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Citizens' Nuclear Information Center

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Toshiba's Nuclear Ambitions Crumble --- Collapse of the Toshiba-WEC Alliance

A major Japanese conglomerate with a corporate history of 142 years is on the verge of collapse. The main cause of this crisis is huge losses incurred by its U.S. nuclear subsidiary Westinghouse Electric Company LLC. (WEC). What is happening within Toshiba?

Onset of the crisis

WEC was previously a leading manufacturer of electrical equipment in the U.S. Founded in 1886, it built the nationwide power distribution grid, and played a major role in the broadcasting sector. CBS, one of the three major broadcasting networks in the U.S., was formerly one of its subsidiaries. In the nuclear reactor business, it occupied a dominant position in the supply of pressurized water reactor (PWR) systems.

From the 1970s onward, however, WEC faced a financial crisis and began spinning off parts of its operations and selling them. In 1999, the firm sold the last remaining nuclear arm to a British state-run company, British Nuclear Fuels Ltd. (BNFL), for \$1.2 billion.

In 2005, however, when renaissance of the nuclear reactor business was widely anticipated worldwide, BNFL announced that it would sell WEC. Alan Johnson, then the British trade and industry secretary, explained some of the reasons for BNFL's decision. He said that "Westinghouse is currently putting four nuclear reactors in China. It's a very high-risk strategy. We don't think the (British) taxpayer should be taking that risk."

The General Electric-Hitachi group, Mitsubishi Heavy Industries and several others tendered bids for WEC, but it was decided in 2006 that Toshiba would buy WEC for about \$5.4 billion. Eventually, Toshiba acquired a 77% stake in WEC (worth \$4.158 billion), the Shaw Group Inc. a major U.S. engineering company based in Baton Rouge, Louisiana, took a 20% stake, and Ishikawajima-Harima Heavy Industries Co., Ltd. (IHI) a 3% stake. As a result of this action, Toshiba was later destined to fall into problems originating with the Shaw Group. Toshiba's purchase price was three times as high as BNFL's original estimate of \$1.8 billion. Due to the exorbitant price of the acquisition, Toshiba has been forced to make desperate efforts to shore up WEC's corporate value.

Goodwill writedown

When a firm purchases another company at a price higher than the company's book value, the difference is recorded as goodwill. In the case of the purchase of WEC, Toshiba posted about \$2.93 billion as

goodwill. According to the Japanese generally accepted accounting principles (Japanese GAAP), goodwill is regularly amortized at a fixed rate, and if contraction occurs, the goodwill can be further amortized. On the other hand, according to the U.S GAAP, there is no regular amortization of goodwill, and instead, write-offs are conducted whenever necessary.

Toshiba claimed that it adopted the U.S. GAAP and that up till 2016, write-offs against WEC's goodwill were unnecessary. Despite this claim, the conglomerate conducted goodwill impairment tests in the U.S. in four categories, "new construction," "automation (introduction and repair/maintenance of its monitoring control system)," "service (maintenance)," and "fuel," and reported impairments of goodwill totaling 115.6 billion yen (\$10.4 billion) in the first two categories. The firm did not do this in Japan.

In April 2016, Toshiba posted a WEC goodwill impairment loss of 260 billion yen (\$23.4 billion) in Japan. WEC's "fuel" and "service" businesses were in surplus, in and after 2006, while its construction business ran losses in many fiscal years.

Problems involving receipt of orders for constructing nuclear reactors in China and U.S.

Before the WEC acquisition, Toshiba held boiling-water reactor (BWR) technology but after the acquisition it also obtained pressurized-water reactor (PWR) technology, the mainstay technology in overseas markets at that time. By this acquisition, Toshiba held most kinds of reactor-related technology ranging over the whole industry from upstream to downstream. Banking on the newly-acquired technology, Toshiba aggressively promoted

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its nuclear-plant export business. According to the in-house document on its business strategy for fiscal 2008, Toshiba planned to gain orders for a total of 33 units by 2015, and projected the expansion of annual sales of its nuclear business to 1 trillion yen (\$89.8 billion) by 2020. It also declared in 2015 that the firm aimed to win orders for a total of 64 units in the global market.

In the same document, Toshiba said it would receive orders for four units of the next-generation AP1000 nuclear reactors from China, and two units each from the U.S. utilities Southern Co., Scana Corp., and Progress Energy. In addition, the conglomerate said it would receive an order for two units of its Advanced Boiling Water Reactor from the South Texas Project (STP). All of these projects, however, are currently facing grave problems.

In 2006, WEC won orders for building two AP1000 reactors each at the Sanmen Nuclear Power Plant in China's Zhejiang Province, and the Haiyang Plant in Shandong Province.

According to the original plans of the projects, the construction work was slated to begin in 2009, the reactors becoming operational in the 2014-15 period. The schedule, however, was delayed due to stricter regulations formulated in the wake of the 2011 nuclear disaster at Japan's Fukushima Daiichi Nuclear Power Station. Operation of the plants is currently scheduled to begin in 2018.

Similar projects launched in the U.S. are confronted with more serious problems. In 2008, Toshiba concluded a contract with Southern Co. to construct the Unit 3 and Unit 4 reactors at its Plant Vogtle in Georgia. In 2009, it won another contract from Scana Corp. to build Unit 2 and Unit 3 at its V.C. Summer Nuclear Generating Station in South Carolina. These projects, however, are making progress at an extremely slow pace and the original schedule for the start of reactor operations in the 2016-18 period was postponed to the 2019-20 period. Currently, it is said that a mere 36% of the construction work has been completed at Plant Vogtle, and 31% of the work at the V.C. Summer plant. Because of this construction delay, the combined amount in cost overruns from the four projects climbed to \$6.1 billion.

