), three under construction, nine 'on order or planned', and three 'proposed'.

The numbers suggest that Japan's nuclear industry is finally getting back on its feet after the Fukushima disaster - but nothing could be further from the truth.

Before considering the industry's current problems, a little historical context from the World Nuclear Industry Status Report 2016:

"[I]t has been 17 years since Japan's nuclear output peaked at 313 TWh in 1998. The noticeably sharp decline during 2002-2003, amounting to a reduction of almost 30%, was due to the temporary shutdown of all 17 of Tokyo Electric Power Company's (TEPCO) reactors - seven at Kashiwazaki Kariwa and six at Fukushima Daiichi and four at Fukushima Daini.

"The shutdown was following an admission from TEPCO that its staff had deliberately falsified data for inclusion in regulatory safety inspections reports. During 2003, TEPCO managed to resume operations of five of its reactors.

"The further noticeable decline in electrical output in 2007 was the result of the extended shutdown of the seven Kashiwazaki Kariwa reactors, with a total installed capacity of 8 GWe, following the Niigata Chuetsu-oki earthquake in 2007. TEPCO was struggling to restart the Kashiwazaki Kariwa units, when the Fukushima earthquake occurred."

How many of Japan's reactors are really 'operable'?

Nuclear power accounted for 29% of electricity generation in Japan in 2010, down from the historic peak of 36% in 1998, and plans were being developed to increase nuclear's share to 50%. But all of Japan's reactors were shut down in the aftermath of the Fukushima disaster. Reactors didn't power a single light-bulb from September 2013 to August 2015.

Japan had 55 operable reactors before Fukushima (including the ill-fated Monju fast reactor). In addition to the six reactors at Fukushima Daiichi, the permanent shutdown of another six reactors has been confirmed - all of them smallish (<559 MWe) and all of them ageing (grid connections between 1969 and 1977): Kansai Electric's Mihama 1 and 2, Kyushu Electric's Genkai 1, Shikoku's Ikata 1, JAPC's Tsuruga 1, and Chugoku Electric's Shimane 1.

So Japan now has 43 'operable' or 'operational' reactors, and it isn't hard to identify some with little or no prospect of ever restarting, such as the four Fukushima Daini reactors (or Monju for that matter).

Two reactors at Sendai in Kagoshima Prefecture were restarted in August and October 2015. And that's it - only two of Japan's 43 'operable' or 'operational' reactors are actually operating. Moreover an anti-nuclear candidate, Satoshi Mitazono, was elected governor of Kagoshima Prefecture in early July 2016 and he announced that he will seek the shut-down of the two Sendai reactors - he can prevent their restart after they shut down for inspection later this year.

As of 1 July 2016, 11 utilities had applied to the Nuclear Regulatory Authority (NRA) for safety assessments of a total of 26 reactors, including seven reactors that have completed the assessment process. Apart from whatever hurdles the NRA might put in their way, there are other obstacles: citizen-led lawsuits; local political and public opposition; economic factors, in particular the questionable economics of large investments to upgrade and restart aging reactors; and the impact of electricity deregulation and intensified market competition.

It's anyone's guess how many reactors might restart, but the process will continue to be drawn out - the only strong candidate for restart this year is the Ikata 3 reactor in Ehime Prefecture.

The government's current energy policy calls for a 22-24% nuclear share of electricity generation by 2030. That is less than half of the pre-Fukushima plans for future nuclear growth (the 50% target), and

considerably lower than the 29% nuclear share in 2010. Currently, nuclear power - the two Sendai reactors - account for less than 1%.
To reach the 20-22% target would require the operation of around 35 reactors by 2030, which seems highly improbable.

Cheap renewables picking up high-level support

The use of both fossil fuels and renewables has increased since the Fukushima disaster, while energy efficiency has made the task considerably easier - national power consumption in 2015 was 12% below the 2010 level.
The *World Nuclear Industry Status Report* comments on energy politics in Japan:
"Japanese utilities are insisting on, and the government has granted and reinforced, the right to refuse cheaper renewable power, supposedly due to concerns about grid stability - hardly plausible in view of their far smaller renewable fractions than in several European countries - but apparently to suppress competition.
"The utilities also continue strenuous efforts to ensure that the imminent liberalization of the monopoly-based, vertically integrated Japanese power system should not actually expose utilities' legacy plants to real competition.
"The ability of existing Japanese nuclear plants, if restarted, to operate competitively against modern renewables (as many in the U.S. and Europe can no longer do) is unclear because nuclear operating costs are not transparent. However, the utilities' almost complete suppression of Japanese wind power suggests they are concerned on this score.
"And as renewables continue to become cheaper and more ubiquitous, customers will be increasingly tempted by Japan's extremely high electricity prices to make and store their own electricity and to drop off the grid altogether, as is already happening, for example, in Hawaii and Australia."
The Japan Association of Corporate Executives, with a membership of about 1,400 executives from around 950 companies, recently issued a statement urging Tokyo to remove hurdles holding back the expansion of renewable power - which supplied 14.3 percent of power in Japan in the year to March 2016.
The statement also notes that the outlook for nuclear is *"uncertain"* and that the 20–22% target could not be met without an improbably high number of restarts of idled reactors along with numerous reactor lifespan extensions beyond 40 years.
Andrew DeWit, a professor at Rikkyo University in Tokyo, said the push signalled *"a profound change in thinking among blue-chip business executives."* DeWit added:
"Many business leaders have clearly thrown in the towel on nuclear and are instead openly lobbying for Japan to vault to global leadership in renewables, efficiency and smart infrastructure."

Safety concerns - the case of Takahama

The restart of the Takahama 3 and 4 reactors in Fukui Prefecture is indicative of the nuclear industry's broader problems. Kansai Electric Power Company (KEPCO) first applied to the NRA for permission to restart the reactors in July 2013. In February 2015, the NRA gave its permission for KEPCO to make the required safety upgrades. The restart process was delayed by an injunction imposed by the Fukui District Court in April 2015, but the ruling was overturned in December 2015.
Takahama 3 was restarted in late January 2016, and TEPCO was in the process of resolving technical glitches affecting the start-up of Takahama 4, when the Otsu District Court in neighbouring Shiga Prefecture ruled on 9 March 2016 that the reactors must be shut down in response to a petition by 29 citizens.
The court found that investigations of active fault lines and other safety issues were not thorough enough, it expressed doubts regarding the plant's ability to withstand a tsunami, and it questioned emergency

response and evacuation plans. Citizens and NGOs also questioned the use of arbitrary figures in KEPCO's safety analysis, and fire protection.

Nuclear Engineering International reported on 2 February 2016:

"While there are plans on paper to evacuate some Fukui residents to Hyogo, Kyoto, and Tokushima prefectures, many municipalities there have no detailed plans for receiving evacuees. Kyoto Governor Keiji Yamada said he did not feel adequate local consent had been obtained, citing concerns about evacuation issues. Shiga Governor Taizo Mikazuki said there was a lack of sufficient disaster planning."

On July 12, the Otsu District Court rejected KEPCO's appeal and upheld the injunction preventing the operation of Takahama 3 and 4. KEPCO plans to appeal the decision to the Osaka High Court.

Meanwhile, KEPCO is considering whether it is worth investing in upgrades required for the restart of the Takahama 1 and 2 reactors. The NRA controversially approved 20-year lifespan extensions for the two reactors (grid connected in 1974 and 1975), but citizens have initiated a lawsuit to keep them shut down.

Japan's 'lax' and' inadequate' regulatory regime

While safety and regulatory standards have improved in the aftermath of Fukushima, there are still serious problems. Citizens and NGOs have raised countless concerns, but criticisms have also come from other quarters.

When the NRA recently approved lifespan extensions for two Takahama reactors, a former NRA commissioner broke his silence and said *"a sense of crisis"* over safety prompted him to go public and urge more attention to earthquake risks. Kunihiko Shimazaki, a commissioner from 2012 to 2014, said: *"I cannot stand by without doing anything. We may have another tragedy ..."*

Professor Yoshioka Hitoshi, a Kyushu University academic who served on the government's 2011-12 Investigation Committee on the Accident at the Fukushima Nuclear Power Stations, said in October 2015:

"Unfortunately, the new regulatory regime is ... inadequate to ensure the safety of Japan's nuclear power facilities. The first problem is that the new safety standards on which the screening and inspection of facilities are to be based are simply too lax. While it is true that the new rules are based on international standards, the international standards themselves are predicated on the status quo.

"They have been set so as to be attainable by most of the reactors already in operation. In essence, the NRA made sure that all Japan's existing reactors would be able to meet the new standards with the help of affordable piecemeal modifications - back-fitting, in other words."

Even the IAEA has slammed the feeble NRA

An International Atomic Energy Agency (IAEA) review in early 2016 made the following recommendations (among others) regarding the NRA:

- To attract competent and experienced staff, and develop competencies relevant to nuclear and radiation safety.
- To amend relevant legislation with the aim of allowing NRA to improve the effectiveness of its inspections. The NRA inspection programme *"needs significant improvement in certain areas. NRA inspectors should be legally allowed to have free access to any site at any time. The decision process for initiating reactive inspections should be shortened."*
- To strengthen the promotion of safety culture including a questioning attitude.
- To give greater priority to the oversight of the implementation of radiation protection measures.
- To develop requirements and guidance for emergency preparedness and response in relation to radiation sources.

The IAEA further noted that the NRA's enforcement provisions are inadequate:

"There is no clear written enforcement policy in place at the NRA. There is no documented process in place at NRA for determining the level of sanctions. NRA inspectors have no power to enforce corrective actions if

there is an imminent likelihood of safety significant event. They are required to defer to NRA headquarters. ... NRA processes for enforcement are fragmented and some processes are not documented.
"NRA needs to establish a formal Enforcement Policy that sets forth processes clearly addressing items such as evaluation of the severity level of non-conformances, sanctions for different levels of non-conformances, processes for issuance of Orders, and expected actions of NRA inspectors if significant safety issues develop."

As the industry declines, expect new safety cutbacks

The narrative from government and industry is that safety and regulatory standards in Japan are now adequate - or they soon will be once teething problems with the new regime are sorted out. NRA Chair Shunichi Tanaka claims that Japanese regulatory standards are *"the strictest in the world."*

But Japan's safety and regulatory standards aren't strict. Improvements are ongoing - such as NRA actions in response to the IAEA report, and reports that legislation will be revised to allow unscheduled inspections of nuclear sites. But improvements are slow, partial and piecemeal and there are forces pushing in the other direction. An Associated Press report states that nuclear laws will be revised in 2017 but not enacted until 2020.

Reactor lifespan extensions beyond 40 years were meant to be *"limited only to exceptional cases"* according to then Prime Minister Yoshihiko Noda, speaking in 2012. Extensions were considered an emergency measure against a possible energy crunch. But lifespan extensions have been approved in the absence of an energy crunch, and more will likely follow.

If Japan's nuclear history is any guide, already flawed safety and regulatory standards will be weakened over time. Signification elements of Japan's corrupt 'nuclear village' are back in control just a few years after the Fukushima disaster. Add to that aging reactors, and utilities facing serious economic stress and intense competition, and there's every reason to be concerned about nuclear safety in Japan.

Tomas Kåberger, Professor of Industrial Energy Policy at Chalmers University of Technology in Sweden, noted in the foreword to the latest edition of the World Nuclear Industry Status Report:

"A nuclear industry under economic stress may become an even more dangerous industry. Owners do what they can to reduce operating costs to avoid making economic loss. Reduce staff, reduce maintenance, and reduce any monitoring and inspection that may be avoided.
"While a stated ambition of 'safety first' and demands of safety authorities will be heard, the conflict is always there and reduced margins of safety may prove to be mistakes."

Dr Jim Green *is the national nuclear campaigner with Friends of the Earth Australia and editor of the* Nuclear Monitor *newsletter, where this article was originally published. Nuclear Monitor, published 20 times a year, has been publishing deeply researched, often critical articles on all aspects of the nuclear cycle since 1978. A must-read for all those who work on this issue!*

Robots needed for Fukushima

September 4, 2016

Robot technologies sought for Fukushima reactors

http://www3.nhk.or.jp/nhkworld/en/news/20160904_12/

Japan's academic societies are soliciting robot technologies that will allow direct surveying of molten fuel in the crippled nuclear reactors in Fukushima.

The atomic energy society and robotics society are seeking ideas for remotely-controlled robots that could travel 25 meters through water and complicated ductworks to reach the fuel and return with samples.

Removing the molten fuel is considered the most difficult step in dismantling the plant.

The Japanese government and Tokyo Electric Power Company have been using robots to survey around the reactors, with a hope to begin removing the molten fuel by 2021.

But highly dangerous conditions in the buildings and the accumulation of tainted water have hampered the work, and workers have yet to reach the molten fuel.

Officials at the societies say they want to test some of the ideas at a research facility near the plant and hope to use them in actual probes.

The deadline for applications is set for the end of January.

New robot to locate melted fuel in No.2 reactor

September 6, 2016

Robot to probe nuke fuel debris in Fukushima No. 2 reactor

http://www.asahi.com/ajw/articles/AJ201609060001.html

By TAKASHI SUGIMOTO/ Staff Writer

A robot will be sent into the No. 2 reactor containment vessel at the crippled Fukushima No. 1 nuclear power plant to locate the melted fuel inside and assess its spread ahead of future retrieval.

Tokyo Electric Power Co. announced on Aug. 25 that it would undertake the difficult operation early next year at the soonest.

Under consideration for the work is a scorpion-shaped robot developed by Toshiba Corp., whose slender body allows it to pass through narrow openings. It is designed to raise its rear camera toward the front to capture images when it has arrived at a planned survey location.

The robot will crawl through an entrance into the No. 2 reactor containment vessel and travel along a rail to go deeper into its interior and confirm the state of the melted fuel inside and other conditions.

TEPCO and other parties are planning to draw on the survey results to decide on the fuel retrieval method as early as fiscal 2018 and set out on the actual retrieval process, expected to pose extreme difficulties, in 2021.
The initial plan would have sent the “scorpion" into the No. 2 reactor last summer, but radiation levels around the entrance were so high that cleanup work had to be done to reduce them for workers who would be sending the scorpion in.
Remote operations to remove a steel plate that blocked the entrance also turned out to be a time-consuming process.
If the operation to send the robot proceeds as planned, its use will still be a year and a half behind schedule.
Robots of a similar kind were sent last year into the No. 1 reactor and were partially successful in capturing images inside the containment vessel. However, the survey has had rough going, as the robots failed to spot any fuel.
TEPCO and the government are planning to draw on the robot survey results and other information to make a decision in fiscal 2018 on the melted fuel retrieval method for the No. 1, No. 2 or No. 3 reactors.
They are hoping to use the “submersion method,” which would involve filling the containment vessel with water to reduce worker radiation doses, during the retrieval work to be started in 2021. However, water is leaking from holes in the containment vessels, and the holes have yet to be located.
TEPCO and other parties have begun weighing alternative retrieval methods that do not involve filling the containment vessels with water.

Greater use of renewables reduces CO2

September 13, 2016

Renewables credited with 28 million-ton drop in Japan utilities’ carbon emissions in 2015

http://www.japantimes.co.jp/news/2016/09/13/business/renewables-credited-28-million-ton-drop-japan-utilities-carbon-emissions-2015/#.V9eZ_zVdeot

Kyodo
An association of Japanese electric power companies said Monday that carbon dioxide emissions by its members declined in fiscal 2015 to around 441 million tons, partly due to greater use of renewable energy.
The preliminary figure represents a fall of 28 million tons from the previous year, said the Electric Power Council for a Low Carbon Society, which was set up in February with the aim of taking effective measures to fight global warming.
The decline in carbon dioxide emissions by Japan’s electricity industry reflects an increase in the use of solar and other renewable energy sources, as well as a decline in the use of fossil-fuel power generation following the restart of Kyushu Electric Power Co.’s Sendai nuclear power plant in 2015, the council said.
The council is composed of 42 companies, ranging from major utilities such as Kansai Electric Power Co. to newcomers to Japan’s electricity retail business, including JX Holdings Inc. and Osaka Gas Co.

The latest survey covered 39 of the companies that were operating in the year ended March.

Hydrogen plant for Fukushima?

September 30, 2016

Fukushima Prefecture study could lead to world's largest hydrogen plant

http://www.japantimes.co.jp/news/2016/09/30/national/fukushima-prefecture-study-lead-worlds-largest-hydrogen-plant/#.V-4kpcldeos

JIJI
From stigma to startup, Fukushima Prefecture stands a chance of becoming known for something other than its festering nuclear debacle. Three power companies have announced a study into a joint hydrogen manufacturing facility in the area.
Toshiba Corp., Tohoku Electric Power Co. and Iwatani Corp. said Thursday the facility could have a capacity equivalent to 10,000 kilowatts, the world's largest.
The government has already said it will build a major renewable energy base in the prefecture, producing hydrogen by solar, wind and other green energy sources. It hopes the gas will be used to power hydrogen fuel cell vehicles during the 2020 Tokyo Olympics.
The three companies will conduct the feasibility research under a deal awarded by the state-affiliated New Energy and Industrial Technology Development Organization.
Hydrogen will be produced through water electrolysis using surplus electricity. It will be stored until extra electricity is needed, when it will help to bridge fluctuations in supply from other renewable sources.
The system is expected to produce 900 tons of hydrogen annually, enough to power 10,000 fuel cell vehicles. The three firms aim to bring the system on line in fiscal 2020.

Japan must increase renewable energy targets

November 4, 2016

Renewable energy key to reducing Japan's CO2 emissions under Paris accord
http://mainichi.jp/english/articles/20161104/p2a/00m/0na/005000c
As the Paris climate accord came into effect on Nov. 4, Japan is under pressure to carry out a public pledge to reduce greenhouse gas emissions by 26 percent compared with 2013 levels by 2030.

- 【Related】Paris accord takes effect to combat global warming

Under domestic guidelines determined in a Cabinet decision in May this year, it will be necessary to cut office and household emissions by 40 percent to achieve the target. Officials envisage a shift to light-emitting diode (LED) lights, which use less power compared with other types of lighting, and an increase in hybrid vehicles, but there has been little progress on these fronts due to the costs involved.

Meanwhile, the energy sector is an area of serious concern. Japan's greenhouse gas reduction goal was based on the government's expectations that it would extend the life of the nation's aging nuclear reactors, and rebuild or build new reactors so that nuclear power would account for 20 to 22 percent of the nation's energy mix by fiscal 2030. However, the reactivation of nuclear power plants in Japan has not progressed, and there are no prospects of replacing reactors or building new ones. There has been a stream of plans to build new coal-fired power plants, which emit large amounts of carbon dioxide, and Japan has fallen behind in the world trend of pouring effort into the introduction of renewable energy.
In 2015, Cochin International Airport in India's southern state of Kerala opened a major solar plant and became the first airport in the world to run completely on solar power. The airport's managing director, V.J. Kurian, explained that it was decided to shift to renewable energy as it was cheaper.
According to the International Energy Agency, the average worldwide cost of solar power in 2015 was one-third of the average cost in 2010. The fact that cost of renewable energy has declined to a level that can rival that of fossil fuels pushed China and India to ratify the Paris Agreement at an early stage.
In Japan, however, construction costs including the cost of installing solar panels are higher than in other countries, and the cost of renewable energy generation is about double that in Germany or China. Under the nation's basic energy plan, it is envisaged that renewable energy (including hydropower) will account for 22 to 24 percent of Japan's energy mix by fiscal 2030. As of fiscal 2014, however, the rate stood at just 12.2 percent. Under the Paris Agreement it is necessary to revise targets upward every five years, and renewable energy holds the key in doing so.
Teruyuki Ono, executive director of the Tokyo-based Renewable Energy Institute, calls for Japan to make an effort.
"We should set higher targets and implement them by setting higher goals for the introduction of natural energy and thoroughly implementing energy conservation measures," he said.

Solar boom in Japan

November 30, 2016

Japan’s solar energy boom

http://www.japantimes.co.jp/news/2016/11/30/business/sun-setting-japans-solar-energy-boom/#.WD6WtH2Dmos

by Anne Beade
AFP-JIJI
CHIBA – The sun is setting on Japan’s clean-energy boom, despite projects like a massive floating solar farm near Tokyo, as the government cuts subsidies and bets on nuclear and coal-fired power, critics say.
Workers at the floating power station, one of the world’s biggest, have just finished laying about 50,000 interconnected panels on a vast dam reservoir.

Taking up space equivalent to several Tokyo Dome-sized baseball stadiums, the vast carpet of panels will supply power to about 5,000 homes from early 2018.
The project is the centerpiece of a solar-dominated wave of renewable energy investments that followed the 2011 Fukushima nuclear crises.
The disaster forced the shutdown of reactors that had supplied about one-quarter of resource-poor Japan's energy.
To plug the gap, electricity providers have been obliged since 2012 to buy power generated from green suppliers, including solar, at above-market rates — known as feed-in tariffs — fixed by the government each year.
But renewable energy investments have plateaued and are set to fall in the coming years as Tokyo cuts back subsidies while commodities including coal, oil and natural gas remain cheap.
Japan is also facing a shortage of land for new solar installations.
Kyocera Corp., which is behind the floating farm south of Tokyo, is building a solar plant on an abandoned golf course.
"Several dynamics in the Japanese power sector have shifted since (2012) — such as weakening government support, cheaper fuel alternatives and electricity sector reform — which have all contributed to the slowdown in growth," BMI Research said in a report.
Some say Japan's future solar potential now sits squarely on the roofs of millions of homes.
"There is still a big potential for the Japanese market," said Atsuhiko Hirano, head of Solar Frontier, a unit of Japanese oil giant Showa Shell.
"Utility-scale projects have been the driver so far. In contrast, the residential market has not grown so much. So there is still much more area where we can grow.
"(But) we are pushing the government to go further."
Solar accounts for a small fraction of Japan's energy mix — 3.3 percent in 2015. But Tokyo has said it wants renewables — also including hydro and wind power — to account for 22 to 24 percent of the total by 2030.
Critical government support appears to be waning, however, as Tokyo drives a push to restart mothballed atomic reactors — an unpopular move among the nuclear-wary public.
The pro-nuclear drive is supported by utilities, which complained about being forced to buy and distribute subsidized power, especially with oil and natural gas prices at multiyear lows.
Japan is also raising eyebrows with plans to invest billions of dollars at home and abroad in new power plants fired by cheap coal — even as it calls for more green power at home.
That includes half a dozen large coal-fired power stations within about 100 kilometers of Tokyo, which Greenpeace has branded "simply insane" over health concerns posed by air pollution.
Coal is also the biggest climate change culprit, generating more carbon pollution per unit of energy generated than oil or gas.
Within the G-7 club of rich nations, Japan is alone in investing heavily in coal-fired energy on its own soil, with more than 40 new power plants in the pipeline.
That sets it apart from even big polluters such as China and India which are pushing away from coal-fired power — although U.S. President-elect Donald Trump has vowed to bring back coal and refocus U.S. energy policy on fossil fuels.
"Japan is betting its economy and energy security on risky coal investments," said Taylor Dimsdale, Washington-based head of research at energy think tank E3G.
"The coal development pipeline in the rest of the G-7 countries has dried up with no further plants expected beyond a handful of projects that are already under construction."

Japan was among the worst performers in terms of countries cutting back on energy-related CO2 emissions in an annual ranking released during U.N. climate talks in November.
Critics say they don't have much hope for Tokyo's long-term commitment to renewable energy.
"After the Fukushima disaster there was an infatuation with renewable energy and the government was clearly pressing the accelerator," said Kimiko Hirata, international director for the Japanese NGO Kiko Network.
"But since then, I feel like it's putting the brakes on that policy and concentrating its focus on revising nuclear power and building new coal-fired power plants."

New cesium-absorbinbg sponges

November 27, 2016

Researchers create radioactive decontamination sponges using Prussian blue pigment

http://mainichi.jp/english/articles/20161127/p2a/00m/0na/007000c

Researchers have announced they have successfully created cesium-absorbing radiation decontamination sponges using Prussian blue pigment, the same type of pigment used in famous Japanese Edo-era ukiyoe paintings.
Prussian blue pigment was used in the renowned "Thirty-six Views of Mount Fuji" works by Edo-era artist Katsushika Hokusai. While it has been known that Prussian blue is good at sticking to radioactive cesium, work to actually use the pigment had until now not progressed far.
The research group combined the pigment with the next-generation material "cellulose nano-fiber," which is made of the ingredients of paper, miniaturized to an exceedingly small size. This allowed the researchers to overcome the problem of the pigment being easily diluted by water. They then incorporated this combination into foam resin sponges.
In February last year they buried around 1.5 kilogram's worth of sponges, each a few cubic centimeters in size, in the soil of around 30 square meters of farmland in Namie, Fukushima Prefecture, near the disaster-stricken Fukushima No. 1 Nuclear Power Plant. They say that after four weeks, the cesium content of the soil was reduced by up to half of what it had been.
Until now, cesium absorbents have faced a problem of high production costs, but University of Tokyo professor Ichiro Sakata, who was part of the research group, says the new sponges' cost won't be "much different from that of a kitchen sponge." After absorbing materials, the sponges can be shrunk to about 1 percent of their original size, which would assist in reducing garbage volume, he says.
The research results were published in the Nov. 15 edition of the British academic journal Scientific Reports.

Robot competition

December 4, 2016

Students test skills for robot missions inside Fukushima plant

http://mainichi.jp/english/articles/20161208/p2g/00m/0dm/080000c

By TERU OKUMURA/ Staff Writer
NARAHA, Fukushima Prefecture--A student contest for developing robots for decommissioning work at the crippled Fukushima No. 1 nuclear power plant was held here on Dec. 3 to nurture young people willing to tackle the decades-long undertaking.
In the plant, robots are being used instead of human workers because of the dangerous radiation levels.
A total of 15 teams from 13 colleges of technology throughout the country took part in the competition, named "The 1st Hairo Sozo Robocon" (The 1st robot contest to compete in creativity for reactor decommissioning).
It was organized by a council of teaching staff at colleges of technology and the education ministry.
"Decommissioning work may give you a negative impression. But it is the same as space development in that both of them challenge unknown fields. I think that the students will be interested in the work," said Shigekazu Suzuki, associate professor of mechanical engineering at the National Institute of Technology, Fukushima College, a leading member of the council.
The students were challenged with robotic tasks such as delivering a piece of baggage to the 3.8-meter-high second floor or checking the state of a bumpy floor.
Their efforts to protect robots from radiation or technologies to operate them remotely were also evaluated. That reflects the reality at the Fukushima No. 1 plant that workers cannot enter some areas due to high radiation levels or robots may not operate properly there.
A team from the Osaka Prefecture University College of Technology was chosen for the top prize.
The contest was held at the Naraha Remote Technology Development Center of the Japan Atomic Energy Agency, an affiliate of the government.
About 40 robots have already been utilized at the plant. However, seven of these have been unable to return as they fell over or were caught between cracks.
Since the decommissioning work is expected to take up to 40 years, it is a major challenge to secure the necessary human resources and develop proper technologies.

Robot contest for scrapping Fukushima reactors

http://www3.nhk.or.jp/nhkworld/en/news/20161203_25/

More than a dozen groups of engineering students have competed in a robot contest to determine whether their models could be used to help decommission damaged reactors at the Fukushima Daiichi nuclear power plant.

Fifteen teams from 13 national institutes of technology took part in the competition in Naraha Town, Fukushima Prefecture, on Saturday.

It is the first-ever event to raise interest among young people in the decommissioning project. Experts estimate that it will take 4 decades to complete the dismantling work. The organizers included the science ministry.

Robots developed by the students took on the task of ascending and descending a steep stairway modelled after actual buildings housing the reactors. The robots also had to take a video of a high place.
The organizers limited working time to between 5 and 10 minutes after considering the effects of strong radiation on electrical devices. The participants in principle needed to operate their robots via cables as radio waves cannot penetrate the thick concrete walls surrounding the reactors.

