NUKE INFO TOKYO

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CNIC Citizens' Nuclear Information Center

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Workers' Compensation Approved

(Photo by A. Imai)

As reported in the Newswatch section of the previous issue, the Labor Ministry's two Local Labor Standards Inspection Offices have acknowledged the claims of a worker under treatment and the family of a deceased worker that their illnesses were due to on-the-job exposure to radiation while working at nuclear power plants. The victims and their relatives will receive compensation under the Workers' Compensation Scheme.

These are only the second and third cases

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cases in which the Labor Ministry has recognized the illnesses of nuclear power plant workers as being due to exposure while working. One of the victims, Nobuyuki Shimahashi, died of leukemia at the age of 29. The other has leukemia and is under treatment at the moment. He will be the first living applicant to be granted compensation. Shimahashi had been working at Hamaoka, and the other worker at Genkai, Ohi, and Takahama nuclear power plants. The first worker acknowledged to have suffered on-the-job exposure, in 1991, was working at Fukushima No.1 plant. All three were subcontracted workers employed for regular inspections and maintenance.

Shimahashi's case was the first to be fought with accurate exposure figures and a medical certificate. It received overwhelming support from the public and more than 380,000 signatures were collected in just half a year.

Shimahashi's level of radiation exposure was 50.63 mSv for the nine-year period he worked (9.8 mSv for the peak year), well over the level of eligibility for compensation under the Workers' Compensation Scheme. The eligibility level set for workers' compensation is 10% of the limit -- 50 mSv annually -- recommended by the International Commission on Radiological Protection (ICRP) in 1977, i.e. 5 mSv times the number of years working.

According to Ministry of International Trade and Industry (MITI) figures, over 5,200 nuclear plant workers were exposed to more than 5 mSv during fiscal 1993, 1,556 at Fukushima I, 1,103 at Hamaoka, 693 at Ohi, and 289 at Takahama. Clearly, the three workers recognized for compensation had been working at the worst plants.

The fact that Shimahashi was recognized for compensation proved that his death from leukaemia was indeed caused by occupational exposure. The head of the Local Labour Standards Inspection Office admitted this at the press conference. It is vital that the electric companies and the Japanese government take seriously the fact that leukaemia has been caused by low dose radiation exposure and take some positive measures to prevent workers from receiving such exposure.

Meanwhile, the ICRP revised its recommended level in 1990 to 100 mSv over five years and set an annual dose limit of 50 mSv. While the new ICRP recommendations are far from sufficient to protect workers against radiation hazards, in view of the recent evidence on the health effects of ionizing radiations, the government should immediately adopt the new recommendations as the regulation standards for workers' exposure and set the annual dose at 20 mSv or less. But so far, MITI has been very reluctant to legalize the new recommendations under the pressure of the nuclear industry.

The MITI data shows that 80 workers were exposed to levels exceeding 20 mSv in fiscal 1993, and if an annual dose limit of 20 mSv were adopted, much of the current maintenance works at nuclear power plants would become impossible. Furthermore, adoption of the new criteria would inevitably lead to a thorough review of the eligibility level for compensation. It is urgent to review all radiation standards on the basis of the 1990 ICRP recommendations because workers' exposure is expected to increase in the coming years as many reactors get aged. Particularly, those aged reactors which are over-exposing large numbers of workers, like Fukushima and Hamaoka, should be decommissioned rather than spending more time on inspections and repairs which expose so many workers to so much radiation, just to keep the plants operable.

Although the Labor Ministry has acknowledged the cause-and-effect relationship between radiation exposure and leukaemia, Chubu Electric, the owner of Hamaoka Nuclear Power Plant and responsible for Shimahashi's death, did not accept the ruling and refused to apologize to Shimahashi's parents. On the day of the ruling, his mother and father and their

lawyers visited the Hamaoka plant and demanded an apology. But the company refused to apologize, saying, "The decision does not necessarily constitute proof of a cause-and-effect relationship between working conditions and workers' illnesses."

Shimahashi's father retorted in anger, "The people operating nuclear power plants normally are not white-collar people like you in neckties and suits, but subcontracted workers like my son, working hard under the reactor, exposed to so much radiation that he had to get sick and die."

Chubu Electric's attitude is that since they are abiding by the legal limit of 50 mSv per year, safety standards are being upheld. Such an attitude will do nothing to reduce workers' exposure levels, nor will it help in any way to spare further victims.