Problems involving Stone & Webster

One of the key factors in this delay was Stone & Webster Inc. (S&W), commissioned to construct the four reactors. S&W was previously an affiliate of the Shaw Group Inc., and expanded its nuclear reactor construction business jointly with Toshiba and WEC. In 2013, however, an engineering group, Chicago Bridge & Iron Company, acquired the Shaw Group. (In 2011, Toshiba bought a 20% share in Shaw that was previously held by WEC, later selling 10% to Kazatomprom, Kazakhstan's state-owned uranium miner.)

Resulting from the huge losses suffered by S&W due to the delays in the nuclear-plant construction projects, a dispute broke out between CB&I and Toshiba over the shares of the massive losses to be shouldered by the respective companies. In addition, the utilities filed suits against Toshiba in view of the

cost overruns caused by the construction delays.

In 2015, Toshiba decided to acquire S&W through its U.S. subsidiary WEC. As a result, Westinghouse assumed full responsibility for all AP1000 projects and related services involving S&W. The transaction agreement said that CB&I would be absolved from responsibility for the projects, and that WEC would pay some reward to CB&I upon completion of the nuclear plants.

According to the announcement made by Toshiba at the time, the aim of the S&W acquisition was to establish a system that enabled the firm to carry out integrated management and implementation of all its nuclear projects in the U.S. Around the same time, the conglomerate agreed to out-of-court settlements on all unsettled claims and disputes involving its nuclear reactor projects in the U.S., including cases being fought before the court. Toshiba also agreed to review its prices and schedules.

Consequently, WEC received \$350 million from Southern, and \$286 million from SCANA, as additional costs, although these amounts were far lower than the actual additional costs. That is, the S&W acquisition was carried out to resolve the tangled relations with the two utilities.

Later, in December 2016, the total amount of S&W's loss was disclosed. At its extraordinary shareholders' meeting in March 2017, Toshiba announced that it would write-off S&W's goodwill impairment loss of 625.3 billion yen (\$5.368 billion), as well as goodwill impairment losses of other nuclear-related businesses, totaling 87.2 billion yen. As a result, the combined amount of goodwill impairment losses reached 712.5 billion yen. On March 29 of the same year, Toshiba's U.S. nuclear unit, Westinghouse Electric, filed for Chapter 11 bankruptcy.

Remaining problems

Toshiba has expressed its intention of withdrawing from the overseas nuclear plant construction business. Nevertheless, the business management risk of its U.S. projects still remains, for example, the risk involving construction of the ABWR units 3 and 4 at the South Texas Project (STP) in Texas.

In the original STP plan, Nuclear Innovation North America (NINA), 88% owned by US utility NRG Energy and 12% by Toshiba, would construct the two units. NRG Energy, however, withdrew from the project in the wake of the Fukushima nuclear accident in 2011.

Toshiba proceeded with the project, and for the purpose of consuming the electric power from the new reactors in Texas, it bought the right to liquefy 2.2 million tons of LNG a year for 20 years from the Freeport Project. The conglomerate currently faces the risk of running up massive losses of at least 1 trillion yen in this project.

In addition to this risk, Toshiba also carries many risks in other nuclear-related businesses. Indications are that in 2005 the above-mentioned British Cabinet minister correctly predicted the plight currently faced by Toshiba

Hajime Matsukubo, CNIC

Evacuation Orders Lifted for Iitate, Kawamata, Namie, Tomioka

The Japanese government has lifted evacuation orders for zones it had designated as “areas to which evacuation orders are ready to be lifted” and “areas in which residents are not permitted to live” as a result of the Tokyo Electric Power Company (TEPCO) Fukushima Daiichi nuclear accident. The orders were lifted in Iitate, Namie and the Yamakiya district of Kawamata on March 31 and in Tomioka on April 1. Evacuation orders for “areas where it is expected that residents will face difficulties in returning for a long time” (or, more briefly, “difficult-to-return zones”) remain in place. The evacuation orders originally affected a total of 12 municipalities, but had been lifted for six of those as of last year. The latest rescission of orders has brought the ratio of refugees allowed to return to their homes to about 70%, with the area still under evacuation orders reduced to about 30% of its original size. TEPCO intends to cut off compensation to these refugees, with a target date of March 2018, roughly a year after the evacuation orders were lifted. Additionally, the provision of free housing to “voluntary evacuees,” who evacuated from areas not under evacuation orders, was discontinued at the end of March 2017.

Lifting of Orders Affects 32,000 People

The number of people forced to abandon their homes due to the Fukushima nuclear accident reached a peak of 164,865 people in May 2012, when they had no choice but to evacuate. Now, even six years later, 79,446 evacuees (as of February 2017) continue to lead difficult lives as refugees.

In the six municipalities for which the evacuation orders were lifted last year, the repatriation of residents has not proceeded well. Repatriation ratios compared to the pre-disaster population have been about 50 to 60% for Hirono and Tamura, about 20% for Kawauchi, and not even 10% for Naraha, Katsurao and the Odaka district of Minamisoma, where radiation doses were high (see Table 1 on page 4).

The number of evacuees affected by the current lifting of evacuation orders for the four municipalities is 32,169. The ratio of positive responses to a residents’ opinion survey conducted by the Reconstruction Agency from last year to this year saying they would like to be repatriated was rather low, with about 30 to 40% for Iitate and Kawamata, and less than 20% for Namie and Tomioka. During the long course of their evacuation, spanning six years, many of the residents had already built foundations for their lives in the places to which they had evacuated.