A team from a Tokyo institute succeeded in taking a video of a high spot by using an extendable arm. One of the members said his team had considered the impact of radiation during the designing stage and had reduced the number of electrical parts to create a practical mechanism. He added the group will advance its research to contribute to the restoration of the area around Fukushima.

The organizers hope interested companies will launch joint research projects using the students' designs.

New "muscle robots"

A "spider" robot developed for use inside the Fukushima No. 1 Nuclear Power Plant is unveiled to the Mainichi Shimbun at a factory in Hiroshima on Feb. 28, 2017. (Mainichi)

March 1, 2017
Factory unveils 'muscle robots' to be used in Fukushima nuke plant dismantling
http://mainichi.jp/english/articles/20170301/p2a/00m/0na/010000c

HIROSHIMA -- A factory here where so-called "muscle robots" to help decommission the Fukushima No. 1 Nuclear Power Plant are being developed was unveiled to the Mainichi Shimbun on Feb. 28.
The robot development project is a joint effort among Hitachi-GE Nuclear Energy Ltd., Hiroshima-based equipment maker Chugai Technos Corp., and other firms. The companies are aiming to use the robots -- which are powered by water pressure and springs, and thus unlikely to be affected by radiation -- to crush and remove nuclear fuel that melted down six years ago. The companies have developed six types of robot so far.
The machines unveiled on Feb. 28 include a six-limbed "spider" robot that can move around and transport objects. The robot is 2.8 meters long when the arms are fully extended, and the companies plan to give it the ability to hang from scaffolding and climb onto equipment.
Although surveys of the interior of the Fukushima plant reactors have been conducted, details on the state and location of the melted nuclear fuel remain sketchy. The "muscle robots" are still in their preliminary stages of development, and the companies say they will continue to tweak the devices to respond to the actual conditions inside the reactors as they become known.

see also :
http://mainichi.jp/english/graphs/20170301/hpe/00m/0na/001000g/1
In Photos: Factory unveils 'muscle robots' for Fukushima nuke plant

Joint renewables projet with Germany

March 20, 2017
Japan, Germany ink pact on green energy project
https://www3.nhk.or.jp/nhkworld/en/news/20170320_10/

Japan and Germany have signed an agreement to start a joint project to stabilize renewable energy supplies.

Japan's New Energy and Industrial Technology Development Organization, or NEDO, and the Niedersachsen state government in northern Germany inked the deal in the state capital, Hannover, on Sunday.

3 Japanese firms, including a battery maker, and a German power company plan to take part in the 3-year project, which is set to begin next month.

They say they want to stabilize green energy supplies by saving electricity at a large storage facility when an amount well above the level of demand goes into power grids.

They say stored electricity will be used during power shortages.

Germany is sharply increasing its output of wind, solar and other forms of green energy, as the government tries to phase out nuclear power by 2022. But fluctuating output that depends on weather conditions poses a major challenge.

NEDO Chairman Kazuo Furukawa says his organization wants to introduce what it will learn in Germany to Japan and help Japanese firms start businesses in other countries.

Investment in renewables down in 2016

April 17, 2017
Renewable energy investment falls in 2016 amid drop in prices, spending
http://www.japantimes.co.jp/news/2017/04/07/business/2016-saw-fall-renewable-energy-investment-prices-eased-output/#.WOdiIGekKos

AP, AFP-JIJI
BERLIN/PARIS – Global investments in renewable energy fell by almost a quarter in 2016 amid a drop in prices and lower spending in some markets, according to a U.N.-backed report published Thursday.
Overall investments reached $241.6 billion last year, down from $312.2 billion in 2015, said the United Nations Environment Program.
But investors got more bang for their buck: renewable energy capacity increased by 138.5 gigawatts, 8 percent more than the 127.5 gigawatts added the year before.
That's because installing solar, wind and other systems for generating renewable energy became cheaper last year.
China invested $78.3 billion, about a third less than the previous year — the first drop in over a decade.
U.S. investment dipped by 10 percent, to $46.4 billion, as developers paced their projects to take advantage of tax credits. Japan's investment more than halved to $14.4 billion last year.
In Europe, spending on renewables increased slightly to $59.8 billion, driven by big wind power projects in Britain and Germany.
India saw the completion of a massive solar project in Tamil Nadu state in 2016. It will be the world's biggest until China finishes expanding the Longyangxia Dam photovoltaic complex later this year.
Many countries see renewable energy as an essential part of international efforts to reduce carbon emissions that contribute to global warming.
Investment in power generated from fossil fuels was roughly half that of renewables last year, according to the report, which is based on data from Bloomberg New Energy Finance.
"Ever-cheaper clean tech provides a real opportunity for investors to get more for less," said Erik Solheim, Executive Director of UNEP.
The proportion of electricity coming from renewable sources, not including large hydropower plants, rose from 10.3 percent to 11.3 percent in 2016.
The European electricity industry association EURELECTRIC announced Tuesday its 3,500 members won't invest in new coal-fired power plants after 2020.
"With power supply becoming increasingly clean, electric technologies are an obvious choice for replacing fossil fuel-based systems … to reduce greenhouse gases," said EURELECTRIC president and CEO of the Portuguese energy group EDP, Antonio Mexia.

Hydrogen for Fukushima

August 29, 2017

Fukushima Prefecture high on hydrogen for greener society

By TERU OKUMURA/ Staff Writer

One of the world's largest hydrogen production plants is planned for the town of Namie, part of efforts to build a hydrogen-based, eco-friendly society in disaster-hit Fukushima Prefecture.

The New Energy and Industrial Technology Development Organization (NEDO) announced its plan on Aug. 1, following the opening of the prefecture's first hydrogen station on the site of the Koriyama city government office in June.

Although hydrogen is drawing increasing attention as a new type of energy to replace fossil fuels, hurdles remain, particularly over costs, for its widespread use.

But still, the green energy business is expected to help the prefecture recover from the 2011 Great East Japan Earthquake and tsunami as well as the subsequent nuclear crisis.

NEDO's planned plant is a core project intended to promote use of the gas and nurture relevant industries to establish a futuristic hydrogen society in Fukushima Prefecture. The plant will produce hydrogen using renewable energy, such solar and wind power.

One disadvantage of renewable energy is the difficulty in ensuring a stable electricity supply. The planned factory will attempt to get around this problem by converting electricity generated from renewable energy into hydrogen because the gas is easier to store and transport.

After Tohoku Electric Power Co. dropped its plan to build a nuclear plant in Namie, the construction site and the surrounding area were selected for the hydrogen factory.

Part of the site will be provided free of charge to the Namie municipal government.

While 4.5 hectares of the land will host the hydrogen plant, the remaining 35 hectares will be used to set up solar panels.

Hydrogen produced at the facility will be used primarily to supply power to fuel-cell vehicles, which run on motors operated by electricity generated by combining hydrogen and oxygen.

The facility will have a total capacity of 10 megawatts, enough to supply hydrogen to 10,000 fuel-cell vehicles.

Fuel-cell cars emit only water while in operation, and their energy efficiency is higher than that of gas-powered and other types of vehicles.

Toshiba Corp., Tohoku Electric and Iwatani Corp. were chosen in autumn last year as operators of the hydrogen facility. Its construction will start next summer, and experimental operations are expected to begin by 2020

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HYDROGEN FOR FUEL-CELL VEHICLES

The Koriyama city government has introduced a fuel-cell vehicle for official use. The first hydrogen station for fuel-cell vehicles in Fukushima Prefecture opened in the parking lot of the city government office in June.

According to the city and other sources, the station in Koriyama was the third in northeastern Tohoku region, after two stations in Sendai.

Another hydrogen station will be installed in Minami-Soma, Fukushima Prefecture. And a movable station is planned to provide hydrogen in the cities of Fukushima and Koriyama.

However, the use of fuel-cell vehicles has not spread sufficiently.

Although a central government subsidy is available, fuel-cell vehicles cost more than 7 million yen ($63,700) each, and there are few hydrogen stations.
According to Koriyama city, Japan had 1,500 registered fuel-cell vehicles as of the end of last year. The city government's fuel-cell vehicle, in fact, was the first one to operate in Fukushima Prefecture.
Starting this fiscal year, the prefectural government started offering a subsidy to set up hydrogen stations. It also plans to begin a subsidy program targeting those who want to buy fuel-cell vehicles by the end of August at the earliest to contribute to realizing a hydrogen society.

Power line (allowed) capacity major obstacle to more renewables

November 9, 2017

EDITORIAL: Unused power line capacity should be given to green energy
http://www.asahi.com/ajw/articles/AJ201711090024.html
Promoting power generation using renewable energy sources such as wind and solar power is vital for Japan's efforts to reduce its dependence on nuclear power while cutting its greenhouse gas emissions.
But **established electric utilities' reluctance to allow new power suppliers to use surplus capacity in their transmission lines is emerging as a major obstacle to growth in renewable power generation in this nation.**
The big utilities claim there is no unused capacity in their transmission lines in many areas, forcing many renewable power suppliers to abandon their business plans. These smaller and greener electricity suppliers cannot afford the heavy investment needed for transmission capacity expansion, which would require many years and be enormously expensive.
Last spring, Tohoku Electric Power Co., which supplies electricity to the northeastern Tohoku region, announced there is no surplus capacity in its transmission lines in the northern parts of the region. Since then, other major utilities, which enjoy a near regional monopoly in the power market, have made similar claims in various parts of the nation.
A Kyoto University research team has checked these claims and found them to be untrue.
The team used data provided by a public institution that monitors and supervises the use of power transmission lines nationwide to estimate how the core transmission lines in the four Tohoku prefectures of Aomori, Akita, Iwate and Yamagata were actually used. The group found that, in fact, only 2 to 18 percent of the capacity was used. Its analysis for the facilities in Hokkaido produced similar results.
None of the established utilities has disclosed details of the formulas they use to calculate surplus capacity in their power lines. Basically, however, their calculations are based on the hypothetical situation where all the power generation facilities that have contracts for connection to their transmission lines operate at full capacity. These contracts are concluded on a first-come-first-served basis. Even nuclear power plants that have yet to be completed are counted, let alone ones that are currently offline.
This is an extremely unreasonable approach. The Ministry of Economy, Trade and Industry and the public organization supervising transmission lines are considering measures to correct the problem. They need to quickly come up with fair and transparent rules concerning the issue.
A key viewpoint for debate on this issue is for whom the power grids exist.
Legally, the power lines belong to the utilities that operate them. But the costs of building and maintaining the networks are passed on to consumers through electricity rates.

In other words, transmission lines are public assets that have been developed with money widely collected from power consumers, or the entire public.
From this point of view, the current system for connecting to transmission lines is seriously flawed because it allows utilities to give preferential treatment to their own power generation facilities, including planned or idle nuclear power plants, and shut out newcomers such as renewal power suppliers.
A radical review of the system is needed to make the most of the existing power grids and keep down the additional financial burden on newcomers as much as possible.
The established utilities have taken a dim view of the Kyoto University study. Tohoku Electric Power says the published data concerning the use of its power cables only represent one aspect of the reality. The firm contends that using only this data to evaluate the necessity of capacity expansion is not fair.
Instead of defending their stance, the utilities should first disclose detailed information about the use of their transmission lines.
If they try to tip the debate in their favor by monopolizing the relevant data, they will inevitably be suspected of erecting a barrier to entry into the market.
In the United States and Europe, where the operations of power generation and transmission facilities are clearly separated, various plans and systems have been developed to ensure a stable power supply and prevent blackouts despite connections of unstable renewable power generation facilities to the grids.
Japan plans to separate the operations of power generation and transmission facilities in 2020.
How to respond to the issue of the alleged scarcity of surplus capacity in transmission lines will be a key test of the commitment of the government and the power industry to creating transparent and fair business environments for the years after the separation.
--The Asahi Shimbun, Nov. 9

Only 20% of transmission lines capacity used by utilities!

Number and average usage rates of major utilities' core electric power transmission lines

Hokkaido Electric Power Co.	38 (19)	14.5% 〈14.1%〉
Tohoku Electric Power Co.	34 (23)	12.0% 〈 9.5%〉
Tokyo Electric Power Co.	77 (31)	27.0% 〈36.6%〉
Chubu Electric Power Co.	77 (48)	20.4% 〈25.4%〉
Hokuriku Electric Power Co.	10 (3)	14.8% 〈25.9%〉
Kansai Electric Power Co.	50 (9)	25.5% 〈23.7%〉
Chugoku Electric Power Co.	20 (4)	13.9% 〈 2.2%〉
Shikoku Electric Power Co.	25 (0)	16.3% 〈 - 〉
Kyushu Electric Power Co.	53 (2)	15.0% 〈26.7%〉
Okinawa Electric Power Co.	15 (0)	14.2% 〈 - 〉

Figures in ( ) show number of lines whose "free capacity is zero."
Figures in 〈 〉 show average usage rates of lines whose "free capacity is zero."

January 28, 2018

Major utilities using less than 20% of capacity of electric lines

http://www.asahi.com/ajw/articles/AJ201801280022.html

THE ASAHI SHIMBUN

The Asahi Shimbun

Usage rates of core electric power transmission lines operated by 10 major utilities are only 19.4 percent on average of capacity, contradicting a claim by these companies, according to a newly conducted analysis. The remaining free capacity can be used to transmit electricity generated by renewable energies such as wind power or solar power.

However, major electric power companies are refusing to allow the use of the free capacity for transmission of renewable energies, saying that there is no available capacity in many of those lines.

The study was conducted by Yoh Yasuda, a specially appointed professor at Kyoto University's economics course on renewable energies. It marked the first time in Japan that usage of the core transmission lines was surveyed on a nationwide scale.

"The usage rates of transmission lines with 'zero free capacity' should be higher," Yasuda said. "In reality, however, they have more free capacity in some cases. It is incomprehensible. Why do utilities say that their free capacity is at zero? Why do they restrict connection of the equipment for renewable energies by citing the zero free capacities as a reason? They are required to make reasonable and highly transparent explanations to those questions."

The results of the analysis are scheduled to be announced in a symposium in Tokyo on Jan. 29.

Yasuda surveyed the 10 utilities' 399 high-voltage core electric power lines, such as 500,000 volts or 275,000 volts, based on data released by the Organization for Cross-regional Coordination of Transmission Operators (OCCTO).

The data covered the period from September 2016 to August 2017.

The usage rate is the ratio of capacities of electricity that actually flowed in the lines to the maximum capacities of electricity that can flow in a year.

According to the analysis of the data, the usage rate of Tokyo Electric Power Co. (TEPCO) was the highest at 27.0 percent while that of Tohoku Electric Power Co. was the lowest at 12.0 percent.

The so-called "crowded transmission lines," meaning that the usage rate temporarily exceeded 100 percent, occurred at least once in 60 lines. Of these, 22 lines were those of TEPCO.

Meanwhile, 139 of the 399 lines were categorized as "free capacity is zero." However, their average usage rate was only 23.0 percent, which was almost the same as the 19.4 percent of the 399 lines.

According to the major utilities, zero free capacity is based on the premise that all existing power plants are running at their full capacities, including idled nuclear power plants and aged thermal power plants. Therefore, the actual flow of electricity through the transmission lines was much smaller.

In a news conference held in November 2017, Satoru Katsuno, chairman of the Federation of Electric Power Companies of Japan, was asked about the circumstances that despite transmission lines having free capacity, equipment to transmit renewable energies could not be connected to those lines.

At that time, he said, "We are putting priority on nuclear power as a baseload power source."

An official of a major utility also explained, "Free capacity cannot be measured based only on electricity that actually flowed in transmission lines."

In Europe and the United States, however, transmission lines are used based on the capacity of electricity that actually flows through the lines. As a result, renewable energies have been introduced in large quantities.

Therefore, the economy ministry has begun to consider greater utilization of the free capacity.

The ratio of transmission lines whose free capacity is zero is high for utilities in eastern Japan, such as Tohoku Electric Power, Chubu Electric Power Co., Hokkaido Electric Power Co. and TEPCO.
On the other hand, the corresponding ratios for utilities in western Japan are low.
For utilities such as Tohoku Electric Power and Hokkaido Electric Power, the usage rates of transmission lines with zero free capacities were lower than those of all the transmission lines under their jurisdictions.
(This article was written by Toru Ishii, a senior staff writer, and Yu Kotsubo.)

The challenge of renewables in Japan

March 12, 2018

News Navigator: What issues are there concerning the spread of renewable energy?
https://mainichi.jp/english/articles/20180310/p2a/00m/0na/022000c
The Mainichi Shimbun answers some common questions readers may have about renewable energy in Japan, and the issues that surround its continued expansion in the country.
Question: What's the situation concerning the introduction of renewable energy in Japan?
Answer: The government has set a target of having 22 to 24 percent of domestic power generation stemming from renewable energy (including hydraulic power) by 2030. Excluding hydraulic power, this percentage increased drastically from 1.1 percent in fiscal 2010 to 7.8 percent in fiscal 2016. The country has already achieved nearly half the 2030 target, with the exception of hydraulic power.
Q: So things are progressing smoothly?
A: The real challenge is from now. In July 2012, the country introduced a feed-in tariff (FIT) scheme, under which electric power companies are obliged to purchase electricity from renewable energy sources at a fixed price. As a result, the introduction of renewable energy suddenly increased.
However, renewable energy facilities relating to solar and wind power are being concentrated in certain regions such as Hokkaido, Tohoku and Kyushu -- where land prices are cheap and conditions for generating power are good -- resulting in a shortage of utility line capacity to carry electricity into urban areas. Therefore, unless new power lines are built, the introduction of further renewable energy will be difficult.
Q: So the problem can be solved by building more power lines?
A: That's easier said than done. It takes about 10 years to construct major power lines, as land needs to be bought and iron towers need to be built. In October 2016, Tohoku Electric Power Co. searched for renewable energy operators capable of generating about 2.8 million kilowatts (kW), as part of a power line construction plan, and received a response from operators able to generate a total of 15.45 million kW. However, so far, construction has failed to get off the ground, as Tohoku Electric Power is unable to buy power from the majority of applicants.
Q: How can the situation be resolved?
A: In fiscal 2018, the government is set to introduce an initiative called "Connect and Manage," which will make effective use of the surplus capacity of existing power lines. Until now, the capacity of power lines had been set with emergencies in mind, and more than half of the lines' capacity is empty. As a result, there are plans to make more efficient use of these lines based on the actual amount of power that is being generated.

Looking ahead to the initiative, Tohoku Electric has changed the capacity of newly established power lines allocated to outsiders from about 2.8 million kW to 3.5 to 4.5 million kW. However, this is still not enough. A long-term plan spanning several decades is required. (Answers by the Business News Department)

Problems of renewables in Fukushima

March 11, 2017

Fukushima powers toward 100% goal on renewables as grid and cost woes linger
https://www.japantimes.co.jp/news/2018/03/11/national/fukushima-powers-toward-100-goal-renewables-grid-cost-woes-linger/#.WqY57XwiGos

by Eric Johnston
Staff Writer

OSAKA – Seven years after the triple meltdown at the Fukushima No. 1 nuclear plant, Fukushima Prefecture remains committed to becoming an international center for renewable-energy research and a domestic pioneer by meeting 100 percent of its energy demand via renewables by 2040.
But grid connection issues, investment costs and a government policy that still favors investment in other energy sources — especially nuclear — continue to present challenges to researchers, businesses and Fukushima policymakers with an interest in renewable energy.
In 2014, the prefecture announced it was aiming to have renewables supply 40 percent of its energy demand by 2020, two-thirds by 2030 and 100 percent by 2040.
As of April 2017, renewable energy accounted for 28 percent of the prefecture's energy needs and about 60 percent of its electricity consumption.
Fukushima's installed capacity in renewables, excluding large-scale hydropower, had reached nearly 1.4 gigawatts by early 2017, equivalent to one large nuclear reactor. This included 925 MW of solar power, 209 MW of biomass and 174 MW of wind, with small shares for geothermal (65 MW) and small-scale hydro (17 MW).
The prefecture also hosts several organizations promoting renewable energy, including the Fukushima Renewable Energy Institute in Koriyama, which is part of the National Institute of Advanced Industrial Science and Technology. There, researchers look into improving the technology, efficiency and use of several forms of renewable energy, including photovoltaic, wind, shallow geothermal and geothermal. The institute also does research on using hydrogen obtained from renewable energy sources.
"With technological support from the institute, a support program for local businesses in the quake- and tsunami-damaged areas is being carried out and human resources are being developed in collaboration with local universities. As a result, there have been 107 joint research projects implemented and nine successful examples of commercialization," said Masaru Nakaiwa, the institute's director-general, in an e-mail interview with The Japan Times.

“As a research institute playing a role in a new energy society for Fukushima, the Fukushima Renewable Energy Institute has been tying up with local business, and it’s gratifying to see the results,” said Masayoshi Hamada, state minister for reconstruction, after a third tour of the institute in February.
Yet while official and public enthusiasm over renewable energy has grown since 2011, and while over 15 percent of Japan’s electricity was generated by renewables in fiscal 2016, Nakaiwa said that does not mean that renewable energy is spreading compared with other OECD countries.
“The big problems remain cost and grid connection capacity, although it’s remarkable that we’ve seen a recent movement in the manufacturing industry, the backbone of support for Japan, to steadily expand its use of renewable energy. The United Nations Sustainable Development Goals have drawn international attention, and the fact that visible consideration for the environment is greatly reflected in a firm’s value is thought to be the main reason” for the shift, he said.
In September 2016, the central government created a renewable energy plan for Fukushima that meant additional support for maximizing its use in Fukushima, including the development of “smart” communities.
The plan gave a particular boost to long-standing government and industry efforts at storing and using hydrogen produced from other renewable energy sources.
In January, Tadashi Mogi, a senior official at the Ministry of Economy, Trade and Industry’s Energy Efficiency and Renewable Energy Department, updated a meeting of the International Renewable Energy Agency on what was going on in Fukushima.
“The potential of solar and wind power in Fukushima is maximized. Currently, delivering the electricity produced by such renewable sources to the large power-consumption areas like Tokyo is unfeasible due to a lack of transmission capacity. But development of transmission lines will begin at a high pace from next year,” he said.
Mogi also noted that pilot projects had been initiated at so-called smart communities in five cities and towns in Fukushima. These include Shinchi, Soma, Namie, Naraha and Katsurao. In those projects, electricity and heat from distributed power sources and renewable energy are supplied to public facilities or even an entire urban district.
The government sees Fukushima-generated hydrogen in particular as a key energy source and plans to promote it internationally in 2020.
“The Fukushima Plan for a New Energy Society, which is the pioneer of this basic strategy, has already begun its activities,” Prime Minister Shinzo Abe said in December at a meeting of the Ministerial Council on Renewable Energy, Hydrogen and Related Issues. “In Namie, a hydrogen production project of the world’s largest scale, using renewable energy with zero CO2 emissions, started last summer. Clean hydrogen made in Fukushima will be used for the Tokyo Olympic and Paralympic Games.”
Wind, particularly offshore wind, is another renewable energy source that Fukushima is pursuing. The Fukushima Offshore Wind Consortium is supported by METI and includes major firms like Marubeni, Mitsubishi Heavy Industries and Hitachi Ltd. The project now has three turbines: 2-MW and 5-MW turbines from Hitachi and a 7-MW turbine from MHI.
The Japan Wind Power Association has proposed that onshore and offshore wind power provide 36GW of electricity by 2030, equivalent to the output of about 30 nuclear power plants. The central government has set a target of generating 820 MW from offshore wind turbines by 2030. As of February 2017, there were nine offshore wind projects nationwide, including fixed and floating offshore turbines that were generating nearly 60 MW.
In March 2017, the association identified a number of problems with offshore wind power in Japan, including cost and poor electric grid infrastructure in areas with good wind like Hokkaido and Tohoku.

The more populated central and western parts of Japan, where grid infrastructure is often better, have only moderate wind speeds, making it difficult for wind farms to turn a profit. Also cited as hurdles were legal issues over the common use of sea areas as well as concerns from politically powerful fishing unions.
In Fukushima itself, a 2017 prefectural survey showed support for renewable energy remained strong, with 54 percent of respondents saying they wanted to keep using it in their daily lives and 14 percent saying they did not.
Between local efforts to meet the 2040 goal of 100 percent use, and central government and business support for Fukushima to become a testing ground for renewable energy technologies, the march toward moving Fukushima from a nuclear past to a renewable future continues.
This is part of a series looking at how the Tohoku region is attempting to rebuild itself seven years after the March 11, 2011, disasters.

Pushing renewables but remaining dependent on nukes

April 10, 2018
Japan pushes renewables, keeps nuclear in energy plan through 2050
https://mainichi.jp/english/articles/20180410/p2g/00m/0dm/063000c
TOKYO (Kyodo) -- Japan will accelerate the development of renewable energy and keep its current policy of lowering its dependence on nuclear power as it aims for a low-carbon society, a government panel report on the country's energy plan through 2050 showed Tuesday.
The long-term policy comes as Japan lags behind the global trend to invest in renewables, and nuclear power is no longer deemed a cheap energy source in the wake of the core reactor meltdowns at the Fukushima Daiichi plant in 2011, with utilities required to invest massively to meet tougher safety regulations.
"Japan will keep the policy of lowering its dependency on nuclear power generation as much as possible while seeking to expand economically independent and carbon-free renewable energy," the report by the eight-member panel said. The members include scholars and business executives.
The report did not set out numerical percentages of the country's future energy mix in 2050. An official at the Ministry of Economy, Trade and Industry said it is hard to predict a specific energy scenario as it depends on how technological developments in energy sources progress.
The most recent targets set out in 2015 seek to have renewable sources account for 22 to 24 percent and nuclear 20 to 22 percent of electric power generation in fiscal 2030.
Under the 2015 Paris climate accord, Japan aims for an 80 percent cut in greenhouse gas emissions by 2050 from 2013 levels.
The report acknowledged that while there have been global movements to phase out nuclear power following the Fukushima crisis, efforts have also been made to enhance the "safety, economic feasibility and mobility" of nuclear power generation.
Japan should first regain public trust in nuclear power following the Fukushima disaster, triggered by the March 2011 massive earthquake and tsunami, and strive to "strengthen personnel, technology and industry base" in pursuit of nuclear reactors with enhanced safety, the report stated.
"There have been concerns that our country's high-level nuclear technology and personnel will be lost following the Fukushima crisis. The panel members pointed out the need to maintain them to enhance safety of nuclear reactors," the ministry official said.

The official said the report puts an emphasis on the development of renewable energy out of a "sense of crisis," with the country currently slow to invest in such energies.
"Honestly speaking, Japan does not have competent companies in the field of renewable energy and we rely heavily on imports of renewable technology, such as solar panels. The panel is concerned Japan should recoup in the long-term," the official said.
Noting that output of solar and wind power generation tends to be influenced by the weather, the panel called for the development of batteries to store surplus renewable energy and converting it to hydrogen.
As for thermal power generation, the report said it will remain a major power source in 2050 but inefficient coal plants should be phased out with more focus on gas plants.
The report is set to be reflected in a separate government energy plan through 2030 that is due to be finalized this summer.

Time to switch to green

April 13, 2018

Editorial: Japan must make concerted push to switch to green energy economy
https://mainichi.jp/english/articles/20180413/p2a/00m/0na/017000c
An expert committee at the Ministry of Economy, Trade and Industry recently finalized long-term energy plan recommendations through the year 2050. Solar, wind and other renewables were given pride of place as "main power sources," and we commend the committee for its proactive attitude to expanding green energy, a sector in which Japan lags behind countries in Europe and elsewhere.