House and Building Demolition Proceeding (Namie)

A total of 15,356 evacuees (as of the end of 2016) are affected by the rescission of evacuation orders for Namie, amounting to about 80% of the town’s residents. Results of an opinion survey published by the Reconstruction Agency in November showed 17.5% of the residents saying they wanted to return to Namie. Most replied that they did not want to return or that they could not return yet.

A temporary shopping center named “Machi Nami Marushe” has been newly opened next to the main Namie Town Office building, where the evacuation orders have been lifted. The rail service on the Joban Line to JR Namie Station was restored when the orders were lifted. In the area around Namie Station and the shopping center in front of it, houses and buildings are being demolished and decontamination and road repair work are proceeding at a high pitch.

Meanwhile, Namie’s residents say their houses have been made uninhabitable by damage from various wild animals, including boars, raccoon dogs, palm civets, raccoons, martens and monkeys. Many houses have been ruined, necessitating their demolition.

‘Forward Base’ for Reactor Decommissioning (Tomioka)

A total of 9,601 evacuees (as of January 1, 2017) are affected by the rescission of evacuation orders for Tomioka, about 70% of the town’s residents. Results of a residents’ opinion survey show no more than 16% of them wishing to return to the town.

Last November, a commercial zone called “Sakura Mall Tomioka” was established along National Route 6. A supermarket and drug store opened for business there at the end of March. Nearby is the “Energy Hall”—TEPCO’s nuclear power PR facilities. Right next door to that, housing is being built for reconstruction workers, consisting of 50 detached houses and 140 apartment complex units. There are plans to relocate JR Tomioka Station to a position near these.

The town will play a role as a “forward base for reactor decommissioning.” The Japan Atomic Energy Agency (JAEA) is promoting the construction of an international research center for the International Research Institute for Nuclear Decommissioning (IRID), scheduled for completion by the end of March. It will carry out research on human resource development and methods for the disposal of radioactive wastes. These facilities are not meant for returning residents. Instead, they are being promoted as part of plans for a new “workers’ town” and will

Table 1: Rate of return and wish to return after lifting of evacuation orders

	Municipality	Date order lifted	Partial/Complete Lifting	No. of registered residents at 11 March 2011 ※1 (Difficult-to-return zones)	No. of returnees at 13 January 2017 ※1	Rate of return (%)	Survey results expressing wish to return (%) ※2
1	Hirono	21 April 2011	Complete	5,490	2,897	52.8	—
2	Tamura	1 April 2014	Complete	Eastern Miyakoji 380	231	60.8	33.3
3	Kawauchi	1 Oct. 2014	Partial	270	62	19.3	63.7
		14 June 2016	Complete	51			
4	Naraha	5 Sep. 2015	Complete	8,011	767	9.6	9.6
5	Katsurao	12 June 2016	Partial	1,567	107	6.8	43.4
6	Minami Soma	12 July 2016	Partial	Odaka 12,842	1,248	9.7	50.8
				Haramachi 1,439	158	11.0	
7	Iitate	31 March 2017	Partial	5,917	0	0.0	33.5
8	Kawamata	31 March 2017	Complete	Yamakiya 1,133	0	0.0	43.9
9	Namie	31 March 2017	Partial	15,440	0	0.0	17.5
10	Tomioka	1 April 2017	Partial	9,679	0	0.0	16.0
11	Okuma	Undecided	—	383	0	0.0	11.4
12	Futaba	Undecided	—	240	0	0.0	13.4

※1 Compiled from Fukushima Pref. data <http://www.pref.fukushima.lg.jp/site/portal/26-2.html>

※2 Compiled from Reconstruction Agency surveys <http://www.reconstruction.go.jp/topics/main-cat1/sub-cat1-4/ikoucyousa>

have decontamination and decommissioning workers move in as new residents along with decommissioning researchers.

On the other hand, the “difficult-to-return zones” of about 8 km², including the Yonomori district, famous for its cherry tree tunnel that used to be lit up at night, will remain under evacuation orders. At a residents’ briefing, people expressed worries about matters like having to see the barricades to those zones on a daily basis.

Non-repatriating Residents Cut Off (Iitate)

The village of Iitate, located about 40 km northwest of the Fukushima Daiichi Nuclear Power Station, is making a massive decontamination effort across its entire area, including agricultural fields, to prepare for repatriation of its residents. About 2.35 million large flexible container bags into which contaminated waste is stuffed are stacked in temporary storage areas, accounting for about 30% of the total 7.53 million bags overall in the special decontamination area (for decontamination directly implemented by the national government). Prior to rescission of the evacuation orders, Iitate Mayor Norio Kanno made the controversial remark, “We will honor support from residents who repatriate to the village.” This brought an angry response from the residents, declaring that they were adamantly opposed to an attitude of treating those not returning as non-residents. The village’s position on repatriation is that it should be up to the judgement of the villagers themselves.

Three Requirements for Lifting Evacuation Orders

On December 26, 2011, Japan’s government determined three conditions needed to be fulfilled before evacuation orders could be lifted. These were (1) certainty that the accumulative annual dose at the estimated air dose rate would be 20 mSv or less, (2) that infrastructure and everyday services had been restored and decontamination work had proceeded sufficiently, especially in environments where children would be active, and (3) that there had been sufficient consultation with the prefecture, municipalities and residents. In May 2015, the government decided on a target of March 2017 for lifting the evacuation orders for all but the “difficult-to-return zones.” They proceeded with the decontamination work and provision of infrastructure for the residents’ return, but gaining consent was a hopeless cause.

Requirement 1: Coerced Exposure

The annual 20 mSv standard the government established is puzzling. The ICRP’s recommendations and laws such as Japan’s Nuclear Reactor Regulation Law stipulate a public radiation exposure limit of 1 mSv a year. The government is repatriating the residents even at radiation doses exceeding this, and of most concern is how this will affect their health. The residents argue, “We cannot return to places with such a high risk of exposure.”