- 【Related】Japan pushes renewables, keeps nuclear in energy plan through 2050

However, there are many obstacles that must be overcome to realize this renewable energy future. To make sure this goal does not end up a mere flight of fancy, we call on the government to develop tactics that will get Japan steadily to its green energy goals.
The long-term energy plan recommendations were drawn up with the Paris Agreement limiting global warming in mind, and form the compass needle by which Japan's energy policy is plotted. Indeed, the government is looking to finalize Japan's revised basic energy plan as early as this summer, and it will reflect the committee's ideas.
The ultimate goal is for Japan to free itself entirely from carbon-based energy. That means ending dependence on fossil fuels -- oil, coal, and natural gas. Expansion of renewable energy plays the leading role in accomplishing this.
However, there are difficulties with renewables, including instability due to changes in the weather, high costs, and patching green energy generation sources into the electricity distribution network. That is likely why the committee recommendations set the target ratio of Japan's energy mix made up of renewables at 22 to 24 percent in 2030 -- the same as it is under the current basic energy plan.
For the sake of the long-term strategy and overcoming the aforementioned obstacles, the recommendations call for a plan to concentrate efforts on developing essential technologies such as storage batteries, hydrogen fuel systems, and smart electricity distribution systems. This idea is based on

the belief that Japan cannot catch up with European countries and China if it uses existing technologies, and that it is necessary to put more efforts into developing next-generation technologies.
Creating new technology always takes time and money. Thus, the government must lay out a truly concrete path to get the work done. To cultivate renewables as the "main energy source," we call on Japan to leverage knowhow from the private and public sectors to make the best of existing high-efficiency electricity distribution technologies and the like, and to secure power sources that can compensate for the instability inherent in green energy generation.
One aspect of the recommendations is the positioning of nuclear power. The long-term energy strategy calls for atomic energy to be "reduced as much as possible," but also retains it as one option to help Japan free itself of fossil fuels. It would be difficult for the government to earn the public's understanding for retaining nuclear power by dressing it up as a just policy to wean the country off carbon.
Japan must end its dependency on nuclear power as quickly as possible. Making renewables this country's main energy source is a must for that to happen.
See also:
https://www.japantimes.co.jp/opinion/2018/04/14/editorials/boost-renewable-energy-sources/

Clean energy for Japan

June 25, 2018

Japanese firms shift to clean energy despite state's enduring commitment to nuclear power
https://www.japantimes.co.jp/news/2018/06/25/business/japanese-firms-shift-clean-energy-despite-states-enduring-commitment-nuclear-power/#.WzDNqIoyWos

by Hidetoshi Takada
Kyodo
As Japan's government clings to nuclear power even after the Fukushima crisis, the private sector is moving ahead with greater use of renewables to power their operations amid growing international awareness of climate change.
As Japan's government clings to nuclear power even after the Fukushima crisis, the private sector is moving ahead with greater use of renewables to power their operations amid growing international awareness of climate change.
For instance, in March Daiwa House Industries Co. became a member of both RE100 (Renewable Electricity) and EP100 (Energy Productivity), two global initiatives by the Climate Group.
RE100 is a global, collaborative initiative of influential businesses committed to using 100 percent renewable electricity, while EP100 brings together companies committed to doubling energy productivity to lower greenhouse gas emissions. Among RE100's 136 members are U.S. General Motors Co. and Dutch consumer goods giant Unilever.
Printer-maker Ricoh Co., the first Japanese firm to join RE100, was followed by five firms such as online stationery retailer Askul Corp. and retail giant Aeon Co., aiming to meet the electricity needs of their global operations with renewable energy between 2030 and 2050.

Daiwa House says it is the world's first company in the construction and housing sectors to join both campaigns and the first to declare it is taking bold action, as part of EP100, among Japanese firms. Currently, there are 15 EP members. Daiwa aims to achieve both goals by 2040.

Katsuhiro Koyama, general manager of Daiwa's environment department, spurred debate over achieving the targets after returning to Japan from the COP23 global climate round in Germany last November.

He had previously taken a cynical view of such tech giants as Apple Inc., Google Inc. and Microsoft Corp. participating in the RE100 clean energy initiative, seeing it as an "atonement for their sins" for consuming huge amounts of electricity.

But as one of the Japanese delegate members to the global conference, Koyama said he was "inspired" by the firms' "serious aspirations to leverage clean energy producers" after hearing various discussions.

The Osaka-based Daiwa group has invested an estimated ¥46.6 billion in the construction of its own solar, hydro and wind-power plants nationwide since 2007, producing power equivalent to about 60 percent of the group's annual use of 481 million kilowatt hours. Meanwhile, it doubled its electricity use efficiency in fiscal 2016 compared to fiscal 2005.

Japanese businesses became much more aware of renewable energy in the wake of the Hokkaido Toyako summit in 2008, in which the Group of Eight countries set a long-term target to reduce greenhouse gas emissions. The 2011 Great East Japan Earthquake, which triggered the suspension of all nuclear power plants, also sparked public concerns over the country's energy mix.

The ratio of renewable energy to the nation's entire power output capacity has risen from 10 percent in fiscal 2010 to 15 percent in fiscal 2016, according to the Agency for Natural Resources and Energy, boosted by a feed-in tariff system that obliges utilities to buy electricity generated by renewable energy at fixed prices. The scheme has attracted businesses large and small — even individuals — to pour money into the field of photovoltaics as they requires less effort to install and operate in a shorter period of time compared to other types of energy sources, said Yushi Inoue, a research director at think tank Mitsubishi Research Institute.

Individual power producers are actively trying to connect with grids in northeastern Japan, and in a recent offering sought to supply "more than three times what we can accept," according to a spokesman of Tohoku-Electric Power Co., the regional utility.

The region, part of which was devastated by the mega-quake seven years ago and the subsequent nuclear disaster, has a number of favorable locations for wind power plants.

Meanwhile, a similar scheme in Europe that utilizes renewable energy certificates and a guaranteed origin of electricity generated from such sources has gained momentum among environmentally conscious firms, particularly after the 2008 summit in Hokkaido. The tradable green certificate proves "environmental added value" created by renewable energy producers, and can be purchased by electricity users.

Despite the financial burden, Ajinomoto Co. switched its energy source to renewables for its entire annual electricity use of 4.5 million kilowatt hours at its Tokyo headquarters and major sales bases at home in the business year to March 2018.

Japan's major seasoning- and food-maker extended the move to its four group arms in April, aiming to boost its renewable energy use to 50 percent of the group's total energy consumption by fiscal 2030.

The targeted figure is part of various nonfinancial targets compiled for the first time in its three-year business management plan that started in fiscal 2017, said Mototsugu Shiratsuchi, general manager of the environment management support group of Ajinomoto.

Although the volume of certified renewable energy is fairly small relative to the entire clean energy output in Japan, it has been steadily rising — reaching 378 million kilowatt hours in the year to March 2018, according to the Japan Quality Assurance Organization, the accreditation body.
Japan Natural Energy Co., the leading certificate issuer, has over 150 firms as long-term clients, such as Sony Corp., Asahi Breweries and about 300 customers on a one-time contract basis.
The company is the pioneer in the field with about an 80 percent market share, according to the accreditation body.
President Masaru Terakoshi said that one of Japan's global carmakers employed the certificate as part of its corporate social responsibility policy for 15 years but terminated a contract with the issuer two years ago.
The automaker, however, is set to repurchase the warrant this year following re-examination of how it can apply the certificate to its production activity.
Terakoshi declined to specify which automaker, but the example indicates that Japan's multinational corporations are becoming more aware of taking leadership roles in the fight against climate change.
"Otherwise, companies face a risk of losing clients," he said, as most of the world backs the landmark Paris accord goal of effectively reducing net carbon dioxide and other greenhouse gas emissions to zero in the second half of this century.
The tradable certificate is widely used. Some hotels, for example, buy the warrants to show that their banquets are sustained by clean energy.
In its latest draft energy mix plan, due to be finalized this summer, the Ministry of Economy, Trade and Industry called nuclear power "an important baseload energy source." This stance appears to conflict with public opinion, which shifted after the 2011 Fukushima disaster. In addition to public sentiment against nuclear power plants, the government's tougher safety standards led to the shutdown of all reactors.
In the fiscal year through March 2017, fossil fuels accounted for 83 percent of Japan's electricity output capacity. Renewables are currently at 15 percent.
The ministry proposes that nuclear power should account for 20-22 percent of the country's power sources in 2030, and renewables 22-24 percent, which still lags behind the equivalent figures seen for major European nations in 2015.

Toward a reduction of the plutonium stockpile?

July 3, 2018
Tokyo plans shift toward renewable energy, planning for first time to cut plutonium stockpile
https://www.japantimes.co.jp/news/2018/07/03/national/tokyo-eyes-renewable-energy-plans-cut-plutonium-stockpile/#.WztfKIoyVLM
Kyodo, Staff Report
Japan will shift further toward renewable energy and cut dependence on fossil fuels and nuclear power, according to the country's energy plan approved Tuesday by the Cabinet.
Ahead of the automatic July renewal of the U.S.-Japan agreement on the peaceful use of nuclear energy, the plan for a medium- to long-term energy policy also mentioned that Japan will work to reduce its plutonium stockpile for the first time.
The increased focus on renewables under the 2015 Paris climate accord underscores the nation's daunting challenge to reduce greenhouse gas emissions drastically in the years ahead.

The government, which updates the energy plan roughly every three years, kept its goals the same for its mix of energy sources in fiscal 2030 but did not give specific numbers for fiscal 2050 — the year when it has to clear its specific commitment in fighting global warming.
Toward 2030, the government aims to have renewables account for 22 to 24 percent, fossil fuels 56 percent and nuclear power 20 to 22 percent of the country's electricity generation, the energy plan showed.
With its 2016 energy self-sufficiency ratio below 10 percent, resource-poor Japan needs to secure stable energy supplies for economic activity and national security while also ensuring the safety of nuclear power generation following the 2011 Fukushima accident.
The country also needs to accelerate efforts to fight global warming, now that it has set the goal of achieving an 80 percent cut in greenhouse gas emissions in fiscal 2050 from 2013 levels.
The energy plan calls for supporting the development of a sustainable market for renewables, such as solar, wind and geothermal power, and encourages the use of hydrogen.
Placing a priority on safety, the nation will cut dependence on nuclear power generation "as much as possible," the energy plan said.
Still, it also acknowledged that nuclear power is one of the viable choices to achieve a shift away from using coal and other fossil fuels and cut greenhouse gas emissions.
Much of the country's nuclear power plants have been taken offline since the Fukushima disaster. The administration of Prime Minister Shinzo Abe is seeking to restart plants that have cleared safety checks.
The Japan-U.S. nuclear pact currently enables Japan to continue its spent-fuel reprocessing program for 30 years to July 2018.
Spent fuel from nuclear reactors is reprocessed to extract uranium and plutonium, which is then recycled into fuel called mixed oxide, or MOX, for use in fast-breeder reactors or conventional nuclear reactors.
In a June 21st open letter to International Atomic Energy Agency Director General Yukiya Amano that expressed concern about the management of plutonium stocks, three anti-nuclear groups said efforts to restart nuclear reactors, especially those that use MOX fuel, to meet the long-term energy goal for nuclear power were unrealistic.
"Our analysis over recent years, and to the present, indicates that Japan will fail to meet its nuclear restart target of 30 gigawatts by 2030 by a wide margin. Many more nuclear reactors are likely to be decommissioned" in the coming years joining the 17 that have been declared such since 2011, said a letter jointly signed by Hideyuki Ban, co-director of Citizens' Nuclear Information Center, Aileen Mioko Smith, director, Green Action, and Shaun Burnie, a senior nuclear specialist at Greenpeace Germany.
"In addition to the four reactors that have resumed operation with partial MOX fuel cores, it is uncertain how many of the remaining six reactors that have received MOX approval will actually restart during the next 10 years. They are all confronted with multiple challenges, including seismic faults, as well as legal and political opposition," the letter added.

Decarbonisation & Japan

July 3, 2018

Japan's energy and decarbonization challenge
by Tomoaki Nakanishi
The government has just reviewed its energy strategy or Basic Energy Plan — the first review in four years. In the 2017 COP23 United Nations Climate Change Conference held in Bonn, Germany, an international network of nongovernmental organizations awarded the Fossil of the Day prize to Japan. But in reviewing its energy strategy, Japan has declared that it will meet the challenge of developing new energy sources and technologies and achieving decarbonization under a long-term timetable stretching to 2050 by taking into consideration the Paris agreement adopted at the 2015 COP21 conference.
The energy landscape has undergone rapid changes in recent years.
First, the prices of energy from renewable sources have fallen on a global scale and new endeavors to develop new technologies for decarbonization, such as energy storage and digital control technologies needed for large-scale introduction of renewable energy, have started with the participation of a wide range of industrial sectors.
Second, new risks that are qualitatively different from conventional geopolitical risks have arisen with the rising presence of emerging powers such as China and India.
Third, competition for dominance in technological development for decarbonization has kicked off among major countries and energy companies, leading people to anticipate the emergence of a society in which technologies will serve as key resources.
In foreseeing the situation in 2050, it must be recognized that the degree of uncertainty for the future is extremely high. At the same time, the high degree of uncertainty means that there will be possibilities in the future. In facing an era of both uncertainty and possibilities, it will be important not only to set an ambitious goal to pursue the possibility of every option but also to consider multiple scenarios that should be scientifically reviewed on the basis of the latest technological trend and global situation for flexible adjustments.
To begin with, Japan, poor in domestic energy resources, is an insular country with no power transmission networks connected with other nations. Therefore it has tried to cope with its intrinsic situation by

exploring the possibility of every energy source to achieve the best mix of 3E+S — energy security, economic efficiency and environmental protection with safety serving as the major premise.
In developing Japan's energy strategy, the recent experience of Germany offers a useful suggestion. Germany is trying to achieve decarbonization by fading out nuclear power and expanding renewable energy sources. But now it faces difficulty in reducing its dependency on coal-fired thermal power generation although its use of renewable energy sources is expanding. It must be noted that as a result, its reduction of carbon dioxide emissions has become slow and household electricity bills have risen.
It also must not be forgotten that a nation like Germany, which can sell or buy electricity to and from neighboring countries through international power transmission networks, can absorb to some extent the fluctuation of power output from renewable energy sources by means of export and import of electricity.
In any case, each country is trying to build an optimum energy system under its given conditions, which are different from one country to another. In this situation, it is important to develop an energy policy under the 3E+S approach.
Let me discuss individual energy sources. The first is a zero-carbon emission power source consisting of renewable energy sources and nuclear power.
After the Great East Japan Earthquake of 2011, Japan reviewed its nuclear power policy from scratch. While seeking to reduce the dependency on nuclear energy for power supply as much as possible, the energy policy aims to squarely tackle the problem of the high cost of renewable energy sources — which remain relatively high compared with overseas — so as to turn the renewables into a major power source.
In view of the fact that nuclear power is an important option already in use for achieving decarbonization, Japan will immediately start seeking reactors excellent in safety, flexibility and economic efficiency as well as developing back-end technologies to win back public trust in nuclear power.
The second is coal-fired thermal power. Currently Japan has highly advanced technologies to utilize coal. For example, by introducing an integrated gasification combined cycle (IGCC), which uses a high-pressure gasifier to turn coal and other carbon-based fuels into pressurized gas, and an integrated gasification fuel cell cycle (IGFC), a fuel cell-based power cycle consuming gasified solid fuels such as coal and biomass fed directly to fuel cells operation at high temperature, it will become possible to cut carbon dioxide emissions significantly even compared with the latest coal-fired plant currently in use. (IGCC will be able to reduce the emissions by about 10 percent more and IGFC 30 percent.) Japan is currently building a large, commercial-use IGCC power plant and carrying out a demonstration experiment of IGFC.
Japan can greatly contribute to reducing global greenhouse gas emissions by passing its highly efficient coal-utilization technologies to countries that have no other choice but to rely on coal as an energy source. Japan, on the other hand, will phase out its low-efficiency coal-fired power generation.
Japan's journey toward 2050 has just begun. It will try to accomplish an ambitious goal of achieving an 80 percent reduction in greenhouse gas emissions on multiple scenarios that will be scientifically reviewed. Although the goal is ambitious, the approach will be flexible. Concrete measures must be worked out from now on.
To achieve the goal, the government and the private sector must fully cooperate. In partnership they will push innovative technological development in areas needed for decarbonization, such as power storage, use of hydrogen, nuclear power, diversification of energy sources and heat utilization.
In the financial market, where environmental, social and governance criteria are gaining importance recently, energy companies and the financial sector will have dialogue to build a funding circulation mechanism, in which they will jointly write a scenario to change the energy landscape and pursue decarbonization.

Since the annual global carbon dioxide emissions top 30 billion tons, with Japan emitting roughly 1.1 billion tons, it is clear that worldwide proliferation of non-carbon technologies is indispensable. Japan will serve as a bridge to link energy-consuming nations and resource-rich countries.
Japan is determined to contribute to and fulfill development of new energy sources/technologies and decarbonization, a long-term goal of humankind, by implementing policies under the new basic energy plan.
Tomoaki Nakanishi is former director of the International Affairs Office of the Natural Resources and Energy Agency at the Ministry of Economy, Trade and Industry.

Time to choose renewables

A large-scale solar power plant that started operation in Niigata in July (Provided by Orix Corp.)

August 27, 2018

EDITORIAL: Time is now to turn renewables into 'mainstay' energy sources
http://www.asahi.com/ajw/articles/AJ201808270016.html
A large-scale solar power plant that started operation in Niigata in July (Provided by Orix Corp.)
We know which direction we should be going.
The problem is how we should go about getting there. It is time to be working out strategies and putting them into practice over the years to come.
The latest edition of Japan's basic energy plan, which was approved by the government in July, includes a passage saying that efforts should be made to turn renewable energy options, such as solar and wind power, into "mainstay" power sources.
A substantial expansion in the use of renewables, which does not involve carbon dioxide (CO2) emissions, is indispensable for achieving the double goals of fighting global warming and becoming less reliant on

nuclear power. The use of renewable energy sources also comes with the big advantage of domestic availability for Japan, a country poor in natural resources.
Many other nations are already speeding up efforts in that direction on the back of technological innovations and a sharp drop in costs. It is all too natural for Japan to follow that global trend.
The latest plan, however, also appears indecisive in some respects. For example, its future introduction target for renewables remains unchanged from a previously stated goal.
A mountain of challenges remains to be solved to make sure that the whole shebang will not end up as mere slogans. Ideas on how they could be solved should be sought both in Japan and abroad, and the undertaking should be sped up across the entire society.

NUMERICAL GOAL SHOULD BE RAISED

The latest plan, revised for the first time in four years, says in one passage, "We should address challenges squarely toward the goal of introducing renewable energy options in large scales and turning them into mainstay power sources that are self-reliant in economic terms."
Given that, the plan is too halfhearted in sticking to the previous goal of having renewable energy account for 22 to 24 percent of the total power to be generated in fiscal 2030.
The share of renewables has already grown to some 15 percent in Japan. The possibility has emerged that the numerical goal will be achieved ahead of the initially planned date.
Many European nations are aspiring to even higher levels. For example, the ruling coalition of Germany has agreed on setting a target share of 65 percent for renewables in 2030.
Japan should also pursue possibilities for raising the share of renewables to a maximum.
The first thing to be done in that respect is to lift the existing restrictions on the use of the power grid, which are practically serving as a barrier against power generated from renewable energy sources.
Renewable energy power producers often hesitate about working out development plans because major electric utilities, which own the power grid equipment, explain to them that they don't have enough capacity in their transmission capability.
Some leeway, in fact, is reserved in their transmission capacity, including a part that is kept unused in providing against a time of technical failures. The industry ministry and the power industry are discussing possible improvements to the operation of the power grid.
There is a pressing need for developing fair and transparent rules to allow a maximal use of the equipment that is currently available.

PAIR OF DRAWBACKS TO OVERCOME

Overcoming a pair of drawbacks is key to the goal of getting renewable energy options on a stable track of expansion. One is the cost of power generation, which remains higher than in other countries, whereas the other lies in the instability of the power supply potential, which varies depending on the weather.
The slowness of cost reduction in Japan is partly attributable to the feed-in tariff (FIT) system, which was introduced in 2012. The system has certainly been a driving force behind a spread of renewable energy sources, but experts have also pointed out that it is helping to allow the renewables industry to preserve its high-cost structure.
The FIT system is an assistance measure for guaranteeing a certain level of income to renewable energy power producers. The cost for doing so is added on top of electricity rates in the name of a levy, and the total burden borne by the public has grown to some 2 trillion yen ($18 billion) a year. The system should inevitably be reviewed to keep that amount to a minimum.
The essential thing is to prompt competition and efficiency improvement on the part of power producers while at the same time ensuring the potential for growth will not be ruined. There are a variety of ways to

do so, such as expanding a mechanism for purchasing electric power from a producer that has presented a lower price during a bidding process.
There should perhaps also be discussions on shifting the focus of policy initiatives in the coming years from direct subsidization through the FIT system to carbon tax, to be imposed on CO2 emissions, and to emissions trading. The use of market mechanisms would help allow renewables to become self-reliant at an earlier date.
In the meantime, how to level out variability in the output of wind and solar power will emerge as a major challenge as their output grows. There is no choice, for the time being, but to rely mostly on thermal power for that purpose, but the use of other means is indispensable for reducing CO2 emissions.
More specifically speaking, a variety of options are available, including the use of storage batteries and the development of a power grid that allows electric utilities to supply power to each other on a broader, regional scale. Different technological means should be assessed carefully for their extent of progress and economic efficiency so the most effective components can be combined and put to use.
DIFFERENT ROLES FOR PUBLIC, PRIVATE SECTORS
The effort to turn renewables into mainstay energy sources would take decades to complete. Sorting out the roles to be played by the public and private sectors and allowing a broad array of actors to work together are essential in overcoming hurdles and pressing ahead with that effort.
An important task to be done by the central and local governments is to develop an environment that allows private-sector players to actively engage in research, development and investments. Apart from designing the FIT and other basic systems, there is also a mountain of other things to do, such as working out rules for the use of offshore areas as wind farms and providing information on land plots that are suitable for hosting renewable power plants.
Businesses, which are the main players of action on the ground, should be ready to quickly seize business opportunities and pinpoint social agenda. Renewables account for a core part of energy-related investments overseas, thereby giving rise to a gigantic growth market.
There has been a noteworthy move in Japan's industrial circles, which appeared to be starting a bit late. More than 100 entities, including major businesses, local governments and other groups, in July set up the Japan Climate Initiative, a platform for working together to help spread the use of renewables and disseminate information on them. Its corporate participants come from a broad array of industrial sectors such as manufacturing, financing and construction.
An attempt to reshape society into one that is sustainable on the fronts of energy and the environment has now turned into a global swell and is generating new development opportunities. That momentum should be allowed to infiltrate public administrative bodies, businesses, consumers and other parties so that it will serve as a driving force for opening up a new age to come.
--The Asahi Shimbun, Aug. 26

Technology developed to remove tritium from water

August 28, 2018

Researchers develop technology to remove radioactive tritium from water
https://mainichi.jp/english/articles/20180828/p2a/00m/0na/013000c
OSAKA -- A team of researchers from Kindai University and private companies in western Japan has developed a new filter enabling the removal of water containing radioactive tritium.

- 【Related】Decommissioning Fukushima reactors will take time but progress continues
- 【Related】NRA chair ties nuke plant restart to TEPCO taking lead on Fukushima decommissioning
- 【Related】High-priced Fukushima ice wall nears completion, but effectiveness doubtful

The researchers hope their technology will eventually be used in processing water leaking from the Tokyo Electric Power Co.'s crippled Fukushima No. 1 Nuclear Power Plant. The waste water contains tritium but the radioactive material cannot be removed with the current filtering technology.
Tritium is an isotope of hydrogen. Water containing tritium has chemical features almost identical to water with ordinary hydrogen, and separating tritium water is difficult.
The research team, comprising professor Tatsuhiko Ihara of Kindai University specializing in inorganic material chemistry, and researchers from Osaka-based Toyo Aluminium K.K. and others, has developed an aluminum filter with extremely tiny holes 5 nanometers or less in diameter each. The filter can stop vapors of tritium water, and the separation rate was "almost 100 percent," according to a team representative.
At the Fukushima No. 1 plant, over 800,000 metric tons of radioactive water that leaked from the facility is stored on the premises. The research team will cooperate with local companies in Fukushima Prefecture and others to develop equipment that can be put to actual use to separate tritium.
The radioactive material exists in the natural environment, and the Nuclear Regulation Authority maintains that there should be no problem in releasing water containing tritium into the sea if its concentration levels are lowered sufficiently. This stance faces strong oppositions from local fishermen and others who worry about negative rumors about their catches due to the discharge of such water. The government has set up a panel of experts to examine how to process tritium water.
(Japanese original by Koki Matsumoto, Osaka Science & Environment News Department)

Kyushu Elecric to restrict renewables ?

A large-scale solar power plant that started operation in Niigata in July (Provided by Orix Corp.)

August 29, 2018

Kyushu Electric mulls cutback on solar power

http://www.asahi.com/ajw/articles/AJ201808290050.html

THE ASAHI SHIMBUN

FUKUOKA--The sun could be setting on renewable energy in Kyushu, as solar power plant operators face the prospect of being forced to suspend their successful operations to make way for resurgent nuclear power.

Kyushu Electric Power Co. is considering using its right to order solar power operators to stop production temporarily, possibly, next month because of a surplus of power resulting from the resumption of operations at the utility's four nuclear reactors on the main island of Kyushu. Unlike renewables, nuclear energy has the status as one of Japan's top priority power sources.

The order would be the first of its kind on a main island in the nation if the utility proceeds with it.

Solar power generation is thriving in Kyushu partly because the region, which is situated in the south in the nation, enjoys more sunlight hours and less snow than others.

Buoyed by government subsidies to promote renewables in the wake of the 2011 Fukushima nuclear disaster, solar quickly spread in Kyushu.

At some points during the year, solar power has provided the vast majority of energy used in Kyushu. For example, it accounted for more than 80 percent of electricity used in the region as of 1 p.m. on April 29 during the Golden Week holidays.

Now, the amount of power generated by solar energy that Kyushu Electric buys from operators under the feed-in-tariff system is growing at a pace of 50 megawatts a month on average.

But the spread of renewables' growth has a drawback, according to utilities.

A power supply in excess of demand causes fluctuations in electric frequency that could result in power outages across a broader area.

Fukuoka-based Kyushu Electric has tried to coordinate supply and demand by curtailing the operation of thermal power plants and producing power at night with water pumped up during the day by solar energy.
When such coordination becomes difficult, electric power companies can issue a directive for solar power operators to halt their operations temporarily under a rule set by the government.
Kyushu Electric has already turned to this option in remote islands such as Ikishima island, Nagasaki Prefecture, and Tanegashima island, Kagoshima Prefecture.
The option of output control looms large in spring and autumn, the two seasons when demand for power to use heaters and air conditioners remains low, but solar power output soars due to clear weather on many days.
When factories and company offices are closed on holidays in those seasons, a need for output control becomes more likely.
“We may issue a directive for output control this autumn,” a Kyushu Electric official said.
When the company decides on output control of solar energy, based on the projected power demands by taking into account data on weather and other factors, it is supposed to notify solar energy operators via e-mail by the evening before.
Kyushu Electric is now capable of supplying more power through conventional sources with the restart of all its four nuclear reactors--two units at its Sendai nuclear plant in Kagoshima Prefecture and another two at its Genkai plant in Saga Prefecture.
Renewables are the first energy sources to be subjected to output control under the government rule. Nuclear energy is the last, because the government designates it a “base load power source,” alongside hydraulic power and geothermal power. The government says those sources are relatively inexpensive to produce power and their output is stable.
Experts say one solution to fully utilize renewable energy output is to strengthen tie-ups between regional utilities so that a surplus of power in one region can be used elsewhere.
Projects to reinforce the capacity of power lines between utilities are getting under way for that purpose. But electric power companies on the receiving end are not eager to receive power from other utilities, because it means their own power stations may then experience drops in the rates of their output.
“We need to draw up rules to coordinate between utilities, including how to share the financial cost, and to optimize the use of renewables beyond regional boundaries,” said Yukari Takamura, professor of environmental law at Nagoya University, who is well-versed in power generation systems.
(This article was written by Yuji Yamashita and Rintaro Sakurai.)

Japan's Kyushu Electric may restrict renewable energy supplies after nuclear ramp-up

https://www.reuters.com/article/japan-nuclear-renewables-restrictions/update-1-japans-kyushu-electric-may-restrict-renewable-energy-supplies-after-nuclear-ramp-up-idUSL3N1VK2J8
By Osamu Tsukimori - August 29, 2018
TOKYO, Aug 29 (Reuters) - Kyushu Electric Power Co may start restricting third-party supplies of solar energy after it restarts a fourth nuclear reactor, the company said on Wednesday, underscoring the risks to a government push to boost renewable energy.
Japan’s fifth-biggest utility by sales plans to restart the No. 2 reactor at its Sendai station later on Wednesday, giving Kyushu the most nuclear generation since the 2011 Fukushima disaster led to the shutdown of Japan’s atomic power sector.
The move could lead to possible restrictions on the purchase of renewable energy as early as next month, a Kyushu spokesman told Reuters, declining to be identified because of company policy.

“Output restrictions can occur when power demand is low and solar power generation is high, such as in the autumn, spring or at the year-end and beginning of the year,” the spokesman said.
The Fukushima disaster prompted a shift in Japan toward renewable energy, backed by mandatory preferential rates for solar, wind and other supplies.
Introduced in 2012, the preferential rates, known as feed-in-tariffs, were at the time among the highest in the world, sparking a rush of investments by startups and other companies.
Only one of Japan’s other nine nuclear operators, Kansai Electric Power Co, the country’s second-biggest utility by sales, so far has reactors running.
However, the slow return of nuclear, which once accounted for 30 percent of Japan’s electricity generation, is now threatening the once-guaranteed income for operators of renewables.
The government changed regulations in 2015, allowing the old utilities, which control the country’s transmission grids, to restrict supplies of renewable energy from their solar or wind farms if they deem it necessary to maintain grid stability.
The orders can be made at short notice and without having to pay compensation.
Solar power has grown particularly fast on the island of Kyushu, where Kyushu Electric operates, because of plentiful sunshine and available land.
“Given the increase in solar capacity in Kyushu it is not necessarily a surprising event and we have seen this type of thing happening in Europe where renewables have grown fast,” said Professor Yoh Yasuda, project professor of renwable energy economics at Kyoto University.
Kyushu had 8 gigawatts of solar capacity connected to the grid at end-June, just shy of the 8.2 gigawatts that a government committee estimated in 2016 would be the maximum the utility could take without curtailment.
Should Kyushu start restricting supplies the curtailment may affect as much as 4.2 gigawatts of the available capacity, the spokesman said, adding suppliers would be given a day’s notice. (Reporting by Osamu Tsukimori; writing by Aaron Sheldrick; editing by Richard Pullin)

How committeed is Japan to sustainable energy?

A giant solar farm in an industrial zone of Oita in 2014 (Asahi Shimbun file photo)

October 17, 2018

EDITORIAL: Commitment to sustainable energy tested like never before
http://www.asahi.com/ajw/articles/AJ201810170029.html

With its pathetically limited natural resources, it is nothing short of sheer wastefulness for Japan to "throw away" any ready-to-use natural energy.

What the nation should be doing instead is to think how best to put that available energy to maximum use.

Kyushu Electric Power Co. required some solar power plant operators in the region to temporarily suspend operations, explaining that daytime supply of power was in surplus and tipping the supply-demand balance, potentially inviting major power outages that must be prevented at all costs.

The utility's decision was fully in keeping with government rules, and was exercised for the first time in Japan, save for remote islands.

Thanks to its plentiful sunshine, Kyushu has made strong leaps in solar power generation. Until recently, Kyushu Electric dealt with daytime power surpluses by curbing thermal power output and using the surpluses for pumped hydroelectric energy storage for load balancing.

But such measures have proved insufficient of late.

If the use of sustainable energy continues to grow, this will likely lead to more temporary shutdowns at power plants using renewable energy around the nation, which in turn will shrink operators' revenues and may stymie the growth in use of sustainable energy.

To prevent that from happening, there is clearly a crucial need to be able to adjust and balance climate-caused load fluctuations from solar and wind power generation.
The government and the power industry need to work out countermeasures without delay.

Systems of power storage involve large-capacity storage batteries and pumped hydroelectric energy storage. Another good option is to build wide-coverage grids to transmit power from one region to another.

However, these types of infrastructure reinforcement will be quite costly, and the question, of course, is who foots the bill. Obviously, any project of this nature must be planned with utmost efficiency and due consideration for the needs or circumstances of each region.

Government assistance will also be needed for the development of new technologies, such as for low-cost batteries.

But there also are ideas that can be tried out by individual and corporate consumers alike. One, for instance, would be to run water heaters during solar power generation's peak load hours. Applying a discount rate for those hours should serve as a consumer incentive. Utilities need to be innovative.

Kyushu Electric's latest move showed that as more idle nuclear reactors go back online, the less chances there will be for reliance on sustainable energy. The utility's operation of four nuclear reactors has had the effect of rendering the existing solar power redundant.

The government's "priority power supply rule" places the highest emphasis on the operation of "long-term fixed power sources," which include nuclear power plants. According to the Ministry of Trade, Economy and Industry, this is necessitated by the "technical difficulty of adjusting nuclear power output."

But the government's Basic Energy Plan, revised this year, aims to position sustainable energy as the main power source. If this is the case, how could it be appropriate to hold onto the "priority power supply rule" that is becoming an obstacle to that aim?

The root cause of the present problems lies in the fact the Basic Energy Plan continues to position nuclear power generation as the fundamental power source.

Before anything, the government must rethink this situation and seriously consider specific ways to reduce the nation's reliance on nuclear energy.

The government is being tested on its stated commitment to making sustainable energy the main power source.

--The Asahi Shimbun, Oct. 17

Too much power?

October 16, 2018

VOX POPULI: Balance of power would tilt from nuclear to solar if logic prevailed

Vox Populi, Vox Dei is a daily column that runs on Page 1 of The Asahi Shimbun.
http://www.asahi.com/ajw/articles/AJ201810160023.html

Going on a trip after being jilted by one's lover is a frequent theme of popular Japanese songs, and the destination is often somewhere cold and bleak in the north.

In mega-hit "enka" ballads, such as "Tsugaru Kaikyo Fuyugeshiki" (Tsugaru Strait winter scene) and "Kita no Yado kara" (From an inn in the north), icy winds heighten the heartache.

In contrast, blissful newlyweds used to invariably head south, according to "Ryoko no Susume" (Encouragement of travel) by Yozaburo Shirahata.

Miyazaki Prefecture on the southern island of Kyushu was the top honeymoon destination, bar none, before overseas travel became common for the public.

In the mid-1970s, Miyazaki attracted more than 30 percent of honeymooners nationwide. Neighboring Kagoshima Prefecture was also popular.

Both prefectures offered plenty of sunshine, which was deemed ideal for newlyweds.
This sunny climate must also be the reason for the growing number of solar panels installed in Kyushu.

That should make us happy, but Kyushu Electric Power Co. apparently feels otherwise.
The regional utility has ordered a partial suspension of solar power generation, saying the arrival of cooler weather has reduced consumers' reliance on air conditioners.

It explained that surplus power generation can disrupt the supply-demand balance and cause outages.

This is something I'd never heard before, but I suppose power generation follows a complex system.

Still, the utility's four nuclear reactors have remained in operation in accordance with the national government policy of prioritizing nuclear power generation.

Seven years have passed since the Fukushima nuclear disaster prompted the nation to promote solar power generation after seeing the risks of relying on nuclear power.

But have the nation's utilities been just sitting around all these years, not bothering to prepare themselves for renewable energy?

The companies have no time to waste. They must reinforce their grids to enable mutual sharing of electricity and stop nuclear reactors that are redundant.

Solar power generation is taking off not only in the south, but also around the nation.
Northern Japan also has many localities suited for wind turbine installation.

When young trees are starting to grow, so to speak, they must not be allowed to wither.

--The Asahi Shimbun, Oct. 15

Fukushima winf turbine removed

October 27, 2018

Fukushima wind turbine, symbol of disaster recovery, to be removed
https://mainichi.jp/english/articles/20181027/p2g/00m/0dm/009000c

FUKUSHIMA, Japan (Kyodo) -- A floating wind turbine built off Fukushima Prefecture to symbolize recovery after the 2011 nuclear disaster will be removed, a government source said Friday.

- 【Related】Samurai horsemen show off skills in traditional Fukushima festival
- 【Related】Wildfire rages in highly radioactive Fukushima mountain forest
- 【Related】5 more minors in Fukushima Pref. at time of nuclear accident diagnosed with thyroid cancer

The offshore power facility was put in place as the Fukushima prefectural government introduced renewable energy after the triple reactor meltdown at the Fukushima Daiichi nuclear power plant in the days following the huge earthquake and tsunami of March 2011.
Experimental studies were conducted with a view toward commercialization but the turbine, one of the world's largest with a rotor diameter of 167 meters, was deemed unprofitable due to multiple malfunctions decreasing the utilization rate.
"At present, we are considering a method of removal because the maintenance cost is too high," said the government source.
The turbine is one of three on a floating wind farm 20 kilometers off the coast of Naraha city in Fukushima Prefecture.

The cost of removal of the 15.2 billion yen ($135 million) turbine with an output capacity of 7,000 kilowatts is expected to be around 10 percent of the building cost.
Studies on the two other turbines are planned to conclude in fiscal 2018, but the study period is expected to be extended to seek any possibility of commercialization.
The turbine started operating in December 2015 but was riddled with operating problems.
Its utilization rate over the year through June 2018 was 3.7 percent, well below the 30 percent necessary for commercialization.
The two other turbines, of different size, have utilization rates of 32.9 percent and 18.5 percent.

New robot to inspect molten fuel

January 28, 2019

TEPCO unveils device for handling nuclear debris

https://www3.nhk.or.jp/nhkworld/en/news/20190128_32/

The operator of the Fukushima Daiichi nuclear power plant has unveiled a device that could become the first to directly handle fuel debris inside one of the facility's crippled reactors.

Tokyo Electric Power Company showed the device to the media on Monday ahead of a survey scheduled for next month at the plant's Number 2 reactor. It's one of the reactors that experienced meltdowns in 2011.

TEPCO has found what appears to be a mixture of molten nuclear fuel and structural parts at the bottom of the reactor's containment vessel.

The device, which is equipped with a camera and a dosimeter, is attached to a pole that extends up to 15 meters long. Its tip works like tongs, allowing it to pick up the possible debris.

TEPCO plans to send the device into the containment vessel to see how hard the possible debris is, and whether it can be moved.

Removing debris is a key step toward decommissioning the plant.

Toshihiro Yasuda of Toshiba Energy Systems & Solutions, which developed the device, says the survey is an important step toward coming up with ways to remove the debris.

In the second half of fiscal 2019, which starts in April, TEPCO plans to conduct a more detailed survey that would involve extracting a small sample of the debris.

The company aims to decide by March 2020 at which reactor to start removing debris. It hopes to start the work in 2021.

See also : http://www.asahi.com/ajw/articles/AJ201901290020.html

January 29, 2019

Toshiba unveils robot to probe melted Fukushima nuclear fuel

THE ASSOCIATED PRESS

Toshiba Corp. unveiled a remote-controlled robot with tongs on Monday that it hopes will be able to probe the inside of one of the three damaged reactors at Japan's tsunami-hit Fukushima nuclear plant and grip chunks of highly radioactive melted fuel.

The device is designed to slide down an extendable 11-meter (36-foot) long pipe and touch melted fuel inside the Unit 2 reactor's primary containment vessel. The reactor was built by Toshiba and GE.

An earlier probe carrying a camera captured images of pieces of melted fuel in the reactor last year, and robotic probes in the two other reactors have detected traces of damaged fuel, but the exact location, contents and other details remain largely unknown.

Toshiba's energy systems unit said experiments with the new probe planned in February are key to determining the proper equipment and technologies needed to remove the fuel debris, the most challenging part of the decommissioning process expected to take decades.

The three reactors at the Fukushima plant suffered core meltdowns after a massive 2011 earthquake and tsunami damaged key cooling systems.

In last year's probe, a camera developed by Toshiba Energy Systems & Solutions Corp. and the International Research Institute for Nuclear Decommissioning found large amounts of deposits in that area, including parts that resembled pebbles or gravel.

The 30-centimeter (12-inch) long robot unveiled Monday will carry a radiation dosimeter, thermometer, LED lights, a camera and a pair of tongs as it slowly slides down from a pipe.
The probe, attached by a cable on its back, is to dangle from the pipe and descend to the bottom of the reactor vessel's pedestal, a structure directly below the core from which the melted fuel fell.

Toshiba plans to use the new device to touch and grip the deposits with the tongs, which can hold a lump as wide as 8 centimeters (3 inches) weighing up to two kilograms (4.4 pounds), to investigate its hardness and other details, said Jun Suzuki, a Toshiba ESS group manager for the project.

"Until now we have only seen those deposits, and we need to know whether they will break off and can be picked up and taken out," Suzuki said. "Touching the deposits is important so we can make plans to sample the deposits, which is a next key step."

The probe will mainly examine the fuel debris' physical condition rather than its radioactive components or other details which require actual sampling and safe storage.

"We are taking one step at a time," said Tsutomu Takeuchi, a Toshiba ESS senior manager for the Fukushima decommissioning project. "First we'll find out if those deposits can be picked up." If the device is unable to lift anything, that's also a key finding, he said. In that case, they will need a cutting device to tear off a sample piece.

TEPCO and government officials plan to determine methods for removing the melted fuel from each of the three damaged reactors later this year so they can begin the process in 2021.

Olympics

Olympics: Exchanging athletes with Ghana and Netherland

January 25, 2016

Fukushima towns to partner with Ghana, Netherlands for Olympics

http://www.japantimes.co.jp/news/2016/01/25/national/fukushima-towns-partner-ghana-netherlands-olympics/#.VqXntlKDmot
Kyodo
FUKUSHIMA – Two municipalities in Fukushima Prefecture are poised to partner up with Ghana and the Netherlands in a central government project to promote exchanges between local people and athletes coming to Japan for the 2020 Tokyo Olympics.
The town of Inawashiro and the city of Koriyama will interact with athletes from Ghana and the Netherlands, people involved in the project said Monday.
The government is pitching the 2020 Games as an opportunity to show the world it has recovered from the 2011 earthquake, tsunami and nuclear crisis.
The project could boost the chances of the municipalities hosting training camps before the games, which would help brush away the negative image of the triple disaster.
Inawashiro has historic ties with Ghana, as it is the hometown of famed Nobel-nominated bacteriologist Hideyo Noguchi (1876-1928), who died in the capital of present-day Ghana while studying yellow fever.
Koriyama is a sister city of Brummen, the Netherlands. Koriyama has also played host to some 8,000 evacuees from other parts of the prefecture following the meltdowns at the Fukushima No. 1 nuclear plant.
The area's farming and tourism industries have been hit by persistent concerns over radiation exposure.
The central government is shouldering half of the municipalities' costs for hosting sports and cultural exchanges after they choose specific countries, regions or types of sports to work with.
Roughly 70 municipalities had applied for the host town project by the first deadline in December.

Security, but what about safety?

April 4, 2016

2020 Tokyo Olympics CEO weighs in on security, differences with Rio

http://www.japantimes.co.jp/news/2016/04/04/national/2020-tokyo-olympics-ceo-weighs-security-differences-rio/#.VwN7HHpdeot

by Andrew Mckirdy
Staff Writer

The CEO of the 2020 Tokyo Olympics says security is his greatest concern but believes Japan will be safe from the kind of mass street protests currently overshadowing this summer's Rio de Janeiro Games.
"If I had to choose just one challenge from many it would have to be security," Toshiro Muto told The Japan Times in an exclusive interview. "There are many threats of terrorism in the world. It's not just a physical threat, but also the threat of cyberterrorism.
"The level of threat that terrorism poses gets more and more complicated each year. No one knows how sophisticated cyberterrorism will have become by 2020.
"To combat this, the organizing committee, Tokyo Metropolitan Government and national government need to be able to deal with it at every level. Cooperation is vital."
Tokyo will take on the mantle of the next Olympic host city when Rio hands over the flag at the closing ceremony of this summer's games, which will run Aug. 5 to 21.
Rio's hosting of the event has been relegated to an afterthought in Brazil amid a major political crisis engulfing President Dilma Rousseff that has brought millions to the streets in protest.
The Olympics have proved to be a lightning rod for demonstrations in recession-hit Brazil, with many people angry at the billions of public dollars being spent on the event.
But Muto, a former deputy governor of the Bank of Japan, is confident that Tokyo can avoid similar scenes despite public concern over the cost of hosting the Olympics.
"The demonstrations in Brazil are down to the fact that the economy is in great difficulty and the government is in trouble," he said. "At times like that, there are bigger things to think about than a sports festival.
"I don't think that kind of problem will occur in Japan. Of course you never know what will happen, but I think the environment in Brazil and Tokyo is completely different."

Tokyo 2020 organizers have managed to cut around $1.5 billion in costs by scaling back plans for the competition venues, but the games have nonetheless been accused of gobbling up public funds and slowing the pace of recovery in the areas affected by the 2011 Great East Japan Earthquake.
"If you look at it in isolation, labor costs have started to rise recently and I understand that could have a negative effect on recovery," Muto said. "But I think a successful Olympics will help people in the affected areas.
"Until very recently, there were around 8 million foreign tourists visiting Japan a year. In 2015 it rose to almost 20 million. The government thinks around 40 million tourists will visit in 2020. Those people will not only visit Tokyo but places all around the country. In the areas affected by the disaster there are various tourist spots, so it should have a beneficial effect."

The 2020 Olympics have suffered a series of embarrassing setbacks over the past year, with design issues still plaguing the construction of the new National Stadium and a logo still to be chosen after the original was scrapped last summer amid accusations of plagiarism.
Muto believes preparations are heading in the right direction and remains confident that the organizing committee is on the same page as its political partners.
“As the organizing committee, the most important thing is bringing in income from sponsors. In Tokyo’s case we are well on course,” he said. “We have more than 30 sponsors so far. Apart from that, the IOC (International Olympic Committee) and IPC (International Paralympic Committee) have been visiting Tokyo to carry out their project reviews, and each time they say our progress is ahead of schedule. That’s great to hear.
“When it comes to communication, the relevant parties have covered a lot of ground, but there are a lot of things we still have to do. We can’t just be satisfied with what we’ve done. That doesn’t mean I’m not happy with what we’ve done, but you always have to be open to communication and new ways of thinking.”
Tokyo 2020 organizers launched a public competition to find a new logo last October, with a shortlist of four set to be unveiled early this month after an initial submission of 15,000 entries.
Muto believes interest in the games remains high, and he hopes to involve the public every step of the way.
“One way for the public to be involved is as volunteers,” he said. “At this moment, we think we will need around 80,000. There are different kinds of volunteers — at the stadium, helping out with different languages and in specialist areas such as medical care.
“Of course the organizing committee has to make the Olympics a success as a sporting festival, but that’s not where it ends. After that comes the legacy. One thing we are concerned with is how to touch the hearts of young people and how to have an impact after the games have finished. I understand the need for the public to be involved in the Olympics.”
French prosecutors investigating corruption allegations into the former head of world athletics last month expanded their probe to examine the bidding for Tokyo 2020.
Muto insists that Tokyo has done nothing wrong, and he believes sports can still contribute to society despite a recent spate of global scandals.
“If the stories that have been printed about sporting scandals are true, it’s very disappointing,” he said. “If they are, I’d like these organizations to think long and hard about what they can do to improve themselves. I am not aware of any such problems in Japanese sports.
“Events like the Olympics bring the whole world together and go beyond race and nationality. Through sport you have a festival of humanity and peace.
“In the future, if the Olympics cost huge sums of money to stage, it will place a big burden on the people of that country. If that happens, more and more people will speak out against it. It’s not appropriate to have an extravagant Olympics. If it’s an Olympics that avoids wasting money, then I believe it can contribute toward peace.”

Tokyo Olympics all about normality and recovery

April 9, 2016

Abe: Tokyo Olympics to show Japan's reconstruction

http://www3.nhk.or.jp/nhkworld/en/news/20160409_18/
Prime Minister Shinzo Abe says he wants the 2020 Tokyo Olympic and Paralympic Games to demonstrate how Japan has recovered from the 2011 earthquake and tsunami.

Abe spoke at a cherry blossom viewing party he hosted on Saturday at the Shinjuku Gyoen National Garden.

About 16,000 guests from various fields enjoyed the flowers.

Abe said that 5 years since the disaster, residents of the affected areas continue to struggle to rebuild their lives. He said these people worry that memories of the disaster are fading among the rest of the population.

Abe said he would like to use the Tokyo Games to show the world how Japan has rebuilt and regained its strength.
April 4, 2016

Abe to work for Olympic torch relay in Fukushima

http://www3.nhk.or.jp/nhkworld/en/news/20160404_33/
Japan's Prime Minister Shinzo Abe says he will strive to ensure that the torch relay course for the 2020 Tokyo Olympics and Paralympics will pass through Fukushima Prefecture.

Abe met in Tokyo with 18 students from 2 high schools in the prefecture.

The schools have been using temporary buildings due to the 2011 Fukushima Daiichi nuclear accident.

The students asked Abe to include a road along the coast of Fukushima in the torch relay course. They also asked that decontamination work be sped up so that **there will be no need for the runners to be anxious.**

The prime minister said he thinks that having the torch relay pass through the prefecture would show the world that Fukushima has recovered from the disaster.

Olympics: Some events could take place in Fukushima

October 20, 2016
Bach: Events could be held in northeast Japan
http://www3.nhk.or.jp/nhkworld/en/news/20161019_29/

The head of the International Olympic Committee has suggested holding some events of the 2020 Tokyo Games in areas of northeastern Japan that were devastated by the earthquake and tsunami of 2011.

IOC President Thomas Bach, now visiting Japan, met Prime Minister Shinzo Abe in Tokyo on Wednesday.

Bach told Abe the IOC is thinking of holding some Olympic events in the disaster zone to contribute to revival efforts. He said this could show the world how the areas have recovered. Abe welcomed the idea.

Abe also promised the government's participation in talks to cut costs for the games.

Bach had proposed 4-way talks by the Tokyo Metropolitan Government, the IOC, Tokyo 2020 organizers and Japan's government.

Reporters later asked Bach if baseball and softball will be held in Fukushima City. Bach said it's an option under consideration. He added that since the sports are very popular in Japan, having the country's team play in the disaster zone would send a strong message.

2020 Olympics: Baseball in Fukushima?

November 9, 2016
Fukushima eyed for baseball, softball games in 2020 Olympics
http://www.japantimes.co.jp/news/2016/11/09/national/fukushima-eyed-baseball-softball-games-2020-olympics/#.WCRF_8mDmos

by Andrew Mckirdy
Staff Writer
Tokyo 2020 Olympic organizers on Wednesday gave the green light for disaster-affected Fukushima Prefecture to host baseball and softball games.
Three cities — Fukushima, Koriyama and Iwaki — are under consideration to stage part of the competition as the two sports return to the Olympic program after an absence of 12 years.
Riccardo Fraccari, president of the World Baseball Softball Confederation, will visit Japan next week to inspect the venues. The International Olympic Committee will make the final decision when it holds its executive board meeting from Dec. 6 to 8.
"We want to emphasize this as a 'recovery games' and we want to work together with everyone to move it forward," said 2020 executive board member Toshiaki Endo.
"These Olympics and Paralympics are not just for Tokyo but for the whole of Japan. We only have 1,353 days left, so we need everyone to make an effort so we can put on a fantastic event."
IOC President Thomas Bach floated the idea of hosting baseball and softball games in Fukushima during a visit to Tokyo last month to take part in the World Forum on Sport and Culture.
"I felt that President Bach had a strong feeling toward Fukushima when he came here," said Fukushima Gov. Masao Uchibori. "The idea of a 'recovery games' is once again in the spotlight and people are thinking carefully about how that can be achieved.
"It can show the courage of Fukushima Prefecture and the Tohoku region, and on a wider scale Kumamoto and Tottori — places that are working hard to recover from disaster."
The Yomiuri Giants professional baseball team occasionally hosts Nippon Professional Baseball games at all three venues. Fukushima Azuma Baseball Stadium and Iwaki Green Stadium both have capacities of 30,000, while the older Koriyama Kaiseizan Baseball Stadium holds 18,200.

Neighboring Miyagi Prefecture is hoping to stage rowing and canoe sprint events as a result of a cost-cutting review currently being undertaken by the IOC, Tokyo Metropolitan Government, Tokyo 2020 organizers and the national government.
“Miyagi Prefecture, Iwate Prefecture and Fukushima Prefecture all suffered a lot of damage from the Great East Japan Earthquake,” said Uchibori.
“These three prefectures have a close bond and always work together. We want to form a movement. We want to show our appreciation to people and get people excited about the Tokyo Olympics. I’d like to consult with my fellow governors.”
Uchibori also said he would like his prefecture to host other Olympic-related events such as training camps and a section of the torch relay.
Baseball and softball were voted back onto the Olympic program as a joint bid at an IOC session in Rio de Janeiro in August ahead of the Summer Games. The format of the competitions has yet to be decided.

Fukushima: Olympic "possibilities"

November 19, 2016

Head of baseball-softball body visits Fukushima

http://www3.nhk.or.jp/nhkworld/en/news/20161119_22/

The head of the world governing body for baseball and softball has visited Fukushima Prefecture to inspect possible venues for the 2020 Tokyo Olympic Games.

World Baseball Softball Confederation President Riccardo Fraccari met Fukushima Governor Masao Uchibori on Saturday.

Earlier this month, the 2020 organizing committee approved a plan to hold some baseball and softball matches in Fukushima, which suffered a nuclear accident in 2011.

The governor told Fraccari that radiation levels in almost all areas of the prefecture have already lowered to the level common in major cities around the world.

Uchibori expressed hope that the prefecture could host matches, saying the people want to meet with visitors from around the world.

Fraccari then visited 2 sites in the cities of Fukushima and Koriyama.

He indicated that the review of the sites will take into consideration security conditions, facilities for athletes, and schedules.

The executive board of the International Olympic Committee will officially select venues in a meeting scheduled for early December.

November 20, 2016

Foottball chief inspects Fukushima stadiums for Olympic possibilities

http://www.japantimes.co.jp/news/2016/11/20/national/world-baseball-softball-chief-inspects-fukushima-stadiums-olympic-possibilities/#.WDHMoH2Dmos

Kyodo

KORIYAMA, FUKUSHIMA PREF. – World Baseball Softball Confederation President Riccardo Fraccari stopped short of issuing a verdict after inspecting Fukushima Prefecture's suitability as a potential host for the 2020 Olympic baseball and softball competitions.

Fraccari on Saturday scouted Azuma Stadium in the city of Fukushima and Koriyama's Kaiseizan Stadium, but insisted the purpose of his visit this time was to gather intelligence rather than reach any kind of conclusion.

A third city, Iwaki, is also under consideration and Green Stadium has already received a visit from Fraccari.

"At the moment, I'm just collecting information of the stadiums," said Fraccari, who met with Fukushima Gov. Masao Uchibori ahead of the stadium tours.

"The problem for Fukushima is not just the stadium," Fraccari said. "We have to check about the transportation, the facility for the teams and the schedule."

The 2020 organizing committee is looking to open the baseball and softball tournaments in the prefecture, with Japan set to play in the opening games of both.

Fraccari did not mention a deadline for the competition format and overall schedule but noted that the stakeholders would have to work fast. The organizing committee wants to finalize the details at the International Olympic Committee's executive board meeting from Dec. 6 to 8.