Trial calculations of the radiation doses received by individuals staying in Namie and Tomioka to conduct preparatory work were published prior to the rescission of evacuation orders for those towns, showing annual doses of 1.54 mSv for Namie and 1.52 mSv for Tomioka. These are below the

government's standard of 20 mSv a year (3.8 μ Sv per hour)* for lifting evacuation orders, but both exceed the annual limit for public exposure. They are not conditions ensuring "safety and security" as the government says.

At the residents' briefings, the government explained that its basis for lifting the orders was that decontamination had been completed. However, even if the annual radiation dose has not fallen below 1mSv (the government's decontamination standard, equivalent to an hourly dose of 0.23 μ Sv) after decontamination, they will press ahead with lifting the evacuation orders anyway. This drew strong reactions from the residents who said, "Are you making us return just because of the decontamination?" and "Are you forcing us to be exposed?"

Requirement 2: Shopping Close By

Prior to the earthquake and tsunami disaster, the Odaka district of Minamisoma, where the evacuation orders were lifted last July, had six supermarkets, two home centers, six fish shops and three drugstores. All of those, however, were lost in the disaster. At last, after the evacuation orders were lifted, two convenience stores opened, but they are far from the residential area near JR Odaka Station, and cannot be reached on foot. A clinic reopened, but since there is no pharmacy, there is no way for patients to buy prescribed medicines. Repatriated residents have to travel for about 20 minutes by car to the adjacent Haramachi district about 10 kilometers away to supplement their shopping and other necessities. Residents without cars, such as the elderly, have difficulty living there. They say, "Nobody wants to reopen the stores because it is obvious that they'll run at a loss." A vicious cycle continues, with stores unable to open because the residents who would be their customers are not returning.

Requirement 3: Spurn Residents' Wishes

Almost none of the residents attending the residents' briefings have been in favor of lifting the evacuation orders. Nine or more out of 10 have expressed opposition. They are always given the same canned explanation, with the national and municipal governments brazenly and unilaterally insisting on lifting the orders.

"It is too soon to lift the evacuation orders," complained one resident at Namie's residents' briefing on February 7. The 74-year-old woman living as an evacuee in Tokyo had been getting by on 100,000 yen a month in pension payments and compensation for mental anguish and was living in a single-bedroom public apartment (UR Housing) in Tokyo that qualifies as post-disaster public-funded rental accommodation. Her compensation will be cut off, and if she chooses to continue living in the housing where she currently resides,

the rent is expected to exceed 100,000 yen. She considers how many years she could continue paying and doesn't know what she would do if she became unable to pay. Such constant thoughts increase her anxiety. The minute the evacuation orders are lifted, she too will be rendered a "voluntary evacuee."

The woman said, "Even if they tell me to go back to Namie because it is safe, I will not return." They have finished decontaminating her house, but high levels of radiation remain, measuring 0.4 μ Sv per hour in her garden and 0.6 μ Sv per hour in her living room. With regard to this, Namie Mayor Tamotsu Baba keeps repeating the same response that "the environment is in good order for people to come back and live in our town."

A multitude of residents expressed a litany of angry opinions, such as, "If the government says it is safe, they ought to send some of their officials to live here first," "Say we come back, but if we are going to live next to where dangerous decommissioning work is going on, are they still going to cut off our compensation?" and "The government and town officials say they are striving for the safety and security of the residents, but we can't trust them at all." Following this briefing, though, on February 27, the town of Namie accepted the national government's policy of lifting the evacuation orders, formally deciding on the end of March as the date for rescission. They pooh-poohed the views of many of the town's residents opposed to lifting of the orders.

Conclusion

In a Cabinet Decision on December 20, 2016, the Japanese government adopted a "Policy for Accelerating Fukushima's Reconstruction." This policy promotes the preparation of "reconstruction bases" in parts of the "difficult-to-return zones" and the use of government funds for decontamination toward a target of lifting the evacuation orders for these areas in five years and urging repatriation. "Difficult-to-return zones" span the seven municipalities of Futaba, Okuma, Tomioka, Namie, Iitate, Katsurao and Minamisoma. By area, they account for 62% of Okuma and 96% of Futaba. The affected population numbers about 24,000 people.

The government's repatriation policy, however, is resulting in bankruptcies. Rather than repatriation, they should be promoting a "policy of evacuation" in consideration of current conditions. Policies should be immediately implemented to provide economic, social and health support to the evacuees, enabling them to live healthy, civilized lives, regardless of whether they choose to repatriate or continue their evacuation.

Ryohei Kataoka, CNIC

* This calculation is based on a government approved formula which assumes that people will be exposed to 3.8 μ Sv per hour only for 8 hours per day when they are outside the house. It is assumed that they will be indoors for 16 hours per day and the screening effect will reduce the exposure rate to 1.52 μ Sv per hour. On a yearly basis, this calculates to slightly less than 20 mSv per year.

Two recent CNIC Statements:

Maebashi District Court ruling on compensation for Fukushima Daiichi victims & Osaka High Court ruling on restarting Takahama NPP

CNIC recently released two statements on court cases related to nuclear issues, which we have translated into English so that international readers can see our position on these important court rulings as well as get an update on what is happening on the legal scene in Japan. One year ago, NIT (No. 172) published an article on court cases associated with nuclear facilities in Japan after the Otsu District Court in Shiga Prefecture, western Japan, had issued a provisional injunction ordering Kansai Electric Power Company (KEPCO) to shut down Takahama Units 3 and 4. Unfortunately this court order was overturned by the Osaka High Court, the subject of one of the CNIC statements below. The other statement applauds the Maebashi District Court for its ruling which makes clear that the government of Japan and the Tokyo Electric Power Company (TEPCO) may be liable for the Fukushima Daiichi accident.