"Yesterday, it was a good meeting with Tokyo 2020," he said. "We work very close with them, we cooperate a lot because both of us have the best interests in the games in 2020."

"We have to work very fast because we don't have too much time," he added. "We don't yet have a fixed deadline, for sure, but we have to work very, very soon towards the entire games' (plan)."

Uchibori reiterated Fukushima's willingness to host the two sports.

"We want to express our strong desire to organize the events in Fukushima Prefecture," Uchibori told Fraccari in his native Italian.

"It will help unite the people of Fukushima, and help unite the prefecture and the world. They're fantastic sports," he added.

Uchibori reassured Fraccari that radiation levels in Fukushima Prefecture, home to the wrecked Fukushima No. 1 nuclear power plant, remain no different than in major cities worldwide.

The March 2011 earthquake and tsunami cut off all power to the plant, triggering a triple core meltdown that spewed radioactive fallout into the environment and over much of the agriculturally dependent prefecture. Decontamination is ongoing.

"In almost all areas in the prefecture, the figures are the same as any of the world's major cities," Uchibori said.

Fukushima as venue for Olympics events?

February 4, 2017

Olympic organizers consider Fukushima stadium for baseball, softball events

http://www.japantimes.co.jp/news/2017/02/04/national/olympic-organizers-consider-fukushima-stadium-baseball-softball-events/#.WJXMHvKDmos

Kyodo

The 2020 Tokyo Games organizers said Friday they are looking at the possibility of renovating Azuma Stadium in the city of Fukushima to host part of the Olympic baseball and softball events.
The World Baseball Softball Confederation inspected the stadium in November and requested improvements the following month, asking that turf be laid in the infield and more seats placed in the stands.
Yokohama Stadium was picked as the main venue for the sports by the International Olympic Committee in December, and the WBSC is calling for several other stadiums to be made available in the Tokyo metropolitan area.
Talks with the WBSC have dragged on since, but the organizers are looking to negotiate with the confederation before getting the approval from the IOC at its board meeting in March.
"We'll be asking to use Yokohama as the main venue and Fukushima as another," said Yukihiko Nunomura, vice chief executive of the 2020 organizing body. "The prefecture also has room to discuss revamping."

More on Olympics costs

February 17, 2017

Work on facilities outside Tokyo for Olympics estimated to cost 43.8 billion yen

http://mainichi.jp/english/articles/20170217/p2a/00m/0na/014000c

The Tokyo Olympics and Paralympics organizing committee has estimated the cost of building and remodeling 11 facilities for the 2020 Games in six prefectures outside the capital at approximately 43.8 billion yen, it has been learned.

- 【Related】Areas outside capital hosting Olympic events want Tokyo to stick to cost pledges
- 【Related】Olympics: 2020 organizers estimate total cost at 1.6-1.8 tril. yen
- 【Related】Tokyo governor's wishes not reflected in 4-party talks on Olympic venue changes

The Tokyo Organising Committee of the Olympic and Paralympic Games notified the local bodies that host these venues of the estimated costs during a four-party working group meeting between the committee, the Tokyo Metropolitan Government, other relevant local bodies and the national government that began in late January.

The estimated costs of work on stadiums for soccer in Miyagi and Hokkaido are some 2.7 billion yen each, and those of remodeling the Makuhari Messe complex in Chiba for wrestling, fencing and taekwondo come to approximately 7.3 billion yen. Work to remodel four facilities in Saitama Prefecture for golf and basketball and other sports will likely total about 18.7 billion yen. Moreover, the costs of improving two facilities in Kanagawa Prefecture for sailing and other sports are expected to cost around 5.4 billion yen and those of remodeling a bicycle racing venue in Shizuoka Prefecture will be about 6.9 billion yen.
The estimated total costs do not include those for sports to be newly added to the Olympics and Paralympics from the 2020 Games. Sources familiar with the issue say the cost of work at Tsurigasaki beach in Ichinomiya, Chiba Prefecture, for surfing and Yokohama Stadium in Yokohama for baseball and softball events will likely amount to nearly 50 billion yen.
The International Olympic Committee has urged the organizing committee to reduce expenses while local bodies that have experience in hosting large-scale events have also called into question the committee's estimates. As such, the estimated costs could later change.
When Japan was bidding to host the 2020 Olympics and Paralympics, the organizing committee was expected to fully foot the costs of constructing and remodeling facilities for the Games.
As a result of a review of expenses for organizing the Games, the organizing committee showed its estimates, which would require local bodies hosting the venues for the Games to shoulder part of the costs.
However, as the concerned local government urged the organizing committee to stick to the original principle, the four-party working group was consulting over the matter.

Football to redeem Fukushima

February 20, 2017

NHK Video

Rebuilding Fukushima through Soccer

https://www3.nhk.or.jp/nhkworld/en/news/editors/3/rebuildingfukushimathroughsoccer/

https://www3.nhk.or.jp/nhkworld/en/news/videos/20170220141242874/
A former soccer training facility close to Japan's crippled Fukushima Daiichi Nuclear Plant has been used as a staging point for recovery work since the 2011 nuclear disaster, but that's about to change.
Temporary dormitories for workers stand where there used to be a soccer field at the facility, called J-Village. The area is filled with memories for Shigenari Akashi, who worked as a coach for a junior youth team there for more than 10 years.
"National tournament finals used to be held here. Children from all over the country would practice hard, aspiring to play here," Akashi says.
J-Village was Japan’s first national soccer training center. It opened in 1997 and over the years saw more than a million visitors. The complex was even used to train the national teams of Japan and Argentina.
But the nuclear disaster changed everything. The facility is just 20 kilometers from the plant, so Tokyo Electric Power Company rented it to set up an operational base for containing the accident.

"I was in shock and at a loss for words when I saw the Self-Defense Forces' tanks here, and the gravel laid on the natural turf for the parking lot," says Akashi.
At the end of last year, the moment he had been waiting for finally arrived as TEPCO began work to return the facility to its original form.
Fukushima Prefecture has even bigger plans -- tt wants to build Japan's first "all-weather soccer field" at the site. Part of the facility is scheduled to open in the summer of 2018.
The Japan Football Association has given the project its full support. The Japanese national team will use the new J-Village as its training base for the 2020 Tokyo Olympics.
But there are bigger challenges than rebuilding. There are fears over radiation levels -- in some areas they're still higher than international standards recommend. So the J-Village operator has a plan.
"The construction work will focus on largely replacing the soil, a technique we expect will reduce radiation levels more than usual decontamination methods," says Eiji Ueda, who is executive vice president at the facility. "We can emphasize how safe it is by hosting national teams from Japan or perhaps abroad for training."
A town near J-Village was evacuated because of the disaster. Residents got the green light to move back a year and a half ago but few have returned as most of the evacuees still live in a neighboring city.
Akashi and his co-workers have been giving soccer classes for children, including some who lived near J-Village. But there are mixed feelings about playing there again.
"I want to use the new J-Village, but I live far away now, so it will be hard to go there very often," says a boy at the facility.
"We still have the lingering memory of it being used as the staging ground for decommissioning work," says one father.
For Akashi, he's got a specific goal in mind.
"In reviving J-Village, we want to give back local people a gathering place and their sense of pride. We believe this will also help to revive Fukushima as a whole," he says.
The clock on the J-Village scoreboard is stopped at 2:46 p.m., the moment the earthquake struck. The deep rift created over the last 6 years will need to be filled so that the clock can move forward once more.

Letter to the IOC

March 13, 2017
Letter sent to by **Mitsuhei Murata**
Former Ambassador to Switzerland
To Mr. Bach, President of the IOC

Sent: Monday, March 13, 2017 3:37 PM

Dear President Thomas Bach,

I wish to remind you of the serious warning of Professor Shuzo Takemoto concerning the problem of the Unit 2 of the Fukushima Daiichi. In his view,if the building of the Unit 2 should encounter an intensity 7 earthquake,which is considered highly possible, it will be destroyed and

scatter the remaining nuclear fuel and its debris, making the Tokyo metropolitan area uninhabitable. Last week,two big earthquakes,whose seismic intensities were 5 and 4, actually occurred in Fukushima.

Conscientious Japanese citizens are bewildered by the widening gap between the ongoing Olympic preparations and the increasing report regarding the deepening of the Fukushima crisis.The Moritomo School scandal continues to draw nation-wide attention,reminding us of its similarity with the total breach of the initial commitments by the Tokyo Olympics.
Six years after the 3/11 Fukushima accident,the policy of returning refugees to their home towns based on the 20 milisieverts ICRP standard is maintained.
Last week,Japanese television TBS interviewed its vice chairman Jacques Rochard who expressed his surprise that this standard,destined to cases of emergency, should not have been lowered as initially recommended.
It is urgently needed to correct the current policy.
The foregoing is fully supported by the following two articles.

http://www.counterpunch.org/2017/02/20/fukushima-a-lurking-global-catastrophe/
https://limitlesslife.wordpress.com/2017/03/12/remembering-6th-anniversary-of-fukushima-march-11-2017/

We are being reminded of Chinese ancient Lao Tsu's famous saying "Heaven's vengeance is slow but sure".
This is the will of heavens and the earth, that is to say,the law of history researched by philosophy. We are taught by this law that immorality is not allowed to last long and that the all dictatorships are made to end.

More and more Japanese citizens are calling for the retreat from the Tokyo Olympic 2020.
Le Figaro has reported the appearance in Paris of a call for boycotting it.
http://www.lefigaro.fr/flash-actu/2017/03/11/97001-20170311FILWWW00139-manifestations-contre-le-nucleaire-ce-samedi.php

The International Olympic Committee faces a heavy responsibility.
Please allow me to count on your understanding and your support.

With highest and warmest regards,
Mitsuhei Murata
Former Ambassador to Switzerland

Fukushima as softball venue?

March 16, 2017

IOC expected to OK Fukushima stadium for 2020 baseball-softball venue: sources

Kyodo

PYEONGCHANG, SOUTH KOREA – The 2020 Tokyo Olympics organizing committee is expected to win approval from the International Olympic Committee to add the renovated Azuma Stadium in Fukushima Prefecture for the baseball-softball competition, sources said.

The ballpark lies in an area hard hit by the March 2011 earthquake and tsunami. Because the IOC has indicated an understanding of the desire of organizers to assist in rebuilding disaster areas, the proposal will likely be accepted, the sources said Wednesday.

The IOC's executive board began a two-day meeting on Thursday in Pyeongchang, the site of next year's Winter Olympics.

On Friday, Yoshiro Mori, the president of the organizing committee, and Toshiro Muto, the CEO, will report on Tokyo's progress at the meeting.

In December, the IOC declined to add Azuma Stadium to the approved main venue, Yokohama Stadium. But the sources said the executive board is now prepared to accept one stadium as an additional venue.

The committee wants to split the six-team baseball tournament into two groups for the first round, but the World Baseball Softball Confederation wants a full round-robin and one more stadium in the Tokyo metropolitan area to accommodate it.

Although the two parties still appear to be far apart on the competition format, one IOC source said the issues can be debated separately.

"Once the Fukushima venue is approved, we can adjust from there," the source said.

The executive board is also expected to receive an update on the situation of the 2020 golf venue, Saitama Prefecture's Kasumigaseki Country Club. The club does not allow women the same membership as men, and the IOC has called the policy unacceptable.

No Olympics in Fukushima!

No Olympics or Paralympics in Radioactive Fukushima!

<image: https://assets.change.org/photos/5/ll/ks/MXLlkSujQuqeeaq-128x128-noPad.jpg?1460136549>

Fukushima Fallout Awareness Network

https://www.change.org/p/no-olympics-or-paralympics-in-radioactive-fukushima
Children are our most beloved and cherished gift and they are also the most vulnerable to the generational damage of man-made radiation in air, food, soil and water. Around the world children who are currently adolescent and possibly younger are in training to compete at the 2020 Summer Olympics and Paralympics in Japan. Their parents most likely have no idea that some of the venues are near the most devastating and ongoing nuclear and industrial disaster in world history, Fukushima Daiichi.
Source:http://globalnews.ca/news/2571822/japan-olympics-minister-backs-fukushima-as-host-venue-for-2020/
http://in.reuters.com/news/picture/inside-fukushimas-j-village?articleId=INRTR2TVZW
On March 11, 2016, the fifth anniversary of the Fukushima triple nuclear meltdowns, the Japanese Olympic minister Toshiaki Endo stated to the Associated Press that preliminary **softball and baseball** could be moved from the host city of Tokyo to Fukushima Prefecture. But it gets worse, **now soccer** has been added too. This isn't mere speculation, in fact organizers are developing **J Village**, only a few miles from Fukushima Daiichi, into a **training facility** for Japan's soccer team and possibly more. J Village was used as a **disaster staging and support facility** during the early days of the Fukushima Daiichi nuclear disaster.
Source:http://www.japantimes.co.jp/sports/2016/01/30/soccer/j-village-to-serve-as-2020-olympic-soccer-training-center/#.VwWPM32AOko
SO HOW DID WE GO FROM THE WORLD'S WORST NUCLEAR AND INDUSTRIAL DISASTER TO ONE OF THE VENUES FOR THE 2020 GAMES? In a stunning development in 2013, Japan's Olympic bid was won by Prime Minister Shinzo Abe when he promised the International Olympic Committee (IOC) that "it (Fukushima Daiichi) has never done, and will never do, any damage in Tokyo". Consequently, the IOC and International Paralympic Committee (IPC) are now left to engage in a dangerous game of **bait and switch**

by using venues not only in Tokyo as originally agreed upon, but also in Fukushima Prefecture, not far from the Fukushima Daiichi nuclear disaster site.
Source: http://www.insidethegames.biz/articles/1015905/how-tokyo-2020-won-its-olympics-and-paralympic-bid-despite-fukushima
Holding Olympic games in Fukushima Prefecture **will endanger young athletes**. To date there is **no solution** in sight to the ongoing radiation releases leaking into air, soil, food and water not only from Fukushima Daiichi but also from areas around the country that have been used for the open storage and incineration of **toxic and radioactive tsunami rubble and garbage.**
The man in charge of decommissioning Fukushima Daiichi, Naohiro Masuda, stated on NHK television in Japan that the **solution** to the radioactive leaks at Fukushima Daiichi **"still needs to be invented**" and appealed for international assistance. Meanwhile, the Japanese government and IOC are planning for children, parents and coaches worldwide to travel to the region for the 2020 Olympics.
Source: http://www3.nhk.or.jp/nhkworld/english/news/nuclearwatch/20150331.html
Hundreds of types of radioisotopes are emitted in nuclear accidents, many of which are long-lived and remain hazardous for millions of years. Easily inhaled, they pose a significant danger to everyone in affected environments and certainly to athletes during strenuous competition. Consider these facts:
****There is no safe dose.** Women are 2 times more vulnerable to the harmful effects of ionizing radiation than men; **girls are at 10 times more at risk, boys are 5 times more at risk.** The Biological Effects of Ionizing Radiation 7 (BEIR 7) report states "it is unlikely that a threshold exists for the induction of cancers" meaning that any dose of radiation, no matter how small, carries health risks.
Following the Chernobyl nuclear disaster it became scientifically evident that the **DNA damaging effects** of ionizing radiation are **passed on to future generations.**
Source: http://www.nirs.org/radiation/radhealth/radhealthhome.htm
http://static1.1.sqspcdn.com/static/f/356082/23097333/1373633249137/radchild.pdf?token=tvHeUhkD2v%2BuhKtz620LTq25fEQ%3D
http://www.ratical.org/radiation/Chernobyl/HEofC25yrsAC.html
****Highly radioactive water used to cool Fukushima Daiichi's damaged reactors is leaking and also being intentionally discharged into the Pacific Ocean every day**. In addition, highly radioactive soil and other toxic waste has been moved to locations all over Japan and stored in open fields or incinerated by the ton. In one location, nearly 11 million tons of bagged radioactive garbage, soil and more is accumulating in Tomioka, Fukushima Prefecture.
Source: http://fukushima-diary.com/2016/03/2029900000-bq-of-cs-134137-leaked-as-contaminated-water-in-fukushima-plant/
https://www.youtube.com/watch?v=qqTwxa2ir_E https://www.youtube.com/watch?v=UCP7PFT9coU
****Radioactive hotspots have been detected in other areas of Japan including Tokyo.** In one case even further south, **in Yokohama,** a petition on behalf of public schools and childcare facilities is pleading for the removal **highly contaminated mud** from rainwater recycling tanks, school roofs and gutters.
Source: https://ssl.form-mailer.jp/fms/b1285961429052
https://www.youtube.com/watch?v=IBkrIgJUWLk
http://www.fukuleaks.org/web/?p=10688
****Bioaccumulation and migration of radionuclides** are extremely complex issues. Greenpeace has reported high readings in areas of Fukushima Prefecture where extensive decontamination measures had already been taken by the government. This information has informed local citizens who had been told previously that they could return home.
http://www.greenpeace.org/japan/ja/library/publication/20160304_report/

Tokyo Electric and Power Company (TEPCO) the owner of Fukushima Daiichi reactors, as of March 2017, has not been able to locate the molten fuel that continues to release significant amounts of radioactive material into the Pacific Ocean. **TEPCO is incinerating more than 8 tons of garbage per day, much of it toxic and radioactive, with plans to burn 90% of all waste on site. It's just one example of an aggressive nationwide incineration campaign underway for several years.
Source: http://www.neimagazine.com/news/newsnew-incinerator-for-fukushima-waste-4849989
http://www.japantoday.com/category/national/view/tepco-group-contracts-kyoto-firms-to-incinerate-iwate-waste
****TO MARKTHE 6th ANNIVERSARY of the ongoing Fukushima disaster, March 11, 2017,** nuclear engineer, Arnie Gundersen of Fairewinds Energy Education, provides **the most recent update on the condition and near impossible task of "cleaning up" the Fukushima site:**
Source: http://www.fairewinds.org/fukushima/
****Drinking water and food** are critical concerns, because **internal contamination** is the most dangerous form of radiation exposure. Trace amounts of radionuclides from Fukushima Daiichi have been found in the tap water of numerous cities, and some samples contain both Cesium 134 and 137. Cumulative trace amounts can pose a significant health problem because there is no safe dose.
Source: http://www.fukuleaks.org/web/?p=15134
****Laboratory tests have documented that some of the **highest concentrations of radiation from Fukushima Daiichi are airborne which then settle to the ground.** Recent samples from vacuum cleaner bags collected in Japan show readings as high as a shocking 4,454 Becquerel's per kilogram.
Source: http://www.iwakisokuteishitu.com/pdf/e-monthly_data.pdf
****The International Commission on Radiological Protection (ICRP) guideline for the public is 1 millisievert per year compared to Japan's 20 mSv/year since the disaster.** By hosting the Olympics, Japan is willing to expose not only their own citizens but also children, young adults, families and coaches worldwide to higher than publicly acceptable levels of radiation per the ICRP. The emergency guideline of 20 mSv/year was never intended by ICRP to be a long term solution.
Source: http://www.icrp.org/docs/p111(special%20free%20release).pdf
Allowing the Olympic and Paralympic games in Fukushima is nothing less than preposterous, because it's impossible to shield children from widespread radioactive contamination. Even **after 30 years, *the 30 km area around Chernobyl remains an exclusion zone,*** *yet only 5 years after the Fukushima disaster began there are misguided plans to train young athletes in the town of Nahara at J Village, which is* ***located 19 km (12 mi) from Fukushima Daiichi****.*
Source: http://www.greenpeace.org/international/en/publications/Campaign-reports/Nuclear-reports/Nuclear-Scars/
http://kyodonews.net/news/2016/01/30/47883
Here in the United States, Presidential candidate and Senator Bernie Sanders has stated grave concerns about the dangers of nuclear power and has called for the immediate closure of the Indian Point nuclear reactors near New York City. Now that you know the facts, we petition you to learn as much as possible too and then work to stop **any and all plans that will endanger** athletes, their families and coaches worldwide due to the Fukushima Daiichi ongoing nuclear disaster at the 2020 Olympics and Paralympics. Holding the 2020 Games in Fukushima or in fact anywhere in Japan will not, in reality, make the Fukushima Daiichi humanitarian and environmental crisis go away. It will only spread it much farther afield. **The whole world is watching this very dangerous game.**

No it is not a joke

April 12, 2017

Fukushima's Upcoming Olympics

http://www.counterpunch.org/2017/04/12/fukushimas-upcoming-olympics/

by Robert Hunziker

Japan will hold soccer and baseball events in Fukushima Prefecture for the Tokyo 2020 Olympics. This is not a spoof. Effective March 2017, the Japan Football Association displaces Tokyo Electric Power Company's emergency operations center at J-Village, the national soccer training center before the nuclear meltdown occurred.

To naysayers that say this is a joke, the answer is 'no this is not a joke'. It is absolutely true Olympic events will be held in Fukushima Prefecture, thereby casting aside any and all concerns about the ongoing nuclear meltdown; after all that's history.

Or, is it?

Here is the announcement as carried in The Japan Times some months ago: "The men's and women's national soccer teams for the 2020 Tokyo Olympics will use the J-Village national soccer training center, currently serving as Tokyo Electric Power Co.'s forward base in dealing with the Fukushima nuclear crisis, as their training base, the Japan Football Association revealed Saturday."

For those who missed the past few classes, Fukushima is home to the worst industrial accident in human history as three nuclear reactors experienced 100% meltdown, the dreaded "China Syndrome." Molten core, or corium, in all of the reactors, highly radioactive and deadly, frizzles robots. Tokyo Electric Power Company (TEPCO) says it may take 40 years to clean up the disaster zone, but that is a wild guess.

Nobody on planet Earth has any idea where the radioactive molten cores are, within the reactor containment vessels or burrowed into the earth, and/or what happens next, e.g., there's speculation that Unit #2 is rickety and could collapse from another big earthquake (Japan is riddled with earthquake zones, experiencing an earthquake on average every day) thus collapsing, which leads to an untold, massive disaster, rendering the city of Tokyo uninhabitable.

According to Dr. Shuzo Takemoto, Engr. / Kyoto University, February 2017: "The Fukushima nuclear facility is a global threat on level of a major catastrophe… The problem of Unit 2… If it should encounter a big earth tremor, it will be destroyed and scatter the remaining nuclear fuel and its debris, making the Tokyo metropolitan area uninhabitable."

Numerous efforts by TEPCO to locate the melted cores have been useless. As of recently: "Some Nuclear Regulation Authority members are skeptical of continuing to send robots into reactors in the crippled Fukushima No. 1 plant to collect vital data on the locations of melted nuclear fuel and radiation levels… investigations utilizing robots controlled remotely generated few findings and were quickly terminated" (Source: Nuke Watchdog Critical as Robot Failures Mount at Fukushima Plant, The Asahi Shimbun, March 24, 2017).

All of which inescapably brings to mind the following question: How could anybody possibly have the audacity to bring Olympic events to the backyard of the worst nuclear meltdown in history whilst it remains totally 100% out of control?

Answer: Japan's PM Shinzō Abe and the International Olympic Committee (IOC).
According to Naohiro Masuda, the head of decommissioning, TEPCO does not know how to decommission the nuclear facilities. Meanwhile, ongoing radiation is a constant threat to air, soil, food, and water, e.g., state inspectors have discovered deadly high levels of cesium pooling at the base of Fukushima's 10 big dams that serve as water reservoirs (drinking water and agriculture). For example, Ganbe Dam 27,533 Bq/kg and Mano Dam at 26,859 Bq/kg whereas Japan's Environment Ministry's safe limit for "designated waste" is set at 8,000 Bq/kg. That limit is for "waste," not drinking water. (Source: High Levels of Radioactive Cesium Pooling at Dams Near Fukushima Nuke Plant, The Mainichi – Japan's National Daily Since 1922, September 26, 2016.)
Japanese officials are ignoring the extraordinarily high levels of cesium at the bottom of the dam reservoirs because the top water levels do meet drinking water standards. The prescribed safe limit of radioactive cesium for drinking water is 200 Bq/kg. A Becquerel ("Bq") is a gauge of strength of radioactivity in materials such as Iodine-131 and Cesium-137. As it happens, Cesium-137 is one of the most poisonous substances on the face of the planet.
Additionally, open storage and incineration of toxic and radioactive rubble is ongoing throughout the prefecture. In fact, the entire prefecture is a toxic warehouse of radioactive isotopes, especially with 70% of Fukushima consisting of forests never decontaminated, yet the Abe administration is moving people back to restricted zones that Greenpeace Japan says contain radioactive hot spots.
According to Greenpeace Japan, which has conducted 25 extensive surveys for radiation throughout Fukushima Prefecture since 2011: "Unfortunately, the crux of the nuclear contamination issue – from Kyshtym to Chernobyl to Fukushima- is this: When a major radiological disaster happens and impacts vast tracts of land, it cannot be 'cleaned up' or 'fixed'." (Source: Hanis Maketab, Environmental Impacts of Fukushima Nuclear Disaster Will Last 'decades to centuries' – Greenpeace, Asia Correspondent, March 4, 2016).
With the onset of the Fukushima Diiachi meltdown, the Japanese government increased the International Commission on Radiological Protection guidelines for radiation exposure of people from 1 millisievert (mSv) per year up to 20 mSv/yr. As such, according to the standards set by the International Commission on Radiological Protection, ICRP Publication 111, Japan's Olympics will expose Olympians and visitors to higher than publicly acceptable levels of radiation. After all, the emergency guideline of 20 mSv/yr was never meant to be a long-term solution.
With the onset of Olympic venues in Fukushima, maybe that will open the way for the 2024 Olympics in Chernobyl. But, on second thought that will not work. Chernobyl's Exclusion Zone is 1,000 square miles (off limits for hundreds, maybe thousands, of years) because of an explosion in one nuclear power plant that is now under control whereas Fukushima has three nuclear meltdowns that remain, to this day and into the unforeseeable future, radically out of control and extremely hazardous.
Mystifying and Confusing?
Yes, it's mystifying and confusing, but the games go on.
Join the debate on Facebook
Robert Hunziker *lives in Los Angeles and can be reached at* roberthunziker@icloud.com

Retreat from Olympics

June 15, 2017

Dear Friends,

On 17 June from 13:00,Hiroshi Kume,famous radio commentator is presenting a wide-show program entitled "Should we retreat from the the Tokyo Olympic Games 2010 ?" Olympic Gold Medal marathon runner Ms. Hiroko Arimori will be present. Mr. Kume and Ms.Arimori have been opposing the Tokyo Olympic Games.The program will conduct a nation-wide referendum among the listenners. It is an extremely opportune and significant program.

The present situation in Japan is based on hiding Fukushima.The media have abandonned their mission. The awaited decision to retreat from the Olympic now seems to be the only way to awaken Japan anf the world. I am firmly convinced that it is inevitable. Its impact is beyond immagination.

I am sending you a communication on June 14 from the Natural Solutions Foundation, reflecting the growing concern of the Internationa Community. "We have posted your eBook at the Institute for Health Research Journal web site. http://www.inhere.org/InHeRe.Journal.html **"**

Please allow me to count on your understanding and support.

Mitsuhei Murata
Former Ambassador to Switzerland

Retreat from Olympics (2)

June 17, 2017

Dear Friends,

The results of the nation-wide referendum among the listenners conducted on 17 June by the Hiroshi Kume's wide-show program entitled "Should we retreat from the the Tokyo Olympic Games 2010 ?" are extremely impressive.All age categories except "under 19 years old" have overwhelmingly supported the retreat from the 2020 Olympic Games. The results could not but have a far reaching impact on this vital issue. The future of Fukushima depends on it.

This development coincides with another significant one.
In a surprise move, the International Olympic Committee announced on 16 June
that it was ending its Olympic sponsorship deal with Mcdonald.
The fast-food giant pulled out of its current, estimated ￡40-million-a-year, deal with
the International Olympic Committee more than three years early,
citing a “focus on different priorities”,severing a relationship that dated to 1976.