Although the higher court in Osaka overturned the lower court's injunction on Takahama, the fact that this NPP was unable to operate over the last year is significant, both in terms of reducing the risk of an accident during this time and in disrupting the finances and planning of KEPCO. It is hoped that the Maebashi District Court's judgment will not be overturned even though TEPCO and the government have lodged an appeal.

CNIC Statement: We question the attitude of the Osaka High Court and Hiroshima District Court, both of which agreed on the restart of nuclear power stations, in lockstep with the government

April 7, 2017

NPO Citizens' Nuclear Information Center

The ruling issued by the Osaka High Court on March 28, 2017 was in favor of Kansai Electric Power Company (KEPCO), rejecting the local residents' request to keep Takahama Units 3 and 4 shut down. Following this ruling, on March 30, the Hiroshima District Court turned down the request of local residents to shut down Shikoku Electric Power Company's Ikata Unit 3.

These court decisions disrespect the seriousness of the accident of Tokyo Electric Power Company's Fukushima Daiichi Nuclear Power Station, which, six years after its occurrence, shows no sign of ending and has caused horrific problems for many local residents.

Back on March 9, 2016, the Otsu District Court issued a provisional injunction ordering KEPCO, the operator, to shut down Takahama Units 3 and 4, which were in commercial operation at that time. KEPCO filed an objection, which was turned down by the same district court on July 12, 2016. The Osaka High Court overturned these two decisions.

The court ruling concerning Ikata Unit 3 was issued as a response to the request submitted by residents living within 100 kilometers of the power plant, in Hiroshima City and Matsuyama City, who were seeking a provisional injunction to shut down the reactor to protect their personal rights.

1) According to the two court rulings, it should be rational that the new regulatory requirements for nuclear power reactors established by the Nuclear Regulation Authority are the basis on which to determine the safety of reactors. However, specialists and researchers have criticized the requirements in many respects, revealing that they leave a wide margin for discussion. By no means they are "safety standards," as the chairperson of the Authority himself has clearly admitted. Another reason is that the investigation to completely clarify the causes of the



*Demonstrations were held from May 7 in Fukui Prefecture where the Takahama NPP is located. Protests continued daily in a last ditch effort to prevent the restart. Takahama Unit 4 restarted on May 17. <See News Watch p10 for details>
Photos by Yasuhiko Matsubara*

Fukushima Daiichi accident has not been completed. “The specific damage to the facilities and the causes of the damage remain partially unknown,” stated the Osaka ruling concerning the accident. This is an astonishing understatement. It is precisely because of this that the Niigata Prefecture Technical Committee on the Safety and Control of Nuclear Facilities is continuing its investigation into the causes of the accident.

2) If a severe nuclear accident occurs, will every resident be able to evacuate without exposure to radioactivity?

Regarding this issue, the Osaka ruling stated that it is not unreasonable that the new regulatory requirements include only the first to fourth layers of the multi-layer protection in the scope of the regulations and do not include the fifth layer, nuclear emergency preparedness. This judgment is simply wrong.

The court ruling says that the nuclear emergency preparedness measures, including evacuation plans, should be properly implemented mainly by the nuclear power operator, national government and municipal governments, through their cooperation. Now what do we mean by proper in reality? Is it possible for any party to evaluate whether an evacuation plan is proper and feasible? It is impossible to release proper information on the discharge of radioactive materials and the risk of exposure to radioactivity continually and in a timely manner as the accident unfolds, while providing instructions for an evacuation that is free from exposure to radioactivity. It is exactly the Nuclear Regulation Authority itself that should be responsible for nuclear emergency preparedness.

Thus the possibility of another severe nuclear accident is undeniable and residents are forced to live with the anxiety of the occurrence of another accident of the same scale as, or greater than, the Fukushima Daiichi accident.

CNIC Statement: We welcome the Maebashi District Court's ruling

March 23, 2017

NPO Citizens' Nuclear Information Center

On March 17, 2017, the Maebashi District Court delivered a decision in the group lawsuit, which had been filed by evacuees of the Fukushima Daiichi accident and those affected, clearly stating that both the government of Japan and Tokyo Electric Power Company (TEPCO) are liable for the accident. The court ordered that the two defendants should jointly pay the plaintiffs a compensation fifty-fifty for their emotional distress caused by the infringement of their "right to live a peaceful life" (details below).

Regarding the causes of the accident, the ruling stated that seismic motion could not be acknowledged as a factor. Our position concerning the causes of the accident is that the investigation has not advanced sufficiently to make such a clear-cut judgment. Nevertheless, it is certain that TEPCO's breach of obligation and the government's illegal negligence contributed to the severe accident — the operator failed to take sufficient measures against tsunami risks while the government failed to order the operator to take action. We would like to applaud the Maebashi ruling in that it condemned both defendants for their inaction, even though it is a corollary of the facts that have become apparent thus far through various investigations.

The ruling acknowledged that damage by tsunami was foreseeable and that TEPCO deserves reproach because "clearly the operator prioritized economical rationality over safety measures against tsunami." In addition, the ruling says: "TEPCO did not even implement provisional countermeasures that could have been completed in about one year — which were power-vehicle placement and cable installation — although they would have been easy in terms of both time and cost."

The ruling was clear and persuasive.

The court also turned down the allegation of the government, which insisted that it did not have regulatory power, as irrational. "If the government had exercised its regulative power, the accident could have been prevented." The ruling blocked the government from evading responsibility, presenting specific examples of exercise of power. It is certain that upcoming rulings on the Fukushima Daiichi accident will incorporate this indication by the Maebashi court.

Needless to say, the ruling is not meant to draw a generalized conclusion, namely, "nuclear power generation is safe if the government correctly exercises authority and the operator takes proper measures."

To our regret, however, while it clearly acknowledges the responsibility of TEPCO and the government, the ruling is not sufficiently empathetic towards the painful feelings of those evacuees who have lost their homes.

There were 137 plaintiffs when the lawsuit was filed. Three have passed away since then. Four were not yet born at the time of the accident. Of the remaining 130, only 62 were found eligible for monetary compensation for pain and suffering: Of the 72 plaintiffs whose homes were in the evacuation zone, 19 were judged eligible to receive the "payment of claim approval" (750 thousand to 3.5 million yen each), and of the 58 plaintiffs who left their homes "on their own decision," 43 were judged eligible (70 thousand to 730 thousand yen each, excluding one plaintiff who was found eligible for 1.02 million yen including compensation for a deceased plaintiff). The plaintiffs originally claimed 11 million yen each (of which 1 million was to be allotted to attorneys' fees); the awarded compensation was far lower than what the plaintiffs had sought.

The ruling acknowledged that the "interim guidelines" established by the Dispute Reconciliation Committee for Compensation of Nuclear Damage are reasonable, because the guidelines would enable prompt and consistent damage compensation. However, isn't it whether the designation of evacuation zones by the government was reasonable that should have been questioned? We hope to hear more persuasive court rulings in this regard in the future.

The judiciary should be independent of the preferences of nuclear operators or government and place maximum priority on protecting the personal rights of people.

Group Introduction:

Live Music Event OhMAGROCK vol. 10

by YAM*



The name 'OhMAGROCK' combines the town of Ohma and its famous tuna fish ('maguro' in Japanese) with the rock festival event that takes place

Time flies so fast. We are celebrating the 10th anniversary of our live music event OhMAGROCK this summer. I became involved in the action to oppose the Ohma Nuclear Power Plant construction project, Ohma Town, Aomori Prefecture, in 2002. I met Asako Kumagai that year and had a serious talk with her. She owned a one-hectare lot near the center of the site where the NPP was planned, and had been rejecting offers to sell out. I heard of many nasty schemes perpetrated under the name of national policy. The schemes were as filthy as those used by gangsters, breaking down the ties between local people, and even families. Ms. Kumagai was holding out alone with a dignified attitude. My heart was shaken by her. In May 2008, the national government approved the start of the construction of the Ohma NPP. Unfortunately, Ms. Kumagai had already passed away, but Ms. Kumagai's lot survived, along with a cottage named Asako House, in the premises of the planned Ohma NPP. In the same year, an anti-NPP event, a combination of a citizens' rally and a live music event, was held on the lot. This was the origin of today's OhMAGROCK. In the first and second years, about 90 minutes of live music was performed before the rally. In the third year, this became a two-day event, music being performed for the whole of the first day as well as on the second day, when the rally was held. The Great East Japan Earthquake and the Fukushima Daiichi NPP disaster occurred on March 11, 2011. Affected by this calamity, we were not sure whether we could organize the fourth annual live event, but it did go ahead and attracted more performers and participants than before, and even media reporters. In the inclement weather, as if caused by an angry heaven, a safe and exciting live event was successfully staged. It

was from the fourth event that we started to use the name OhMAGROCK. In addition, from the fourth event, we started to use a different lot, owned jointly by many anti-NPP people, located adjacent to the Ohma NPP premises, because conditions surrounding Asako House had changed. Ever since then, the number of people participating in both OhMAGROCK and the citizens' rally has been increasing year by year: They arrive in Ohma Town on the day before the rally, enjoy the music during the day, and participate in the now-routine pre-rally evening lecture session before the rally on the next day. On the day of the rally, music is performed first, then the rally and a demonstration march are held. After the march, the latter half of the day's music program is held. Thus OhMAGROCK has become a full two-day event. This has helped to bring the OhMAGROCK audience and anti-NPP citizens participating in the rally closer together. While the purpose of the whole event is to express our opposition to nuclear power, the event has a wonderfully friendly atmosphere. The march is led by a band, and resembles a town parade. The response of the locals is changing from that of earlier days. Recently, some wave their hands and talk to us. This year, we hope to make the 10th OhMAGROCK a more friendly, relaxing event that everyone can enjoy. Your donation to the organization of another successful OhMAGROCK will be very much appreciated. Please see our website for details:

http://ohmagrock.greenwebs.net/?page_id=660

We look forward to seeing everyone there!

*YAM (Masakazu Yamauchi) is one of the organizers of OhMAGROCK

NEWS WATCH

Takahama Unit 4 Reactor Restarted

Kansai Electric Power Co.'s (KEPCO's) Takahama Unit 4 reactor (PWR, 870 MW) was restarted on May 17. It began power transmission on the 22nd and full operation on the 25th. Following up, KEPCO aims to restart Unit 3 (also PWR, 870 MW) in early June.

Together with Kyushu Electric Power Co.'s Sendai Units 1 and 2 (both PWR, 890 MW) and Shikoku Electric Power Co.'s Ikata Unit 3 (PWR, 890 MW), which have previously resumed operation, this will make five nuclear reactors that have been restarted in Japan. All of them are pressurized water reactors (PWR). Not one boiling water reactor (BWR) has yet been restarted.