A new page is being opened as regards the Olympic Games 2020.

Mitsuhei Murata
Former Ambassador to Switzerland

Trying to "foil nuclear terrorism"

July 19, 2017
Japan taps tech to foil nuclear terrorism ahead of Tokyo Olympics
http://www.japantimes.co.jp/news/2017/07/19/national/japan-taps-tech-foil-nuclear-terrorism-ahead-tokyo-olympics/#.WW8f7FFpyou
Kyodo
With the 2020 Olympics and Paralympics in Tokyo just three years away, the government is stepping up efforts to prevent terrorist attacks using nuclear and other radioactive materials.
The Japan Atomic Energy Agency has developed a device capable of detecting nuclear materials during airport baggage screening and is enhancing its nuclear forensics analytical technology.
“We want to improve deterrence against nuclear terrorism,” an agency official said.
At a meeting of the Education, Culture, Sports, Science and Technology Ministry in December, Mitsuru Uesaka, president of the Atomic Energy Society of Japan and a professor at the University of Tokyo, said it was important to “enhance nuclear security” ahead of the games.
There have been numerous incidents overseas involving attempts to smuggle nuclear materials.
In 1994, investigative authorities intercepted and seized illegally transferred nuclear material at Munich Airport in Germany. The material — mixed oxide fuel containing weapons-grade plutonium — was found on a Lufthansa flight from Moscow. Smugglers were arrested and the MOX fuel was later identified as having been used at a nuclear reactor in the former Soviet Union.
There are also fears that the radical militant group Islamic State might have made a “dirty bomb” capable of scattering radioactive materials. Unlike nuclear weapons, such devices can be made relatively cheaply without advanced skills.
To stop nuclear materials from entering Japan through airports, the agency developed a device to detect very small amounts of uranium concealed in luggage by irradiating luggage with a beam of neutrons. The result is available in less than a second.
Baggage screening at domestic airports usually uses X-rays, but an expert at the agency said conventional screening is not effective in detecting nuclear materials.
“X-rays can detect suspicious metal objects, but cannot tell whether objects are nuclear materials or not,” said Yosuke To, leader of the research group behind the project at the agency.
The agency has also been developing nuclear forensics capabilities through analyzing “nuclear fingerprints,” such as particles and isotopic compositions, of materials stored at facilities related to

nuclear power generation in the country. The agency has been working on registering the data in a database as well.
These efforts are aimed at determining the point of origin and routes of transit involving nuclear or radioactive materials when such materials are illicitly removed, lost or stolen.
As of the end of 2015, there were 454 confirmed incidents around the world involving unauthorized possession of nuclear materials and related criminal activities, 762 incidents involving reported theft or loss of such materials, and 1,622 incidents involving other unauthorized activities and events related to such materials, according to an International Atomic Energy Agency report.
In one high profile incident in Japan, a former employee of an inspection company in Ichihara, Chiba Prefecture, stole iridium-192 and dumped it into a river in 2008.

Letter by Ambassador Murata to the CIO President

Dear Friends,

I am sending you my message addressed to President Thomas Bach of the IOC.

Mitsuhei Murata
Former Ambassador to Switzerland

From: mitsu
Sent: Tuesday, August 01, 2017 2:44 PM

Dear President Thomas Bach,

Please allow me to send you this message that reminds us of the problems confronting the Tokyo Olympic Games 2020.

We can grasp distinctly the spirit of the Olympic Charter is being neglected as regards the political utilization of the Olympic Games.
Relevant prescriptions are as follows.
"The Olympic Games are competitions between athletes in individual or team events and not between countries" (Chapter 1, clause6).
"The IOC and the OCOG shall not draw up any global ranking" (Chapter 5, clause 57).

A special treatment of 5 years grace period, accorded to the limitation of overtime work in consideration of the Olympic Games, has caused a tragedy concerning the construction of the Olympic National Stadium. A newly employed worker has recently committed a suicide due to overwork. His latest monthly work time registered 200 hours surpassing the newly established limit of 100 hours. This 5 years grace period must be abolished as soon as possible.

A glance at the attached articles criticizing the Tokyo Olympic Games 2010 published in Japanese newspapers will be sufficient to understand the new trend of the public opinion in Japan.The first criticizes holding the Games in intensisive heat.The second is the similar warning by the Mainichi News Paper, one of the 4 sponsorng major news papers.The temperature being expected to surpass 34 degrees C. by then, it points out serious dangers of heatstrokes,not only for the athletes,but also for spectators and volunteers.

Moreover, the same trend can be observed internationally, as evidenced by the following article.

https://www.bloomberg.com/...07.../why-no-one-wants-the-olympics

I am convinced all the problems boil down to one question; Can the "under control" assertion be still be trusted?

With highest and warmest regards,

Mitsuhei Murata
Former Ambassador to Switzerland

Message from Ambassador Murata

Message from Ambassador Murata (August 19, 2017)

Dear Friends,

There are symptoms that allow us to foresee an important change in Japan.
The Japanese major media seem to start shifting toward supporting the retreat from the Tokyo Olympic Games 2020.
The Asahi Newspaper and the Mainichi Newspaper, both of them sponsoring the Tokyo Olympic Games, surprised the readers by the following frank expressions.

< Olympic preparations have given rise to such consequences as the soaring of construction costs, the shortage of workers, death due to overwork etc. The Olympic Games that sacrifices human life and health is nothing but a sheer contradiction>(The editorial of August 14,2017)

<The Tokyo Olympic Games is based on the false assertion that "Fukushima is under control", assertion that deceives the whole world. The Abe Cabinet passed by force the law on conspiracy under the pretext of the Tokyo Olympic Games, law that could restrict human rights and menace democracy. We should at least retreat from "the sickness of the Tokyo Olympic Games!"

(The evening edition of the Mainichi News Paper of August7, 2017)

"The results of the nation-wide referendum among the listeners conducted on 17 June by the TV Asahi news anchor Hiroshi Kume's wide-show program entitled "Should we retreat from the the Tokyo Olympic Games 2010 ?"are impressive. All age categories except "under 19 years old" have overwhelmingly(83%) supported the retreat from the 2020 Olympic Games.

Mr. Hiroshi Kume revealed in his radio broadcast of August12 that the Olympic Organizing Committee had addressed him opposing arguments. He told the listeners that they proved their "Olympic First"position, in stead of "Athletes First", explaining why the Tokyo Olympic Games is taking place at the hottest period in Japan（July21~August9）. The IOC had accepted the request of 3 American television networks to make the acceptance of it the prerequisite of the candidacy. Actually, the imposed choice of this hottest period is the target of increasing criticism, because of the obvious dangers of heat strokes menacing athletes, spectators, volunteers etc.(The evening edition of the Mainichi News Paper of July 29, 2017)

In view of the unimaginable impact the cancellation of the Tokyo Olympic Games, it could not but develop into a major political issue sooner or later.
In this connection, some former prime ministers are expected to play an important role.
Former Prime Minister Kan Naoto who experienced the 3/11 disaster while in office is engaged in pleading the world to stop using nuclear reactors, source of humanly unacceptable consequences.
Former Prime Minister Yukio Hatoyama voiced his opposition against it in his interview given by Japan Times a year and a half ago.
Former Prime Minister Junichiro Koizumi continues to condemn strongly the false assertion "under control". He has established a relief fund to help American soldiers, victims of the TOMODACHI operation after the 3/11 nuclear disaster.
Among former prime ministers who have not taken position on the Olympic issue, some deserve special attention.
Former Prime Minister Morihiro Hosokawa played a role in promoting the removal of nuclear fuel rods from the unit 4 reactor in Fukushima Daiichi.
Former Prime Minister Yasuo Fukuda is now drawing special attention.
On August 2, the Kyodo News interviewed him. He most severely criticized Prime Minister Abe, asserting that Japan would be ruined due to his control of high ranking bureaucrats by dint of the Cabinet Bureau of Personnel Affaires established in 2014.
(Japanese version: http://yuruneto.com/hukudayasuo/**)**

This interview has not yet been reported abroad, as of August 20, according to the Kyodo News. Its impact is expected to be far reaching.

An important change seems to be in the making.

With warmest and highest regards,

Mitsuhei Murata
Former Ambassador to Switzerland

Too busy rebuilding

November 13, 2017

Tohoku areas snub Olympic program, focus on rebuilding
http://www.asahi.com/ajw/articles/AJ201711130010.html
By TAKAHIRO OKUBO/ Staff Writer
The vast majority of municipalities in the Tohoku region are snubbing a government exchange program related to the 2020 Tokyo Olympics, saying they are simply too busy rebuilding from the 2011 disaster.
The central government wants to use “Tohoku reconstruction” as a theme for the Games and a way to promote the revival of devastated areas. But scorn is now being heaped on this idea.
In the run-up to the Summer Olympics, the government is pushing the Reconstruction “Arigato” Host Town international exchange program involving municipalities in Iwate, Miyagi and Fukushima, the three prefectures hardest hit by the Great East Japan Earthquake and tsunami on March 11, 2011.
Under the program, disaster-hit municipalities will invite athletes, rescue workers and people who contributed relief goods to the victims to check on the rebuilding progress, allowing local residents to interact with people from across the globe.
Only 11 cities and villages of all 127 municipalities in the three prefectures applied for the program between Sept. 15 and Oct. 31.
“The most important phase of reconstruction is now getting under way,” said an official of a city in Iwate Prefecture that did not apply. “We are suffering from a worker shortage and can’t afford to think of the Tokyo Olympics.”
In fact, there was such little initial interest in the exchange program that officials of the Cabinet Secretariat had to urge cities, towns and villages to participate.
A central government source said that combining the Tohoku rebuilding efforts with the Olympics is nonsensical.
“Disaster recovery and the Olympics are basically two different things,” the source said.
The central government decided to extend the period of accepting applications because the results so far have been embarrassing.

Letter from Ambassador Murata to Abe

Dear Friends, I have sent the attached message dated March 1,2018, to Prime Minister Shinzo Abe.Its gist is as follows: “The preparations for the Tokyo Olympic Games are widely recognized as causing the sharp rise of prices of materials and serious lack of workers,thus constituting a major factor standing in the way of the reconstructionof North Eastern Japan. The monthly magazine "FACTA"(March,2018)has published a shocking article entitled"Material evidence of Dentsu bribing the Tokyo Olympic Games".It reveals the contentof the secret contract between Dentsu and former international athletics federation (IAAF) President Lamine Diack.The " Facta" and the French paper "le Monde"had jointly obtained the document which the French Prosecuter's Office

had confiscated. In view of the deepening sense of crisis of the International Community regaradingthe unstoppable radioactive contamination emanating from the Fukushima Daiichi,an influential member of the IPPNW renews his proposal to postpone the Tokyo Plympic Games.("they should at least be postponed until the situation in Fukushima is under better, perhaps even global control .——— Probably the whole world would understand and agree, and Japan would avoid the risk and embarrassment, that for ongoing unresolved nuclear problemswith the Fukushima reactors, in the end national delegations might cancel their Olympic participation"） From many quarters,requests have been addressed to President Bach of the IOCto reverify the "under control"assertion, but they remain without response.To cope with the increasingly preoccupying situation in Fukushima, Former Prime Ministers are being approached to write a joint letter to President Bach in order to ask him to clarify his position."(http://kurionet.web.fc2.com/murata.html**) Mitsuhei Murata Former Ambassador to Switzerland**

Letter from Ambassador Murata to the UN Secretary-General

Letter from Ambassador Murata to the UN Secretary-General

The Honorable António Guterres
Secretary–General of the United Nations Organization
New York City, NY.

_____

Tokyo, May 26, 2018
Dear Secretary-General António Guterres,
Please allow me to draw your attention to the persistent and deepening Fukushima crisis.
It is essential not to forget the crucial fact that the state of emergency promulgated after the Fukushima accident still persists and will not be annulled hereafter for more than 100 years according to reliable experts.
It is simply abnormal not to consecrate maximum efforts to this task. The Tokyo Olympic Games 2020 should be considered as out of the question. Its preparations, however, are being promoted without hesitation.

The International Olympic Committee continues not to respond to increasing legitimate requests from various quarters to reexamine the false assertion "under control", publicly condemned as a "big lie" by Former Prime Minister Junichiro Koizumi. He is now engaged in promoting a national movement against nuclear reactors, together with Former Prime Minister Morihiro Hosokawa.

Former Prime Minister Yukio Hatoyama, in the interview article of the Japan Times of January 21,2016, pleaded for Japan's retreat from the Tokyo Olympic Games. He has recently sent me a message in which he expressed his appreciation and expectations of women's role in this crucial problem.

In this connection, there is a growing support for the plea to make shift the current paternal civilization based on power and domination to a maternal civilization based on harmony and solidarity.
On May 16,the House of Councilors unanimously approved a law aimed at equalizing eventually the number of male and female candidates in national elections.

Women are expected to remind the world of the very lesson of the Fukushima nuclear accident that requires the shift of priority from economy to life.
The current Japanese society, exposing one scandal after another, reminds the whole world of the well-known warning of the ancient Chinese philosopher Laozi; "The Heaven's vengeance is slow but sure". It reminds us of the law of history that does not allow immorality to last long.
I wish you the best of luck in your noble and increasingly challenging mission.
Please accept, Secretary-General António Guterres , the assurances of my highest consideration.

Mitsuhei Murata
Former Japanese Ambassador to Switzerland and Senegal
Honorary Professor of Tianjin University of Science and Technology (China)

Boosting nuke antiterrorism ahead of Olympics

July 11, 2018
Japan to beef up nuclear security before Rugby World Cup, Olympics
https://mainichi.jp/english/articles/20180711/p2g/00m/0dm/106000c
TOKYO (Kyodo) -- Japan's nuclear watchdog decided Wednesday to oblige facilities using any of about 200 radioactive materials to introduce antitheft measures to enhance nuclear security ahead of the 2019 Rugby World Cup and 2020 Tokyo Olympics.

- 【Related】Nuclear watchdog OKs restart of aging nuclear plant hit by tsunami
- 【Related】Editorial: Time to transform Japan's nuclear plant inspection system
- 【Related】Japan drops in Hiroshima Report rankings due to refusal to sign nuclear ban treaty

As part of the country's efforts to boost counterterrorism steps before hosting the major sporting events, the government will aim at enforcing related laws in September 2019, in time for the Rugby tourney kicking off on Sept. 20 that year, which would cover some 500 business operators, the Nuclear Regulation Authority said.
Hospitals and companies and the like would be required to install surveillance cameras near their storage sites for radioactive materials. The containers must be kept in rooms with solid doors and manuals and communication equipment must be provided for personnel to deal with intruders, to prevent such materials from falling into the hands of terrorists.
Nuclear power plants have already introduced a personal background investigation system to prevent potential terrorists from being hired as workers.

According to the NRA, the planned regulation would cover radioactive substances including cesium 137 and cobalt 60, which are widely used for medical and industrial purposes, but which could be used in so-called dirty bombs.
Amid the globally mounting threat of terrorism, the International Atomic Energy Agency advised countries in January 2011 to take measures to better manage radioactive materials.
Tokyo, however, has yet to introduce these steps due to its need to deal with the 2011 Fukushima Daiichi nuclear disaster.
In Brazil, instruments for radiation therapy were taken away from the former site of a hospital and then dismantled. But it led to large-scale exposure and the deaths of four people in 1987.

Torch relay in Fukushima to lift spirits?

July 13, 2018

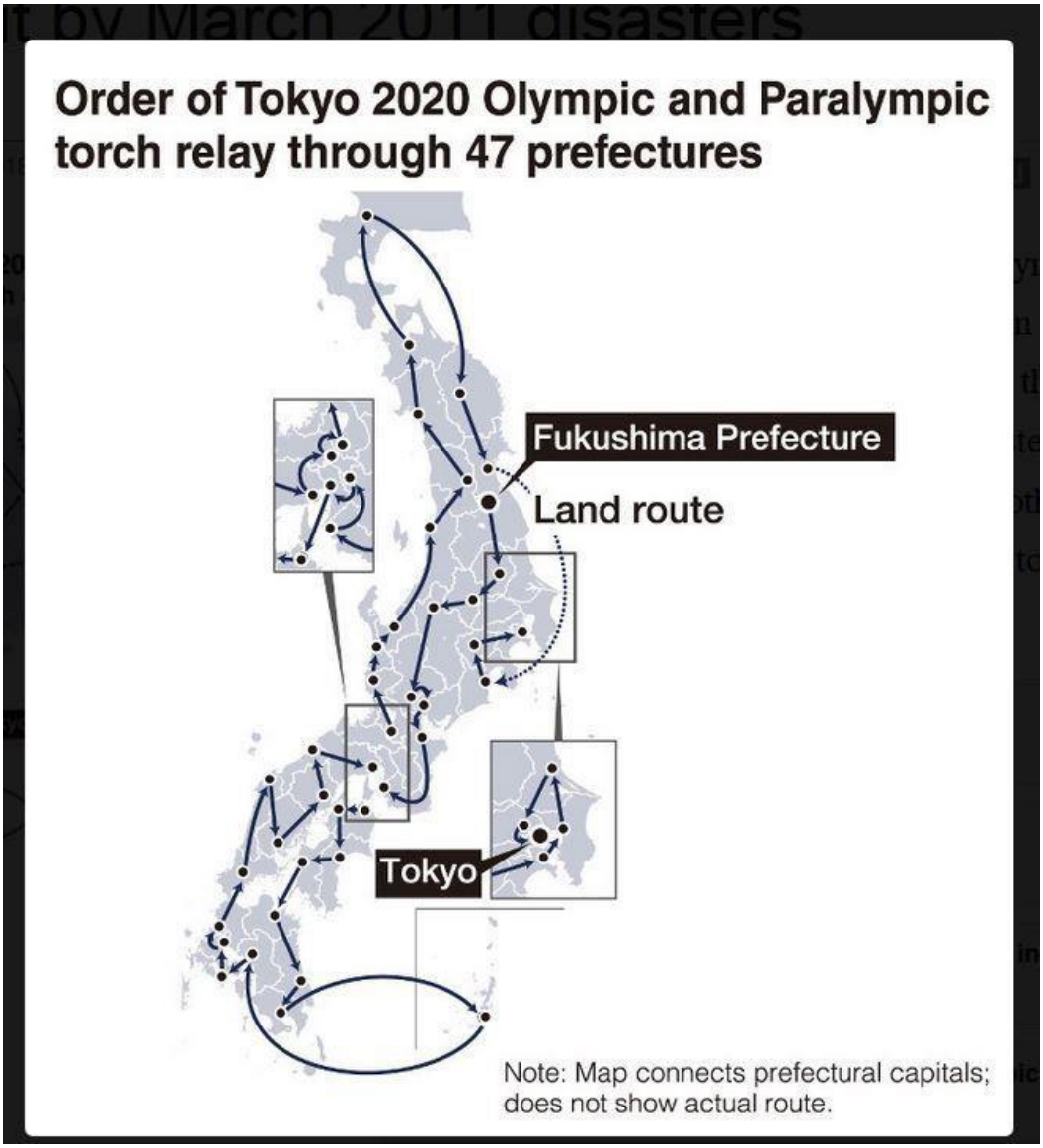
1964 Olympic torch bearer hopes 2020 runners will spur hope in Fukushima
https://mainichi.jp/english/articles/20180713/p2a/00m/0na/018000c
YABUKI, Fukushima -- A 71-year-old man here who served as a torch bearer in the 1964 Tokyo Olympics looks to see young people from this prefecture encourage residents affected by the nuclear disaster through their torch relay ahead of the 2020 Tokyo Games.

- 【Related】Tokyo 2020 torch relay plan draws attention to areas hit by March 2011 disasters
- 【Related】2020 Olympic torch relay to start in Fukushima on March 26
- 【Related】Tokyo Olympics

Fukushima Prefecture was on July 12 named the starting point for the 2020 Olympic torch relay in Japan. 1964 runner Masao Yabuki, a resident of the prefectural town of Yabuki, hopes that the relay will play a part in boosting disaster recovery, as touted by the Tokyo 2020 organizing committee.
"I hope the torch relay will uplift the spirits of those affected by the disaster, if only a little," said Yabuki, a former Japan Agricultural Cooperatives employee.
Yabuki was a third-year student and a member of a track team at what is now Shirakawa Jitsugyo High School in Shirakawa in southern Fukushima Prefecture, when he was chosen to run in the city, alongside two teammates. "I was probably picked as I was a third-year student back then. I was just lucky," he recalled.
He was assigned to run through an approximately 2-kilometer zigzag course from the entrance to the castle town's downtown area to the city hall. He practiced by holding a metal bat high up in the air with his right hand while running.
On Sept. 30, 1964, he covered the designated stretch with the real Olympic torch in his hand as some 100,000 spectators filled the streets.
"My mind was completely blank. I couldn't even hear cheers from spectators as I was so absorbed," he said.
Nearly half a century later, Yabuki's house was partially damaged due to a massive earthquake registering a lower 6 on the Japanese seismic intensity scale of 7 in his area on March 11, 2011.

In the wake of the Fukushima nuclear disaster triggered by the quake and ensuing tsunami, temporary housing units for evacuees from the nuclear disaster were built in the town of Yabuki. Seven years on, people who are still unable to return to their hometowns are living in those housing units.
Last year, Yabuki drove through areas along the Pacific Coast stricken by the tsunami and nuclear disasters. What he saw were rice paddies and fields long left unattended and almost empty streets, even in areas where nuclear evacuation orders had already been lifted. In other areas where such orders remained in place, towns were overgrown with wild grass and trees. Such landscapes saddened Yabuki.
The Fukushima Prefectural Government will establish an organizing committee for the 2020 Games to select the specific torch relay path. The governments of 15 cities, towns and villages in the prefecture -- which were damaged by the 2011 tsunami and ordered to evacuate residents due to the nuclear crisis -- are calling for their streets to be included in the relay route.
While Yabuki wishes to once again become a torch bearer himself, even if to cover just 100 meters, he believes that the upcoming torch relay should be one that can uplift local residents by covering the coastal "Hamadori" region of Fukushima, not the mid-inland "Nakadori" region including the town of Yabuki, to embody the spirit of the "disaster recovery Olympics" by conveying the current situation to the rest of the country.
(Japanese original by Shuji Ozaki, Fukushima Bureau)

Torch relay in Fukushima



July 13, 2018

Tokyo 2020 torch relay plan draws attention to areas hit by March 2011 disasters
https://mainichi.jp/english/articles/20180713/p2a/00m/0na/007000c

With the starting point for the 2020 Tokyo Olympic and Paralympic Games torch relay set to begin in Fukushima Prefecture, which was hit hard by the March 2011 quake, tsunami and nuclear disaster, anticipation is growing in the prefecture and other areas ahead of the two-year countdown mark to the games on July 24.

- 【Related】1964 Olympic torch bearer hopes 2020 runners will spur hope in Fukushima
- 【Related】2020 Olympic torch relay to start in Fukushima on March 26
- 【Related】Swimmers put on traditional-style show in bid to join Tokyo 2020 torch relay
- 【Related】IOC approves extension of Tokyo Olympic torch relay
- 【Related】Mori requests longer Olympic torch relay for flame to travel through disaster-hit areas

The torch relay for the 1964 games wrapped the entire country up in passion for the event, but the 2020 relay looks to become an even bigger phenomenon, making its way through all 47 of Japan's prefectures.
The Tokyo Organising Committee of the Olympic and Paralympic Games established a committee and began selecting the route and the starting point in February 2017. From the outset, the committee had planned to pay special attention to disaster-hit areas, but the relay was to begin in late March, and in the northern Japanese regions of Hokkaido and Tohoku, the temperature would still be low.
Moving from the southernmost prefecture of Okinawa northward with the blooming spring cherry blossoms was the most logical choice, and there were southwestern areas of the country such as Kumamoto Prefecture, which was hit by a double earthquake disaster in April 2016, and other areas around the country that could represent Japan's resilience. There were arguments as to whether or not the message of recovery should be limited to just the areas hit by the March 2011 triple disaster.
Still, the committee decided to begin the route in Fukushima Prefecture to dispel any doubts that the image of "disaster recovery" held up by the organizing committee and the government would be obscured.
The idea of holding the games as a sign of recovery had been put forward since the International Olympic Committee general assembly met in September 2013 when the Tokyo games were decided, but the proposal ended up being a double-edged sword -- foreign media were still pointing out the risks of contaminated water leaking from the Fukushima No. 1 Nuclear Power Plant. Japanese Prime Minister Shinzo Abe, however, who traveled to where the assembly was held in Buenos Aires, explained that the "situation was under control."
Despite the government's commitment to a games in the spirit of recovery, the people of Japan have not been so fast to warm up to the idea, asking what the games will actually do for the reconstruction of the regions hit by disasters. With personnel, financial resources and facilities lacking, there were quite a few disaster-hit municipalities that viewed things like "host town" registration to plan exchanges with participating countries and regions as well as the hosting of pre-game training camps as burdensome. In November 2016, the Tokyo 2020 organizing committee decided that Fukushima Prefecture would be the venue for the baseball and softball events of the games, and in April this year, it was decided that the Olympic flame from Greece would be exhibited in the three prefectures on the northeastern Pacific coast hit hardest by the March 2011 disasters -- Fukushima, Miyagi and Iwate -- as a "flame of recovery."
"**We have to create some substance to the image of the games as an event of recovery**," said Minister in charge of the Tokyo Olympic and Paralympic Games Shunichi Suzuki, emphasizing the need to connect the activities of the games to the regions they hoped to uplift.
In the relay path announced on July 12, the torch will not travel through the three prefectures of Fukushima, Miyagi and Iwate at once, but rather travel south from Fukushima to do away with worries about the March temperatures in the northern region of Japan. So far, there have not been any complaints.
Mayor Hiroshi Kameyama of the heavily hit city of Ishinomaki in Miyagi Prefecture, just north of Fukushima, who fought for his city to be the relay starting point, released a comment stating, "We're all a part of the Tohoku region, and I hope that having Fukushima Prefecture, where there are still quite a number of victims of the disaster, decided as the starting point for the relay will provide strength in moving toward reconstruction."
(Japanese original by Kazuhiro Tahara, Tadashi Murakami and Akira Matsumoto, Sports News Department)

IPPNW launches a campaign about the "Radioactive Olympics"

International Campaign
“Tokyo 2020 - The Radioactive Olympics”
In 2020, Japan is inviting athletes from around the world to take part in the Tokyo Olympic Games. We are hoping for the games to be fair and peaceful. At the same time, we are worried about plans to host baseball and softball competitions in Fukushima City, just 50 km away from the ruins of the Fukushima Dai-ichi nuclear power plant. It was here, in 2011, that multiple nuclear meltdowns took place, spreading radioactivity across Japan and the Pacific Ocean - a catastrophe comparable only to the nuclear meltdown of Chernobyl.
The ecological and social consequences of this catastrophe can be seen everywhere in the country: whole families uprooted from their ancestral homes, deserted evacuation zones, hundreds of thousands of bags of irradiated soil dumped all over the country, contaminated forests, rivers and lakes. Normality has not returned to Japan.
The reactors continue to be a radiation hazard as further catastrophes could occur at any time. Every day adds more radioactive contamination to the ocean, air and soil. Enormous amounts of radioactive waste are stored on the premises of the power plant in the open air. Should there be another earthquake, these would pose a grave danger to the population and the environment. The nuclear catastrophe continues today.
On the occasion of the Olympic Games 2020, we are planning an international campaign. Our concern is that athletes and visitors to the games could be harmed by the radioactive contamination in the region, especially those people more vulnerable to radiation, children and pregnant women.
According to official Japanese government estimates, the Olympic Games will cost more than the equivalent of 12 billion Euros. At the same time, the Japanese government is threatening to cut support to all evacuees who are unwilling to return to the region.
International regulations limit the permitted dose for the general public of additional radiation following a nuclear accident to 1 mSv per year. In areas where evacuation orders were recently lifted, the returning population will be exposed to levels up to 20 mSv per year. Even places that have undergone extensive decontamination efforts could be recontaminated at any time by unfavourable weather conditions, as mountains and forests serve as a continuous depot for radioactive particles.
Our campaign will focus on educating the public about the dangers of the nuclear industry. We will explain what health threats the Japanese population was and is exposed to today. Even during normal operations, nuclear power plants pose a threat to public health – especially to infants and unborn children.
There is still no safe permanent depository site for the toxic inheritance of the nuclear industry anywhere on earth, that is a fact.
We plan to use the media attention generated by the Olympic Games to support Japanese initiatives calling for a nuclear phase-out and to promote a worldwide energy revolution: away from fossil and nuclear fuels and towards renewable energy generation.
We need to raise awareness of the involvement of political representatives around the world in the military industrial complex.
We denounce the attempt of the Japanese government to pretend that normality has returned to the contaminated regions of Japan.
We call on all organisations to join our network and help us put together a steering group to coordinate this campaign. The Olympic Games are still two years away – now is still time to get organised.