Fukui Buddhist Priest Goes on Hunger Strike

As a protest against the restart of Takahama NPP, the priest at Myoutsuji Temple in Obama City, Fukui, Tetsuen Nakajima, went on hunger strike. Myoutsuji Temple was built in the Kamakura Period and its main building and a 22 meter high three-story pagoda have been designated as national treasures. The hunger strike was conducted on May 15-17 outside the KEPCO head office in Osaka and continued on May 18-19 in the lobby of the Fukui Prefectural government office. Only drinking water Nakajima commented: "I put my trust and hope in the multiple and unspecified public which is opposed to the restart of nuclear reactors."

TEPCO Making New Management Reorganization Plans

Tokyo Electric Power Company Holdings (TEPCO) applied to the government on May 12 for approval of its new management reorganization plans. It received approval on May 18. It says it intends to restart the Kashiwazaki-Kariwa NPP "while making safety the top priority." The company is appealing for early restarts, because if the restarts begin from fiscal 2019 and include all seven reactors (totaling 8212 MW), it would mean an additional 55 billion yen per year in ordinary profits for the company, compared to restarting only four reactors (totaling 4912 MW) beginning from 2021.

Currently, Niigata Governor Ryuichi Yoneyama maintains that verifying the

causes of the Fukushima nuclear accident and countermeasures for emergencies will take several years, so there are no prospects for gaining local consent.

The new management reorganization plans also specify establishment of a framework for cooperation with other electric power companies regarding the Higashidori Unit 1 reactor (ABWR, 1385 MW), the construction of which has been suspended for the past six years, with a target for 2020. However, the candidate for this cooperation, Tohoku Electric Power Co., has indicated its rejection, saying "We have nothing whatsoever like that in mind."

Toshiba's Final Deficit 950 Billion Yen

On May 15, Toshiba announced its provisional projected consolidated results for fiscal 2016 without its auditors' approval. These show a net loss of 950 billion yen, worse by 490 billion yen compared to the previous fiscal year. Its subsidiary, Westinghouse, suffered massive losses from its nuclear power construction business and has filed under Chapter 11 bankruptcy laws in the US, with a net loss from discontinued operations of 1.36 trillion yen. IHI Corp., which owned 3% of Westinghouse's stock, exercised its put option, giving Toshiba 90% ownership of the stock in May. (Kazatomprom, which owns the remaining 10%, has not expressed an intent to exercise its put option). Toshiba is seeking buyers for Westinghouse, but it would be a difficult sell to companies in China or Russia, and Korea Electric Power Corp. denies intentions to buy it.

Toshiba Holding 100% of UK NuGen Stock

Toshiba has held a 60% share of NuGen, which has plans for building a nuclear plant at Moorside, northwestern England, while ENGIE (formerly GDF Suez, established by Gaz de France) has held a 40% share. ENGIE, however, has been seeking a way to back out of the project, and on April 4 started negotiating the sale of its stake to the troubled Toshiba, but the negotiations are expected to be difficult.

Hitachi Applies to UK Nuclear Regulator for a License to Build Wylfa Newydd NPP

Hitachi filed on April 5 for approval from the UK's Office for Nuclear Regulation to construct

the Wylfa Newfydd Nuclear Power Plant. Japan Atomic Power Co. (JAPC) teamed up with Exelon Generation of the US on April 13 to establish a joint venture company, JExel Nuclear, to provide operation and maintenance support for Horizon Nuclear Power, the Hitachi subsidiary in the UK which is developing the nuclear reactors for the site.

NRA Approves Plans for Decommissioning 5 Reactors

Japan's Nuclear Regulation Authority approved decommissioning plans on April 19 for KEPCO's Mihama Unit 1 (PWR, 340 MW) and Unit 2 (PWR, 500 MW), Chugoku Electric Power Co.'s Shimane Unit 1 (BWR, 460 MW), Kyushu Electric Power Co.'s Genkai Unit 1 (PWR, 559 MW), and Japan Atomic Power Company's (JAPC) Tsuruga Unit 1 (BWR, 357 MW) reactors. An application has also been filed for decommissioning Shikoku Electric Power Co.'s Ikata Unit 1 reactor (PWR, 566 MW).

According to the plans, dismantling of machinery and buildings for Mihama Units 1 and 2 and Shimane Unit 1 will take 30 years, Genkai Unit 1 will take 28 years and Tsuruga Unit 1 will take 24 years. It has not been decided where the radioactive waste will be disposed of. The cost of decommissioning each unit is estimated to be slightly less than 40 billion yen.

Federation for Nuclear-Free Renewable Energy Launched

"Genpatsu Zero – Shizen Enerugi Suishin Renmei" (translated as "Federation to Promote Nuclear-Free Renewable Energy") was established on April 14, with a press conference held in Tokyo. Tsuyoshi Yoshiwara, who has served as advisor to the board of the Johnan Shinkin Bank and has appealed for elimination of nuclear energy from a managerial standpoint, was appointed as president, and Hiroyuki Kawai, who jointly represents "Datsu Genpatsu Bengodan Zenkoku Renrakkai" (translated as "Nationwide Liaison Association of Nuclear-Free Defense Lawyers"), was appointed managing director. Two former prime ministers Junichiro Koizumi and Morihiro Hosokawa, are also listed as advisors.

India-Japan Nuclear Cooperation Agreement approval bill passes the Lower House of the Diet

The India-Japan Nuclear Cooperation Agreement, which was signed with great fanfare when Indian PM Narendra Modi was visiting Japan last November, has since been working through the Japanese ratification process. It was presented to the Lower House of the Diet on 14 April and was then referred to the

Lower House Committee on Foreign Affairs for deliberation. After two hours of deliberations on 28 April, when Committee members questioned three witnesses, and then another full day of questioning the Minister of Foreign Affairs and related bureaucrats on 10 May, the Committee approved the Agreement in the vote on 12 May. Many serious questions were raised by both the independent witnesses and opposition lawmakers, such as whether provisions in the Agreement would adequately prevent India, a country possessing nuclear weapon, from using Japanese technology for military purposes; if India conducted another nuclear test, would Japan even be able to end the Agreement? And even if they could, how could Japan actually withdraw nuclear reactors that they had already sold to India? There were no clear answers from the Minister down and it seemed that they were hardly serious about debating this vitally important issue, knowing that they had the numbers to push it through.