We look forward to hearing from you,
with best regards,
For the campaign „Nuclear Free Olympic Games 2020“:
Annette Bänsch-Richter-Hansen
Jörg Schmid
Henrik Paulitz
Alex Rosen

Reconstruction Olympics?

August 10, 2018

Tokyo's road to 'Reconstruction Olympics' not an easy one
https://mainichi.jp/english/articles/20180810/p2a/00m/0na/014000c
TOKYO -- Showcasing Japan's reconstruction from the devastating earthquake in 2011 to the world is one of the main themes of the Tokyo Olympics and Paralympics in 2020, but displaying this is no easy task.

- 【Related】Dealing with the heat of the 2020 games: A racewalker keeps cool by icing his palms
- 【Related】Japan crafts new cybersecurity strategy for 2020 Tokyo Olympics
- 【Related】Japan-US friendship born out of private lodging in 1964 lives on toward Tokyo 2020

Two years ahead of the Tokyo Games, the organizing committee is making additional efforts to emphasize the reconstruction aspect of the global athletic event. In recent weeks, the committee announced Fukushima Prefecture, which was hit hard by the Great East Japan Earthquake, tsunami and the ensuing nuclear crisis, as the starting point for the Olympic torch relay. It also revealed that the first event of the Games, a softball match involving Japan, will be held at the Azuma ballpark in the city of Fukushima on July 22, 2020, two days before the official start of the 2020 Games. The ballpark hosted a Japan-U.S. softball match in June this year, attracting some 7,000 spectators.
Holding events and competitions is one thing, but conveying the message of the massive damage caused by the quake, subsequent tsunami and triple core meltdowns at the Tokyo Electric Power Co.'s Fukushima No. 1 Nuclear Power Plant that forced hundreds of thousands of residents to flee, is another. Organizers are busy discussing how to present the information to athletes and reporters visiting from overseas.
The organizing committee plans to set up a "reconstruction support booth" inside the main press center for international visitors as well as the athletes' village and display images of devastation and reconstruction using cutting-edge equipment.
But some in the committee are worried that footage of huge tsunami engulfing thousands of houses or of areas left abandoned following the evacuation of residents caused by the nuclear accident may have some adverse effects on viewers.
A committee official in charge of the presentation said, "I want people to know what happened back then, but the images might prove to be very shocking to some and affect competition." Food items produced in areas hit by the disaster will be served at the athletes' village, but this may fuel negative rumors about food safety rather than dispel them.

In early September, the organizing committee plans to hold the first briefing targeting the international media, and explain the status of preparations. Another plan is also being considered for the Tokyo Metropolitan Government to invite journalists from overseas to tour disaster-affected areas in the Tohoku region in northern Japan and show them competition venues and reconstruction efforts. These proposals are designed in part to judge how the foreign media will report on those areas.
Tokyo was selected as the host city for the 2020 Games in September 2013 at a session of the International Olympic Committee. At that time, the international media emphasized concerns about leaking radioactive water from the Fukushima nuclear plant. Prime Minister Shinzo Abe, in his speech at the meeting, assured that the situation was "under control," helping Tokyo to win enough support to be chosen as the host venue. The 2020 Tokyo Games has come to shoulder a responsibility to show to the world that areas affected by the 2011 disaster have mostly been restored.
The Olympics always show the reality of the host city and country to the world. During the 2016 Rio Games, the situation of poor neighborhoods in the city was reported on globally. The organizers in Tokyo are trying to figure out what needs to be done to get the actual situation in disaster-hit areas reported on accurately during the Olympics and Paralympics.
(Japanese original by Tadashi Murakami, Sports News Department)

"That's how dangerous the Tokyo Olympics are"

August 13, 2018
Olympic heat wave fears: What steps can Tokyo take?
https://www.japantimes.co.jp/news/2018/08/13/reference/olympic-heat-wave-fears-steps-can-tokyo-take/#.W3Kj68IyWos
by Tomohiro Osaki
Staff Writer
Japan has become well-known for its *omotenashi* (hospitality), with the concept being part of Tokyo's pitch when it bid to host the 2020 Olympics.
But this year's record heat wave, which has so far killed more than 100 people and led to tens of thousands more being rushed to the hospital, has raised concern that some foreign visitors to the games may not find them as hospitable as organizers had hoped.
Fears have been rekindled over what experts say will likely be a sweltering 2020 Games, which will start on July 24 and finish on Aug. 9. Tokyo is now facing significant pressure to hammer out measures to combat the searing heat, including a potential revival of daylight saving time.
With the games just two years away, what can Tokyo do to minimize the risk of heatstroke? Could it possibly push the event back to a cooler time to avoid the hottest period of the year? Here is a look at those and other questions:
Why are the 2020 Games being held in midsummer in the first place?
To be fair, it's not like Tokyo had much of a choice. The July-August window was a precondition set by the International Olympic Committee (IOC) as it sought aspiring hosts.
When Tokyo last hosted the Summer Olympics in 1964, the two-week event kicked off on Oct. 10.
But today, an October Olympics is considered difficult because it would compromise the IOC's bid to capitalize on broadcasting rights paid by TV stations — one of its biggest revenue sources. The IOC wants to avoid having the quadrennial games coincide with other popular sporting events, such as the Major

League Baseball playoffs and the European soccer season in the fall, due to fears of splitting up airtime and TV ratings.

A case in point: Doha, Qatar, known for its scorching summer weather, also bid for the 2020 Olympics. It was granted special permission by the IOC to pitch an October Olympics — only to be knocked out in the first round. The committee's evaluation report, according to Reuters, later admitted that in the event of an autumn Olympics, broadcasters would have difficulties "attracting the same audience levels" as they could when the games are held in July and August.

Is it possible to move the Olympic schedule to a cooler time?

A spokesman for the Tokyo Olympic Organizing Committee said the "probability is extremely low" that the July-August period could be postponed, because it would be seen as Tokyo violating the original arrangement with the IOC. Such a major rethink, if at all possible, would necessitate Tokyo negotiating with the IOC for approval, said the spokesman, who declined to give his name per internal policy.

Any attempt to push the event to a cooler period risks exposing Tokyo to global backlash given that the city advertised its summer climate as "mild" and "ideal" for athletes to perform when it bid for the 2020 Games.

"Anyone with common sense knows that Tokyo during this period of time is far from being ideal for sporting activities," said Makoto Yokohari, a professor of urban engineering at the University of Tokyo. "I just have to wonder on what basis they called Tokyo's weather mild and athlete-friendly. … That's an impossible assessment."

How dangerous is it to hold the games in the middle of summer?

Experts say the heat presents the risk of a life-threatening heatstroke.

Yokohari has conducted a study of temperature and rainfall records from 1971 to 2000 for all of the Olympic host cities. Although Tokyo trailed behind Athens and Atlanta in terms of heat, its abundant rainfall suggests it is "the hottest and the most humid" host, the professor said.

Akio Hoshi, a professor of sports and health sciences at Toin University of Yokohama, agrees. Hoshi's team analyzed 50 years' worth of Meteorological Agency data to ascertain what is called the "wet-bulb globe temperature (WBGT)" — a comprehensive heat index based on temperature, humidity, wind speed and sunlight — from July 24 to Aug. 9 each year.

His study, which covered a period from 1964 to 2014, revealed that Tokyo's WBGT has risen by an average 0.4 degree per year in recent years and is projected to hit as high as 34 degrees in 2020. That's well beyond the 31-degree threshold flagged by the Environment Ministry as extremely dangerous, and the level at which all exercise should be suspended in principle. A sporting event coupled with the sizzling heat heightens the risk of life-threatening heatstroke, Hoshi said.

"I think we've come to a point where not only the Olympics but other midsummer sporting events, such as the Koshien baseball tournaments and nationwide high school championships, must be reconsidered," he said.

What about daylight saving time?

Recent weeks saw debate flare up anew over whether Japan should introduce daylight saving time in a bid to minimize the impact of the heat.

According to Kyodo News, Prime Minister Shinzo Abe instructed his ruling Liberal Democratic Party last week to look into the possibility of introducing daylight saving time — with a view to moving the clock two hours forward during the games — at the request of Yoshiro Mori, president of the Olympic organizing committee and a former prime minister.

Despite Abe's apparent eagerness, however, the government remains split, with Chief Cabinet Secretary Yoshihide Suga repeatedly striking a negative note. Changing the clock "would impact the lives of the public.

There are only two years left before the games, too," Suga told a regular news briefing last week.

Experts agree that adopting daylight saving time would be effective in combating the heat — if not a game-changer.

"Under the current plan, the marathon is slated to kick off at 7 a.m. … which is seen as the earliest schedule possible given the time of transportation and preparation needed by volunteers," Yokohari said. "But saving (an hour of) daylight, for example, would allow the race to begin at effectively 6 o'clock. That's better than doing nothing," he added.

Japan experimented with daylight saving from 1948 to 1951 under the U.S. Occupation. But the custom came to an end amid complaints that daylight saving led to farmers working longer hours. Concerns this time around are more varied.

"Compared with the last time we did it, we have computers now … There is just too much preparation necessary," a senior government official said.

What other measures are being discussed?

Popular ideas include applying special anti-heat coatings to road surfaces, pruning and growing trees along sidewalks to offer more shade, setting up mist-spraying equipment and moving forward the start time for some events.

An experiment conducted by the Tokyo government Monday has shown that water sprinkling would keep temperatures on the street surface up to around 5 degrees cooler than the surrounding air temperature.

The organizing committee is even looking into what it touts as a "cool sharing" initiative, where building owners along the marathon course would be asked to keep their doors open to offer a bit of cooler air.

The cool-sharing initiative is a "last-resort" measure that basically relies on the goodwill of volunteers and is far from being a problem-solver — and so are other measures eyed by officials, Yokohari said.

"These are hardly effective enough to offset the possibility of heatstroke," he said.

As a fundamental solution, the professor suggested relocating venues for high-risk sports, such as marathons, to cooler places like Hokkaido or Nagano Prefecture, citing an ongoing plan to hold some softball games in Fukushima Prefecture in lieu of Tokyo.

Current measures under consideration are "not entirely useless," Yokohari said. "They are helpful to a certain degree, but even if all of them are implemented, the fact still remains that Tokyo's heat level will keep hovering within a 'danger zone.' "

"In other words, that's how dangerous the Tokyo Olympics are."

Lighting of Olympic flame totake place on March 11

September 2, 2018

Olympic flame for 2020 Games to be lit on 3/11 anniversary, IOC chief says in interview

https://www.japantimes.co.jp/news/2018/09/02/national/olympic-flame-2020-games-lit-3-11-anniversary-ioc-chief-says/#.W4vVSMIyVLM

Kyodo

JAKARTA – The Olympic flame-lighting ceremony for the 2020 Summer Games will take place on March 11 — the ninth anniversary of the earthquake and tsunami that devastated the Tohoku region, International Olympic Committee President Thomas Bach said Saturday.

"I think this is a wonderful idea," Bach said in an interview in Jakarta. "The IOC has alre
hat wherever possible we want to contribute to the reconstruction of the area."

The Tokyo Olympic Organizing Committee proposed the date, but Bach's statement was the first public announcement to confirm the IOC's support for holding the ceremony on the anniversary of the 2011 Great East Japan Earthquake.

The Olympic flame has been kept alight in Olympia in western Greece since Nazi Germany introduced the idea of a torch relay for the 1936 Berlin Summer Games.

After the relay begins in Greece, the flame will be transported to Japan, where it will be displayed in Fukushima, Iwate and Miyagi, the three prefectures most heavily damaged by the calamity, which also triggered a nuclear crisis and left more than 18,000 people dead or missing.

The Japan leg will begin in Fukushima on March 26 and travel around the country for 121 days.

A day before he attends the closing ceremony for the Asian Games, the largest multisport event in the world behind the Olympics, Bach said he plans to visit northeastern Japan in November to "show our solidarity with the people and to encourage the people in the region."

Referring to Japan's record-high temperatures this summer, Bach, 64, said he is confident that the IOC, working together with the Tokyo organizing committee, will be able to come up with the "right mixture of measures" to protect athletes and spectators during the Tokyo Olympics.

He said introducing daylight saving time in Japan during the summer may be an effective way to address potential health risks but at the same time stressed it will be important to craft a "good package," rather than just focusing too much on one measure.

He also said the IOC, along with North and South Korea, has been exploring the possibility of "some joint actions during the Olympic Games in Tokyo" and to achieve this goal adequate preparations with other national Olympic committees should begin at an early date.

"We have not only opened the door for political talks but also we have also kicked off developments in sports," he said. "We are ready to continue to support this rapprochement on the Korean Peninsula."

North and South Korea formed a joint team in women's ice hockey during the Winter Olympics in Pyeongchang in February. It was the first time for an integrated Korean team had competed in Olympics history.

They also fielded unified teams in women's basketball, rowing and canoeing at the Asian Games, which opened on Aug. 18.

Their dragon boat racing team celebrated the first gold medal won by a combined team participating at an international multisport event on Aug. 26. The victory was punctuated by a rendition of the popular Korean folk song "Arirang" that served as the combined team's national anthem during the podium ceremony.

As for Sapporo's interest in hosting the Winter Olympics in 2026 or 2030, Bach said the move is in line with the IOC's policy of taking advantage of existing facilities and bringing the Olympics back to a "traditional winter sports destination."

While stressing it is too early to talk about which city might host those Winter Olympics, he said Sapporo has a good chance to succeed in clinching the 2030 Games even if it does not get selected for 2026.

"I think this is fair to say the candidates for '26 who are following up on the whole procedures will of course have a certain advantage for 2030," he said.

For obvious reasons, they will have “all the knowledge” and “more expertise and more time” to work out their projects according to their needs and cooperation with the IOC, the IOC chief said.
“I think they would be in the kind of pole position” as they would also be able to gain the confidence of the IOC in advance, he said.
While he spoke in favor of those issues, when it came to the likelihood of esports, or competitive multiplayer video gaming, becoming an Olympic event in the near future, he was not as confident.
He said substantive discussions are needed, for example, to determine whether esports should be regarded as sports in the first place or as a contradiction of Olympic values.
“This will be for my successor,” he said. “There are at this moment too many open questions. . . . It will take time.”

Using schools to recup silver

September 2, 2018

Criticism grows against gov't 'urban mines' plan for Tokyo 2020 medals
https://mainichi.jp/english/articles/20180902/p2a/00m/0na/012000c
TOKYO -- Yet another government program linked to the 2020 Tokyo Games is facing criticism: extracting silver from used mobile phones and computers for Olympic and Paralympic medals.

- 【Related】Gov't faces criticism for 'mobilizing' students as volunteers for 2020 Tokyo Olympics
- 【Related】Daylight saving time causes more trouble than benefits, say critics
- 【Related】Officials spray water on Olympic course sidewalk in trial to beat the heat

Critics say the collection drive is reminiscent of a World War II government order to the public to donate metal items to make aircraft and bullets. They also lambasted the plan as a product of groupthink in the same vein as other games-related government initiatives, such as heat countermeasures, introduction of daylight saving time, and "mobilization" of student volunteers.
This fall, the Ministry of the Environment will urge some 230 municipalities hosting Olympic and Paralympic athletes to cooperate, and install device collection boxes of its own at public elementary and junior high schools.
According to the ministry, about 40 kilograms of gold, 4,900 kilograms of silver and 3,000 kilograms of copper are needed to make some 5,000 medals for the Tokyo Games. There is already enough gold and copper thanks to a collection drive organized at NTT DoCoMo mobile phone shops and post offices. But stocks of silver, which is in particular need because the metal is used as the basis for gold-plated medals, are insufficient, according to ministry officials.
However, there is a growing tide of Twitter commentary critical of the plan to get that silver. "Now they want us to provide the metals. It's creepy," one tweet said, in an apparent reference to the government's wartime metal donation drive. The education ministry's effort to have universities call off classes during the games so that students can serve as volunteers has similarly been compared to war support efforts.
A proposal to introduce daylight saving time to avoid the summer heat during competitions has also been attacked as akin to wartime mobilization because it would place an enormous burden on computer programmers required to adjust software and force workers to stay on the job longer. A call to ease the

heat by spraying water in certain neighborhoods was likened to the desperate wartime plan to counter an Allied invasion of the Japanese home islands with bamboo spears.
Scholars and academics are particularly angry at the use of schools and students for the projects. "The mentality to utilize school organizations is really scary," one tweet said, while another commented, "Don't increase the burden on people on the front line of education."
The amount of precious metals contained in a used electronic device is negligible, but a huge number of these items, which are said to be lying dormant in people's homes, are called "urban mines." The project to "dig" out the metals to make Tokyo 2020 medals was received warmly when it was announced two years ago.
Komei Harada, an honorary researcher at the National Institute for Materials Science who proposed the idea, said the project team in charge of making the medals had failed to set up a system or create an atmosphere allowing the public to cooperate easily. According to Harada, recycling small home electronics produced 2.3 metric tons of silver in 2016. "What is needed for the medals is to double that figure, and that amount can be collected if people are willing to support the drive," he said.
However, unlike the 1964 Tokyo Games, the upcoming Olympics and Paralympics is tied to commercial sponsors, and it is difficult for municipal governments and recycling companies that are not games' sponsors to use the Olympics and Paralympics name to promote precious metals collection. Under the environment ministry plan, however, elementary and junior high schools will have to foot the bill. "People may come to dislike the games or recycling," said a worried Harada.
Some internet commenters assert that buying silver is cheaper than "urban mining." A Tokyo Games public relations official countered this by saying that it is not a matter of cost. "The medal project was designed to promote a sense of participation and the culture of recycling," explained the official.
But what is the organizing committee going to do if there is simply not enough silver? "It's not like we cannot make medals. There is an established system for procurement," the official said, but did not venture to detail how the system works, saying, "We cannot answer a hypothetical question."
(Japanese original by Satoko Nakagawa, General Digital News Center)

Uncontrollable Olympics

September 12, 2018

Japan's recent typhoon, earthquake are reality checks for Olympic planning: IOC official
AP
https://www.japantimes.co.jp/news/2018/09/12/national/japans-recent-typhoon-earthquake-reality-checks-olympic-planning-ioc-official/#.W5oavfmYSos
An IOC inspector working on the 2020 Tokyo Olympics said Wednesday the powerful typhoon and deadly earthquake that hit Japan in the last 10 days have been a wake-up call for organizers.
The most powerful typhoon in 25 years left 11 dead in the Osaka area of western Japan when it struck Sept. 4. A few days later, a deadly earthquake hit the northern island of Hokkaido and killed about 40.
John Coates, an Australian who heads the inspection team, said what happened "has hit home to me."
Coates helped organize the 2000 Sydney Olympics. He said organizers there simulated disasters.
"You don't have to dream anything up in this country," he added. "It's very sad to say."
He said disaster preparation "is being factored" into the planning.

The other uncontrollable problem could be Tokyo's searing heat, which set records this summer with temperatures soaring regularly over 38 degrees.
Coates, an International Olympic Committee member, said that body favored going onto daylight saving time.
"It does seem a very good solution to us," Coates said.
Yoshiro Mori, a former Japanese prime minister and head of the local organizing committee, has asked the Japanese government to consider moving the clocks forward.
Japan does not change its clocks as many countries do.
Mori has turned down suggestions of switching the games to October when temperatures are cooler. The 1964 Tokyo Olympics were held in October.
Organizers also confirmed what was long known: the swim finals will be held in the morning, as they were in Beijing in 2008.
This is primarily to accommodate the American broadcaster NBC, which will telecast the finals live during evening viewing hours in North America.
There is some local resentment of scheduling events to accommodate foreign broadcasters.
Finals are scheduled from 10:30 a.m.-12:30 p.m. local time. Preliminary heats will be from 7-9 p.m. local time. The first final will be the men's 400-meter individual medley on July 26.
"It's in the morning, but it's 10:30 or 11. That's not abnormal hours," said Koji Murofushi, a former Olympic gold — and silver-medalist in the hammer throw, who is the games sports director.
Organizers also announced plans to start recruiting 80,000 unpaid volunteers. A Japanese reporter told Coates there was some criticism in Japan about using volunteers.
"They are hinting that it is similar to forced labor," she said.
An Associated Press study several years ago showed that using unpaid volunteers saved the IOC at least $100 million, maybe more.
"Volunteers are volunteers," Coates replied. "And they don't have to apply if they don't want to."
The IOC generates almost $6 billion in income over a four-year Olympic cycle. Coates explained 90 percent of the money goes back to national Olympic bodies, sports federations and local organizers.
"The economics of it necessitates having to have volunteers," Coates said. "They get trained, they get their uniforms. They are part of something very exciting."
He added: "I think it's a fine model … and I don't think there's a case for paying volunteers."
IOC members receive per diems of between $450-900 when they are on Olympic business, and other generous perks like paid lodging at top hotels.
In other business, organizers announced the Olympic torch will be kindled on March, 12, 2020, in Greece. The handover ceremony to Japanese organizers is set for March 19 with the torch arriving in Japan on March 20.
The flame will be displayed in three northern prefectures hit by the 2011 earthquake and tsunami until March 26 when the relay begins from the Fukushima region and runs across Japan's 47 prefectures.

Corruption endemic to Olymics process

January 12, 2018

VOX POPULI: Corruption seems to be endemic to the Olympic process

http://www.asahi.com/ajw/articles/AJ201901120028.html

Vox Populi, Vox Dei is a daily column that runs on Page 1 of The Asahi Shimbun.
The job of Olympic consultants is said to gather--and sell--accurate information concerning members of the International Olympic Committee to the cities bidding for the Olympic Games.
The process of information gathering is so thorough that the consultants even go so far as to mine each IOC member's personal data, such as whether the individual is happily married, how many children he/she has, if there is any topic he/she resents discussing, and so on.
In 1998, a bribery scandal surfaced in connection with Salt Lake City's candidature for the 2002 Winter Olympics. Many IOC members were forced to resign for accepting expensive gifts that ranged from cash to a scholarship for a member's son.
After this scandal, the IOC banned visits by its members to candidate cities, thereby blocking direct contact between the parties.
But ironically, this opened the doors wide to the Olympic consultancy business. "No successful bidding without consultants" became an axiom.
And now, with next year's Tokyo Olympics drawing near, another allegation of corruption has surfaced.
Tsunekazu Takeda, president of the Japanese Olympic Committee, has been under investigation by French judicial authorities. The allegation against the Japanese bidding committee is that payments it made to a Singaporean consultancy firm were meant as bribes for IOC members.
Takeda was questioned by prosecutors in Paris last month.
"Revenge is a dish best served cold" is a saying that originated in France, a nation that prides itself on its gourmet tradition. It means that anyone planning a revenge should be patient and plan thoroughly.
One fleeting suspicion that arose in my mind was that the French could be trying to get even with us Japanese for indicting Carlos Ghosn, a much-respected figure in France.
After all, there is the Japanese saying, "Edo no kataki wo Nagasaki de utsu," which may translate as "to take revenge on someone in an unlikely place."
But, no, matters are obviously much more complex than I had imagined for even a second.
In any case, just when Japan seemed to be getting ready for the big event next summer, we get hit with this disturbing development so early in the new year.
The Olympics are a truly tricky business.
--The Asahi Shimbun, Jan. 12
* * *
Vox Populi, Vox Dei is a popular daily column that takes up a wide range of topics, including culture, arts and social trends and developments. Written by veteran Asahi Shimbun writers, the column provides useful perspectives on and insights into contemporary Japan and its culture.

Letter from Amb. Murata about the Olympics

Dear Friends,

The International Community is increasingly concerned about the Tokyo Olympic Games.

The February 3, 2019 edition of the *Washington Post* published an article about the present tragic situation in
Namie town in Fukushima prefecture where family separations continue and vacant houses are being torn down.
(https://www.washingtonpost.com/world/asia_pacific/near-site-of-fukushima-nuclear-disaster-a-shattered-town-and-scattered-lives/2019/02/02/0dea7886-1e8c-11e9-a759-2b8541bbbe20_story.html?noredirect=on&utm_term=.43dccd79b04f)
The Tokyo Olympic Games cannot serve as a perfect cover-up for the present situation in Fukushima.

The February 1, 2019 edition of the *People's Daily of China* carried an article on President Xi-Jinping's meeting with
President Bach of the IOC in which the former repeatedly referred to the importance of integrity in making preparations for the Winter Olympic Games in Beijing. His concern seems to reflect the impact of the
serious problems connected to the Tokyo Olympic Games, including the latest actions of the French prosecution
office in investigating possible corruption. For this reason, President Xi's remarks are considered opportune and important.

We notice mounting criticism regarding the hosting of baseball and softball games in Fukushima prefecture.
This criticism can no longer be ignored for obvious reasons.

The February 6, 2019 edition of *Sankei* newspaper reported that demonstrations had taken place in London
protesting against Japan's restarting of commercial whaling and calling for a boycott of the Tokyo Olympic Games.

The IOC and the JOC should also bear in mind that the International Community has not forgiven the huge, immoral
lies claiming the Fukushima Nuclear Accident was "under control" or that "July-August is ideal" for hosting the Olympic Games.

Please allow me to count on your understanding and support.

Mitsuhei Murata
Former Japanese Ambassador to Switzerland

"Reconstruction" Olympics?

February 27, 2019

'Reconstruction Olympics' theme said not to have caught public eye

AOMORI, Japan (Kyodo) -- Half of 42 municipalities in northeastern Japan hit by a massive earthquake in 2011 said the public is not fully aware of the government's efforts to showcase the region's recovery from the disaster through the 2020 Tokyo Olympics, a Kyodo News survey showed Wednesday.

- 【Related】Olympics: Tokyo to invite children from disaster-hit prefectures
- 【Related】Olympics: Tokyo 2020 adds test events including basketball, baseball
- 【Related】Olympics: 2020 torches to be made of recycled aluminum from Fukushima

The heads of 21 local governments in Fukushima, Iwate and Miyagi prefectures said in the survey that the "reconstruction Olympics" theme has yet to fully catch on among the public.
Asked whether the slogan has gained public attention, two mayors said "it has not" while 19 mayors said "it mostly has not." Eighteen said "it has a little" and two said "it has." The remaining municipality -- the Fukushima city of Soma -- did not answer.
"The phrase 'reconstruction Olympics' was thought up but no substantial progress has been made and the affected areas feel left behind," said an official of Minamisanriku town in Miyagi Prefecture. "We have limited manpower and cannot spare personnel for Olympic events."
"The sporting event will be held under the banner of the 'reconstruction Olympics' but venues are centered on Tokyo," said an official of Otsuchi town in Iwate Prefecture.
The Tokyo Olympic Organizing Committee has promoted projects involving the disaster-stricken areas, such as holding baseball and softball games in Fukushima and starting the Japan leg of the Olympic torch relay in the prefecture, which was also hit by a nuclear crisis in the wake of the earthquake and subsequent tsunami.
Before the relay, the flame will be displayed in the three northeastern prefectures.
The Fukushima city of Iwaki appreciated the move to highlight the recovery of the affected areas in the Summer Olympics. "Fukushima will be hosting some games and the torch relay will start here. We have been given certain roles to play," a city official said.
Asked what they expect from the Tokyo Games in a multiple-choice question, the biggest group of 36 mayors picked "promoting our progress toward recovery," while 20 mayors, mainly from Fukushima, chose "overcoming reputational damage."
"We want to use the Olympics as a chance to regain sales channels for our farm products," said an official of the Fukushima town of Namie.
Hisashi Sanada, a professor of the anthropology of sport and Olympic history at the University of Tsukuba, said efforts by the central government and the organizing committee to promote reconstruction through the sporting event were "not enough."
"The state needs to explain in detail to municipalities what kind of support it can offer and the local governments should also rack their brains about how to link (the Olympics) to regional development," Sanada said.