After clearing the Committee in this way, the bill was sent back to the Lower House where Shinji Oguma, an MP from Fukushima, led the opposition against it. Once again, however, because of the ruling coalition's overwhelming majority, the serious problems with the Agreement, which were again emphasized by Oguma and others, were ignored and the bill passed. The battleground now shifts to the Upper House, which is expected to vote on ratifying the Agreement on 7 June.

Japan Atomic Energy Agency to build a research hub for decommissioning technology in Tsuruga

On 21 May the Japan Atomic Energy Agency (JAEA) held a groundbreaking ceremony on the premises of the Tsuruga Project Headquarters in Tsuruga City, Fukui Prefecture, commencing construction of the "Fukui Smart Decommissioning Technology Demonstration Hub." The facility is expected to be completed within this fiscal year and to commence operations in the new fiscal year (April 2018).

JAEA is now proceeding with the decommissioning of prototype advanced thermal converter reactor Fugen and the prototype fast breeder reactor, Monju, will be decommissioned without ever achieving full operations. Within Fukui Prefecture, KEPCO's Mihama Units 1 and 2 and JAPC's Tsuruga Unit 1 are also slated for decommissioning and both companies will work together on developing the necessary technology. At the same time, it is hoped that jobs will be created and economic stimulation will occur within the prefecture due to increasing technical strength of local companies.

Book Review:

Yoshida's Dilemma *One Man's Struggle to Avert Nuclear Catastrophe* *Fukushima — March 2011*

by **Rob Gilhooly**

<Inknbeans Press, USA, March 2017>

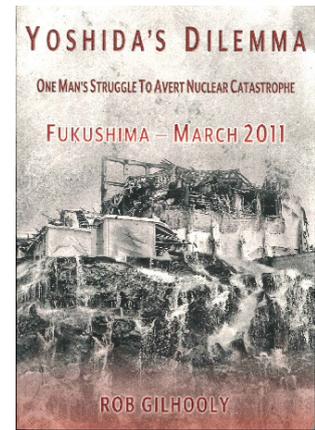
Reviewed by **Caitlin Stronell**

Rob Gilhooly first came to Japan from the UK in 1990, living and working for his first few years in Fukushima as a teacher on the JET Program. He was one of the first foreign journalists on the scene after the Great East Japan Earthquake, arriving in Iwaki, 20 miles from Fukushima Daiichi, on March 12th. His first-hand experience of Japan and especially of those first few days of unfolding nuclear catastrophe, most definitely helped him, indeed spurred him to write this book. Although he is a journalist and the style of the book is certainly journalistic, reconstructed conversations between plant workers as well as TEPCO executives and government ministers, are interspersed with quite detailed technical information. This effectively conveys the utter darkness-- literal, technical and psychological-- that the workers, political leaders and indeed the whole country, were stumbling around in. This book is another stark reminder that no one who was supposed to be responsible for operating Fukushima Daiichi or for the safety of citizens, had a clue what was happening as the situation became more and more dire. It shows graphically, how most of the attempts to 'avert nuclear catastrophe' were pathetically ineffective and the 'worst-case scenario' where Tokyo would have to be evacuated and Japan would cease to function as a nation-state, was avoided more through luck than any clear management.

Amidst this total chaos, the Fukushima Daiichi superintendent Masao Yoshida certainly comes out as a hero of sorts-- defying the orders of the TEPCO bosses in Tokyo, fighting against all odds to protect his men and country. Yet, despite the title 'one man's struggle to avert nuclear catastrophe,' this book is really about many men and their struggles, from Fuku-Ichi managers and workers to national politicians, from US experts dispatched to Japan as advisers to local

Fukushima citizens, from Hazardous Materials and Hyper Rescue Squad team members of the Tokyo Fire Department to Self Defense Force personnel. The book makes a clear division between the 'baddies' in the TEPCO executive and parts of the government, especially the Nuclear and Industrial Safety Agency (NISA) who appear to be not only ignorant but also oblivious to the situation that was spiraling out of control, interested more in self-preservation than anything else; and the 'goodies' who were there at ground zero, sacrificing themselves to save their families, their communities and their country. While there is no doubt that the people on the frontlines of battling multiple, out-of-control nuclear reactors must indeed be considered heroes at one level, we must not lose sight of the fact that Yoshida, at least, was also very much a part of the regime that was responsible for perpetrating the nuclear safety myth and the benefits of nuclear energy. This is of course a controversial issue and while this book does not perhaps fall into excessive hero-worship, there could well be readers who take away simply the heroic aspects without questioning what these heroes had done in the years prior to 3.11 to create the disaster in the first place.

Gilhooly also briefly mentions the protest movements against nuclear power which have appeared after 3.11. He is somewhat negative about the strength and impact of anti-nuclear movements in the face of the political system. For example, initiatives to encourage the expansion of renewable energy in Japan, such as the Feed-In-Tariff, are being whittled down. Despite this, one does detect an element of sympathy with the anti-nukers. After writing such a detailed account of such a blundering tragedy, it would perhaps be difficult to be anything else.



Nuke Info Tokyo is a bi-monthly newsletter that aims to provide international friends with up-to-date information on the Japanese nuclear industry as well as on the movements against it. It is published in html and pdf versions on CNIC's English website: <http://cnic.jp/english/>

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