Missing volunteers for the Olympics

February 23, 2019
Disaster-hit Fukushima still short of volunteers for 2020 Games

Kyodo
https://www.japantimes.co.jp/news/2019/02/23/national/disaster-hit-fukushima-still-short-volunteers-2020-games/#.XHKNU7jjLyQ

FUKUSHIMA - Fukushima Prefecture is still well short of its target for recruiting volunteers to help it stage some events during the 2020 Tokyo Olympics and Paralympics — a setback in its efforts to showcase its recovery from the 2011 earthquake, tsunami and nuclear crisis.
With the recruiting deadline set for the end of this month, the prefecture, due to host several softball games and a baseball game, is only a third of the way to its target of 1,500 volunteers.
Of the 503 people who had applied as of early February, 70 percent were in their 40s or above, with much lower participation from those in their teens and 20s, according to the prefecture.
Prefectural officials said the low number of applicants may be because the schedules for most of the games have yet to be set, while also acknowledging that promotion efforts have barely paid off.
One of the main themes of the Tokyo Games is to demonstrate Japan's reconstruction from the 2011 disasters, and Fukushima, one of the hardest-hit areas, wants to use the opportunity to illustrate the progress it has made and convey a message of gratitude for support. It also hopes to promote inbound tourism.
The prefecture has increased events aimed at recruiting volunteers at company offices and colleges, while seeking to reassure potential volunteers that they can always change their minds later and withdraw their applications.
At a recruiting event in early February in the city of Fukushima, around 80 people gathered to listen to a presentation by a prefectural official on the role of volunteers.
An 18-year-old high school student who was due to start working this spring noted at the meeting that "getting the schedules soon would make it easier for us to participate."
The first of the six softball games the prefecture is hosting will be held on July 22, 2020, in the city of Fukushima — the first event of the entire Tokyo Games — while the one baseball game it is staging will be held at the same venue on July 29.
But schedules for the five other softball games have yet to be determined.
Two types of volunteers are being sought for the 2020 Games. Those who will volunteer during actual events are recruited by the Tokyo 2020 organizing committee, while city volunteers such as those Fukushima is seeking to recruit, are organized by local governments and will provide transport and sightseeing information to visitors, among other roles.
"Whenever the opportunity arises, I want to call out for more volunteers by stressing how attractive (the job) is," said Takahiro Sato, head of the prefecture's Olympic and Paralympic promotion office.

Tohoku flowers in victory bouquet

March 3, 2019
Tohoku flower growers putting the petals to the Olympic medals
http://www.asahi.com/ajw/articles/AJ201903030006.html

By ISSEI SAKAKIBARA/ Staff Writer

Flower growers in northeastern Japan are reviving an Olympic tradition to symbolize the resilience and perseverance of not only the medal-winning athletes but also the disaster-stricken Tohoku region.
The Tokyo Organizing Committee of the Olympic and Paralympic Games has decided to award all medalists a "victory bouquet" as an extra prize at the event next year.
The committee plans to feature flowers from the region devastated by the 2011 Great East Japan Earthquake, tsunami and nuclear disaster, and it expects the Olympics to play a part in rebuilding from the triple disaster.
Gentian and eustoma from Miyagi and Fukushima prefectures are currently in the running to be featured in the bouquet.
"It is encouraging and heartening for growers that our flowers will be featured in the Tokyo Games," said Hiroshi Kawamura, a 63-year-old flower grower in Namie, Fukushima Prefecture.
The entire town of Namie was evacuated in the aftermath of the triple meltdown at the Fukushima No. 1 nuclear power plant. Most areas of the town remain off-limits.
"I hope (the Tokyo Olympics) will become a springboard for revitalizing the flower-growing industry in the disaster-stricken region," Kawamura said.
Presenting a flower bouquet to winners at an Olympic medal ceremony was a tradition up until the 2014 Winter Games in Sochi, Russia.
But the organizers of the 2016 Rio de Janeiro Olympics and the 2018 Pyeongchang Winter Olympics dropped that tradition because flowers quickly spoil and athletes cannot bring them home due to quarantine issues.
Instead, medalists at those events received a figurine featuring the Olympics logo or a stuffed toy of the official mascot.
In 2015, two years after Tokyo won the bid to host the 2020 Games, people in the flower industry in Japan started urging organizers to bring back the bouquet tradition.
They have developed new breeds suitable for growing in extreme heat, the expected weather in Tokyo between July 24 and Aug. 9, when the Olympics will be held. They have also conducted demonstration experiments of preservation methods that make flowers last longer.
The Tokyo organizers initially considered a ceramic or lacquer work as an extra prize for the medalists. But they are now pushing the idea of adding a flower bouquet to an Olympic memento, which athletes can take home.
The International Olympic Committee (IOC) has approved of the bouquet idea.
The Tokyo organizers said they will discuss the specifics with the IOC, such as shapes of the bouquet and which prefectures the flowers will come from.

“With flowers, I hope to express our gratitude for the people overseas who have provided aid for the Tohoku recovery,” said Nobuo Isomura, the 68-year-old chairman of a national promotion association of flower growers, which also promotes support of agriculture of the Tohoku region.

Gundersen on the 2020 Olympics

March 8, 2019
Atomic Balm Part 2: The Run For Your Life Tokyo Olympics

https://www.fairewinds.org/demystify/atomic-balm-part-2-the-run-for-your-life-tokyo-olympics

Written by Arnie Gundersen
Edited by Maggie Gundersen

Thank you to Fairewinds’ Friends, who have written and called us to share their appreciation for Fairewinds’ post *Atomic Balm Part 1*, and for taking the time to read and understand our analysis of the real reasons the Summer Olympics were placed in Tokyo in 2020.
To begin Part 2, let’s talk about the scientific studies that Dr. Marco Kaltofen and I began together back in 2012. Before the ongoing catastrophe created by the Fukushima meltdowns, the *maximum allowable* radiation exposure emanating from commercial atomic power reactors was 100 millirem per year (1 milli Sievert per year) to civilians worldwide. Because radiation workers receive compensation for the increased body burden they take on by working in a high radiation risk environment, workers were allowed a maximum of 5,000 millirem per year of radiation (50 milli Seiverts of 5 Rem – depending upon which term one is applying). Although that is the legal upper limit, most workers in atomic power industry

actually receive approximately 2,000 millirem per year (20 milli Sieverts or 2 Rem). According to DOE 2016 Occupational Radiation Exposure
Over the past 5-year period, all monitored individuals received measurable total effective dose (TED) below the 2 rem (20 mSv) TED ACL, which is well below the DOE regulatory limit of 5 rem (50 mSv) TED annually.
Since the Fukushima meltdowns, the government of Japan changed the rules by increasing the allowable amount of radiation civilians are subjected to at 20-times higher than was previously allowed, which is almost the same as the highest dose exposure nuke workers may receive in an entire year!
A significant portion of the Olympic games, including men's baseball and women's softball and the Olympic torch run, as well as the soccer training facility, will occur on land that the government of Japan has declared to be part of a "nuclear emergency". This means that athletes and civilians will legally be exposed to *allowable* radiation levels that are 20 times higher than levels that exist at other athletic facilities on any other continent. Therefore, according to the National Academy of Science's Linear No Threshold (LNT) radiation risk assessment, the athlete's risk of radiation related maladies has also increased 20 times higher than if they stayed home.
The people living in and around the Fukushima Daiichi disaster were informed by Japan's government that they must return to their contaminated homes and villages if the radiation levels there were 2 Rem, *even though they are being subjected to daily doses of radiation that is* 20 *times higher than any people living near any nuclear plants in Japan were ever subjected to*.
Rather than completing an effective cleanup, Japan's government is forcing its evacuees to return to their allegedly clean but still highly contaminated homes if they wanted to continue to receive their financial refugee stipend. There are three fundamental problems that make the exposure to Japanese civilians much worse than the new dose limit.

The first problem is with the government of Japan's clearance criteria that only areas in and around homes have been allegedly decontaminated. I measured radiation along highways and then 50-feet into the surrounding woods, only to find that the woods remained highly contaminated, so that when it rains or snows, or the wind blows the dust or pollen from the woods, that radiation migrates back to people's supposedly clean and radiation-free homes. I went to the top of 4-story high rooftops in Minamisoma that had been completely cleaned and repainted following the meltdowns. These rooftops were recontaminated by dust on the wind, blowing in radiation from the surrounding mountains. Peoples' homes and communities that were claimed to be clean are indeed being recontaminated every day.
The second problem is that the government of Japan is measuring only one type of radiation prior to forcing the refugees to return. Only the direct radiation from cesium is being measured with handheld Geiger Counters. Such measurements are the measurement of external gamma rays that travel through the human body uniformly, much like X-rays. Dr. Marco Kaltofen and I have long noted that ingestion of small radioactive particles, called hot particles or fine radioactive dust (or nanoparticles), migrate into peoples' lungs and GI systems causing internal organs to receive heavy radiation doses for years on end. TEPCO and the government of Japan are ignoring the presence of these hot particles.
The third and final problem is that some hot particles are extraordinarily radioactive, much more so than the average hot particles. In a peer-reviewed paper that Dr. Kaltofen and I wrote, we detail our scientific research which proves that more than 5% of these particles are up to 10,000 times more radioactive than the average of all 300-particles we studied. Of course, this means that peoples' internal organs are constantly bombarded with extraordinarily high levels of radiation, much higher than the civilian evacuees are subjected to.

These three additional selfie-videos that I took while in Fukushima during September 2017 show what is really happening near Fukushima. We cannot forget about the magnitude of these exposures to all people in order to create an image of normalcy by Japan's hosting of the Tokyo Olympics.

The migrating radioactive dust from Fukushima has had and will continue to have a devastating effect on thousands of people who lived near the reactors and are now being forced to return as well as hundreds of thousands who reside much further away. Highly radioactive samples were found as far away and in such populous places as Tokyo. In its effort to try and restore everything to the way it was before the triple meltdowns, the government of Japan has failed to realize that Japan and in fact the world, is a much different place than it was before the Fukushima Daiichi disaster. Japan continues to force refugees to return to contaminated villages and is marketing what can only be irradiated products from Fukushima. Cleaning up after a nuclear meltdown is no easy task, in fact a total clean-up is technically impossible, by slapping Band-Aids and quick fixes onto the problem instead of acknowledging the scope, severity, and root causes of the issues, the politicians and government officials of Japan and TECPO are endangering the lives of thousands of Japan's citizens in order to protect their political standing, personal financial status, and the wallets of the nuclear industry.

According to the Asia Pacific Journal (AJP) last week, in a brilliant essay written by University of Chicago professor Dr. Norma Field, a Robert S. Ingersoll Distinguished Service Professor in Japanese Studies in East Asian Languages and Civilizations:

We might pause over predictions that the 2020 Olympics-Paralympics may end up costing 3 trillion yen (approximately 26.4 billion USD), many times the original budget for what was promised to be the most "compact Olympics" ever. These games are often touted as the "recovery Olympics" (fukkō gorin).

It is not hard to conjure ways that these monies might have been used to benefit the entire region afflicted by the triple disaster and especially, the victims of the enduring nuclear disaster. A pittance of the Olympics budget would have sustained modest housing support for evacuees, compulsory or "voluntary." Instead, the highly restricted, arbitrarily drawn evacuation zones have been recklessly opened for return of evacuated citizens despite worrisome conditions prevailing over wide swaths of the region.

The Olympic soccer center that served TEPCO as a base for radioactively contaminated disaster workers (where they slept, donned protective gear, and were screened) has been contaminated by radioactivity yet is scheduled to be the training site for the national soccer team.

In Dr. Field's essay for APJ, which was an introduction to a longer essay by the recently retired Kyoto University Reactor Research Institute professor: Dr. Koide Hiroaki, she wrote:

…As medical journalist Aihara Hiroko observes with not a little irony, "**Surely the Tokyo Olympics will be a superb occasion for displaying 'recovery from disaster,'" but also for revealing to the international community the "real consequences of the human-made disaster resulting from the national nuclear energy policy: the imposition of long-term evacuation and sacrifice on the part of area residents**." **[Emphasis Added]**

Dr. Field's introduction and Dr. Koide Hiroaki's extensive article in *APJ* are crushing to read, yet they do not tell the whole story. I feel it is important to expand upon the ongoing radiation exposures that the 160,000 Fukushima refugees are still experiencing, eight years after the meltdowns. This science, that governments are hiding from people around the world, is not difficult to understand, especially if we also focus on the desire of world governments to keep alive the ever-intertwined nuclear power and nuclear weapons opportunities they have invested in so heavily -– financially, politically, and emotionally. During my four trips to Japan, and from all the people who have written to Fairewinds from Japan since we first published our book there, I have met, spoken with, or communicated with numerous refugees from Fukushima and truly believe that Fairewinds understands their traumatic losses.

While people world-wide might cheer the Tokyo Olympians, the human perspective should focus on the real victims, those who are being shoved out-of-sight.
The bottom line is that to reduce cleanup costs while spending enormous funds on the Olympics, the government of Japan treats its 160,000 Fukushima evacuees as if they were radiation Guinea Pigs, forcing them to return to recontaminated areas to try and convince the world everything is ok, meanwhile making it difficult for serious scientists to accurately assess the effects of radiation on these evacuees. The billions of dollars being spent on the Olympics would be much better used to help those displaced by the Fukushima Daiichi disaster. Help these families find permanent homes and employment and new supportive communities far away from the contaminated areas that they are now forcibly being returned to.

"Recovery Olympics", really?

March 10, 2019
'Recovery Olympics' moniker for 2020 Games rubs 3/11 evacuees the wrong way

https://www.japantimes.co.jp/news/2019/03/10/national/recovery-olympics-moniker-2020-games-rubs-3-11-evacuees-wrong-way/#.XIUMrLjjLyQ

by Magdalena Osumi
Staff Writer
This is the fourth in a series examining how the northeast and the nation are progressing with efforts to deal with the March 2011 earthquake, tsunami and nuclear crisis.
ISHINOMAKI, MIYAGI PREF. - The town of Rifu on the outskirts of Sendai is set to host 10 soccer matches during the 2020 Olympics and Paralympics in line with the organizers' plan to tout the games as the "Recovery Olympics."
For Rifu, expectations are high the 2020 Games will draw international attention and lure more tourists, as Tohoku's tourism sector struggles to recover from the Great East Japan Earthquake and ensuing tsunami on March 11, 2001. As part of the plan, an arena in Miyagi Prefecture is set to get a face-lift for the games.
"It's an honor for us to host such a large-scale event," said Fumitsugu Komatsu, who manages the facilities selected to host soccer matches in 2020.

The central government hopes the quadrennial sports event will serve as a platform to show that the nation has recovered from the disasters.
But recovery wasn't one of the original themes for the Tokyo Games. The concept was added when it became apparent Tokyo wouldn't be able to secure all the venues needed in the capital or its vicinity.
When organizers thus turned to the disaster-hit prefectures of Miyagi and Fukushima, which will host the softball and baseball games, the recovery spin was born, with officials saying the event would contribute to reconstruction.
Moreover, the reconstruction plan for the Tohoku region is expected to end when fiscal 2020 closes in March 2021, putting an end to various central government subsidies that helped both victims and municipalities.
"The Tokyo 2020 Games have become a goal for us to show the region has recovered," said Yasuki Sato, a Miyagi Prefecture official tasked with coordinating the preparations.
But residents in the area view the preparations as something happening in the background. In fact, some believe they are actually hindering the region's recovery.
Setsuo Takahashi, a resident of Ishinomaki, Miyagi Prefecture, whose house was swept away by tsunami eight years ago, is among the skeptics.
"Cheering the victims through sports is a good idea," he said. "But the Olympics have nothing to do with the people who live here. It's a different world, unreachable for us."
What most concerns Takahashi, who is now living in a new house he built in a residential area for the evacuees, is that preparations are taking priority over reconstruction, slowing the process.
Masahiko Fujimoto, a professor at Tohoku University's Graduate School of Economics and Management, said the affected areas may be losing workers to businesses in Tokyo, including for construction projects related to the games.
"The Olympics are, in part, negatively affecting the local economy. The event won't have any impact on the coastal towns," he said.
Indeed, the coast of Ishinomaki, dotted with trucks and cranes, remains largely under construction to restore damaged areas.
"Eight years on, this is still where we are," Akinari Abe, a member of Tohoku University's Volunteer Support Center, said last month as he looked out over the city from Hiyoriyama Park.
"We don't want anybody to tell lies that Tohoku has recovered," said Abe, 30. "People need to realize that the reality isn't so rosy."Many people here worry that after the Olympics, the Tohoku region, with all its struggles, will be forgotten."
The calamity killed at least 15,897, injured 6,157 and left over 2,500 unaccounted for, according to police figures. In addition, of the 470,000 forced to evacuate in the immediate aftermath, 51,778 remained unable to return to their homes as of Feb. 27, according to Reconstruction Agency data.
Nearly all of the 30,000 homes planned for relocation are ready to go in the hardest-hit prefectures of Miyagi, Iwate and Fukushima, plus five neighboring prefectures, including Aomori, Ibaraki and Chiba.
With the infrastructure nearly finished, the focus has shifted to the mental and physical well being of the victims, especially the elderly, many of whom are having difficulty adjusting to new environments after their community bonds were severed.
Former fisherman Koetsu Kondo, 76, moved into a residential complex in Ishinomaki near the Oppa River in October 2017.
"This is my second home now," Kondo said as he covered himself with a quilt from his *kotatsu* (heated table) at his home in late February. His wife, Yoko, opted not to discuss her experience with the calamity.

Before March 2011, the family had lived in a tiny hamlet on the coast. Although their home survived the tsunami, which in some places exceeded 30 meters, the liquefaction damage made returning to the area too risky.

Kondo said he has learned to accept his fate and that he's trying to pick up the pieces of his life. He says he's lucky he has someone to lean on as most of the other evacuees have no one to turn to.

Takahashi, the Ishinomaki man who lost his house and now lives across the street from Kondo, is helping him cope with the grief of losing relatives. The grief runs so deep that Kondo said he chose to rent an apartment near Takahashi so he wouldn't have to cross paths with his cousin, who lost his eldest son and wife in the tsunami.

"I can't look him in the eyes — it's too painful," he said. "They say time's a healer but that's a lie. Wounds only deepen with time. Before I go to sleep I still see their faces."

Kondo knows that for elderly men coping with traumatic events, starting anew in unfamiliar surroundings can be too much to bear. Yet he feels he has no choice.

So far, Ishinomaki has built 65 public housing complexes for disaster victims, and 4,456 new apartments are expected to be finished by the end of the month.

"But the construction of public housing is just a step forward toward recovery. The recovery process requires a support network to ensure a sense of security," said Hiroaki Maruya, a professor at Tohoku University's International Research Institute of Disaster Science who specializes in social systems for disaster mitigation. "The real recovery process starts after the survivors settle down."

The municipalities in the region are well aware of the challenge.

"We're concerned that such turmoil in their lives will exacerbate stress-related health problems; we worry this may lead to the rise in solitary deaths and suicides," said Hiroshi Oka, manager of Ishinomaki's recovery planning section, adding that stress-related problems are prevalent in seniors.

The Ishinomaki Municipal Government has launched a campaign to prevent suicides through medical consultations, including relaxation classes and other forms of support. The city also periodically conducts checkups on evacuees in the designated recovery districts.

According to Oka, data shows that the health of an evacuee begins to deteriorate after spending a year in a new neighborhood. Oka said some 80 percent of the evacuees in the recovery districts live alone or with only one family member.

Financial problems add to their struggles by preventing them from moving out of temporary housing.

Ishinomaki's plan calls for having everyone in temporary housing moved to so-called recovery housing — apartment complexes instead of makeshift shelters — by the end of March. But as of the end of February, 807 Miyagi residents, including 203 in Ishinomaki, had yet to do so, their governments say. Subsidized rent for the new facilities will be terminated at the end of March 2021.

The authorities say they are now seeking ways to assist the evacuees from that point on.

"The 10-year period we had thought would suffice doesn't seem enough" to help communities recover, said Tomoharu Terashima, who manages one of the recovery task forces from Miyagi Prefecture.

"Reconstruction has taken too much time, so we're asking ourselves if after 10 years we can pull the plug," he said.

The Reconstruction Agency, which was set up to coordinate reconstruction efforts after 3/11, will also soon be dissolved. The Land, Infrastructure, Transport and Tourism Ministry and the Health, Labor and Welfare Ministry are expected to absorb its projects.

Experts warn of more challenges ahead.

Maruya, the Tohoku International Research professor, said the biggest problem is that many people fled areas that were already struggling with shrinking and rapidly graying populations. Most have no plans to return.

“Those who have left and settled down, found new jobs and sent their children to new schools won’t come back just like that” despite the new housing facilities, elevated ground and restored infrastructure, he said. “Because people are not coming back, it may all be in vain.”

The entire community, in fact, will likely disappear, Maruya said.

“For a region already struggling with rapid graying and depopulation before March 2011, it won’t be possible to bring back the population or restore industrial prosperity.”

Michio Ubaura, a Tohoku University professor with expertise in regional and urban reconstruction, says the disaster-hit areas are home to an aging population and a growing number of vacant homes — the same challenges other towns in Japan face.

The quake and tsunami, however, accelerated these demographic woes, forcing small towns in the region to deal with them decades earlier.

“Projections from before the disaster are becoming reality 10 or 20 years earlier than predicted,” he said. “What we’ll see in a decade is what we had expected to see in 30 years.”

When night falls in Ishinomaki, lights can be seen dotting the area around some of the aging temporary housing units where those who can’t afford to leave still live.

In contrast, a huge cauldron that was kept alight throughout the 1964 Tokyo Olympics has been put on display nearby as a symbol of recovery ahead of the 2020 Games.

“The previous Olympics gave us hope for a better life,” said Takahashi. “But the 2020 Games we can’t afford to take part in will only benefit Tokyo.”

This is a series examining how the northeast and the nation are progressing with efforts to deal with the March 2011 earthquake, tsunami and nuclear crisis.

Tokyo 2020: The radioactive Olympics (IPPNW)

http://www.radioactive-olympics.org/information-in-english/appeal.html
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Tokyo 2020 - The Radioactive Olympics

In 2020, Japan is inviting athletes from around the world to take part in the Tokyo Olympic Games. We are hoping for the games to be fair and peaceful. At the same time, we are worried about plans to host baseball and softball competitions in Fukushima City, just 50 km away from the ruins of the Fukushima Dai-ichi nuclear power plant. It was here, in 2011, that multiple nuclear meltdowns took place, spreading radioactivity across Japan and the Pacific Ocean – a catastrophe comparable only to the nuclear meltdown of Chernobyl.

The ecological and social consequences of this catastrophe can be seen everywhere in the country: whole families uprooted from their ancestral homes, deserted evacuation zones, hundreds of thousands of bags of irradiated soil dumped all over the country, contaminated forests, rivers and lakes. Normality has not returned to Japan. The reactors continue to be a radiation hazard as further catastrophes could occur at any time. Every day adds more radioactive contamination to the ocean, air and soil. Enormous amounts of radioactive waste are stored on the premises of the power plant in the open air. Should there be another earthquake, these would pose a grave danger to the population and the environment. The nuclear catastrophe continues today. On the occasion of the Olympic Games 2020, we are planning an

international campaign. Our concern is that athletes and visitors to the games could be harmed by the radioactive contamination in the region, especially those people more vulnerable to radiation, children and pregnant women.

According to official Japanese government estimates, the Olympic Games will cost more than the equivalent of 12 billion Euros. At the same time, the Japanese government is threatening to cut support to all evacuees who are unwilling to return to the region. International regulations limit the permitted dose for the general public of additional radiation following a nuclear accident to 1 mSv per year. In areas where evacuation orders were recently lifted, the returning population will be exposed to levels up to 20 mSv per year. Even places that have undergone extensive decontamination efforts could be recontaminated at any time by unfavourable weather conditions, as mountains and forests serve as a continuous depot for radioactive particles. Our campaign will focus on educating the public about the dangers of the nuclear industry. We will explain what health threats the Japanese population was and is exposed to today. Even during normal operations, nuclear power plants pose a threat to public health – especially to infants and unborn children. There is still no safe permanent depository site for the toxic inheritance of the nuclear industry anywhere on earth, that is a fact.

We plan to use the media attention generated by the Olympic Games to support Japanese initiatives calling for a nuclear phase-out and to promote a worldwide energy revolution: away from fossil and nuclear fuels and towards renewable energy generation. We need to raise awareness of the involvement of political representatives around the world in the militaryindustrial complex. We denounce the attempt of the Japanese government to pretend that normality has returned to the contaminated regions of Japan. We call on all organisations to join our network and help us put together a steering group to coordinate this campaign. The Olympic Games are still two years away – now is still time to get organised. We look forward to hearing from you, with best regards,

For the campaign „Nuclear Free Olympic Games 2020“:
Annette Bänsch-Richter-Hansen
Jörg Schmid
Henrik Paulitz
Alex Rosen

Press Release IPPNW Germany March 25 2019

"Tokyo 2020 - The Radioactive Olympics"

Tomorrow in one year, on March 26 2020, the Olympic torch relay will start in the radioactively contaminated Fukushima Prefecture. This is why tomorrow, a group of anti-nuclear oranizations in Germany, Switzerland, France and Japan will launch an international information campaign entitled „Tokyo 2020 - The Radioactive Olympics”. The campaign will focus on the ongoing radioactive contamination of parts of Japan due to the nuclear catastrope of Fukushima, which began eight years ago.

Dr. Alex Rosen, chairman of the German affiliate of the International Physicians for the Prevention of Nuclear War (IPPNW), one of the principal organizations behind the campaign explains: „We are

concerned about the health consequences of radioactive contamination, especially for people with increased vulnerability towards radiation, such as pregnant women and children.“
International regulations limit the permitted dose for the general public of additional radiation following a nuclear accident to 1 mSv per year. “In areas where evacuation orders were recently lifted, the returning population will be exposed to levels up to 20 mSv per year, however”, says IPPNW physician and founding member of the campaign, Dr. Jörg Schmid. “Even places that have undergone extensive decontamination efforts could be recontaminated at any time by unfavourable weather conditions, as mountains and forests serve as a continuous depot for radioactive particles. Now the Japanese authorities are trying to force the people evacuated from the contaminated areas to return by cutting their financial assistance and ending housing schemes for nuclear refugees,” says Schmid.
The campaign, which will continue all the way until the end of the Olympic Games, has a clear message: We denounce the attempt of the Japanese government to pretend that normality has returned to the contaminated regions of Japan”, says Rosen. “Already now, we are seeing an increased rate of thyroid cancers in Fukushima children and adolescents. And this is only the tip of the iceberg. More than 50,000 nuclear refugees continue to live as displaced persons in their own country. At the same time, more and more radioactive refuse is seeping into groundwater and the ocean and the decontamination and reconstruction work is largely carried out by unskilled and uninformed subcontractors, without proper training or protection. Normality looks different.“

Supportes of the Campaign „Tokyo 2020 - The Radioactive Olympics“

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