(Mr. & Mrs. Shimahashi demanding apology at Hamaoka Nuclear Plant)

Total Workers' Exposure at Nuclear Power Plants (Incl. Fugen)

Fiscal Year	Regular Employees	Subcontracted Workers	Total
1984	6.21	115.34	121.56
1985	5.72	119.33	125.05
1986	4.66	102.78	107.44
1987	4.17	91.94	96.12
1988	4.14	94.25	98.39
1989	3.46	90.34	93.79
1990	3.29	86.03	89.29
1991	2.86	56.06	58.93
1992	2.92	63.53	66.44
1993	2.98	86.40	89.39

(person Sv)

HLW TRANSPORT -- Series No. 5

In view of the fact that little information relevant to the safety of the impending HLW sea shipment from France to Japan has been made public and no environmental impact assessment, as required by international law, appears to have been carried out by the French and Japanese government authorities, CNIC sent an open letter on Sept. 14 together with WISE (World Information Service on Energy) Paris, the Nuclear Control Institute (Washington) and Greenpeace International to government officials in France, Japan, the United States and the European Commission. In the open letter, the four organizations demanded that the French and Japanese governments disclose all technical data on the radioactive waste and details of the ship's route and shipment schedule, also that they carry out a full environmental assessment of the shipment and release the results promptly so that concerned countries and citizens will have ample time to respond to the issues raised.

The following is the full text of the letter.

Open Letter to the Governments of France, Japan, the United States and to the European Union

September 14, 1994

To: Makiko Tanaka, Director General, Science and Technology Agency, Tokyo
Gerard Longuet, Minister of Industry, Paris
Michel Barnier, Minister of Environment, Paris
Hazel O'Leary, Secretary of Energy, Washington, D.C.
Jacques Delors, President of the Commission of the European Union, Brussels

Dear Honorable Officials:

We are writing concerning the planned shipment of highly radioactive, vitrified nuclear waste from France to Japan that is now expected to take place in February 1995 ... the first sea shipment of its kind. Customary international law and the U.N. Convention on the Law of the Sea (Articles 204, 205, 206), which will be in force as of November 16, 1994, require the governments of France and Japan, as the shipper and receiver of the waste, respectively, to conduct an environmental impact assessment of this shipment and release the results. The United States, as the originator of the nuclear fuel from which the wastes were extracted and then vitrified into glass logs, and with responsibility for a number of prospective en-route territories, should actively support the preparation of such an assessment by France and Japan.

Because the shipment could lead to increased exposure to radiation, the French Government is required under current European rules [Article 6(A) of Euratom directive 80/836 as amended by Article 2 of Euratom directive 84/467] to provide the European Commission with an explanation of why the shipment is necessary, in advance of the shipment.

Also, because the shipment is the first of its kind, Article 34 of the Euratom Treaty requires a prior review by the European Commission of specific measures that are to be established to protect human health and the environment.

An environmental impact assessment of the waste shipment itself should analyze the probable impact of the shipment on the environment, the potential adverse environmental effects of the shipment under accident conditions, and the possible alternatives to this shipment. The report should be thorough and unbiased. It should include a cost/benefit analysis and describe the long-term commitment of resources necessary to carry out the policy of returning nuclear waste to its country of origin. The public should be given ample opportunity to express its views during the preparation of the report. The report should be completed in time for the public to comment on its findings well before the

first shipment gets underway.

We urge you, therefore, to initiate such an environmental impact assessment promptly. Although significant quantities of spent nuclear fuel have been routinely shipped from Japan to Europe, this would be the first shipment of returned vitrified waste. There are a number of issues specific to vitrified waste that should be addressed in the environmental impact assessment.

First, the assessment should provide a complete characterization of the waste itself and the detailed specifications for the conditioning of the waste and for the manufacture of the shipping cask to be used. Also, the quality-control approaches used for conditioning of the waste and for manufacture of the casks should be analysed.

Second, the report should examine how vitrified waste responds to such severe accident conditions as mechanical shocks, high-temperature fires, and long-term, deep-sea immersion. There should be a full description of the tests to which the cask and vitrified waste have been subjected, including which tests were done by computer simulations and which were actual physical tests. The assessment should consider short- and long-term consequences of radioactive releases resulting from a maximum credible accident at sea or in port.

Third, the environmental impact assessment should review all stages and characteristics of the transport plan, from storage in France to storage in Japan. This assessment should include potential exposures to workers and the public. In France, the legal status of the facility for storing the vitrified waste logs, pending their placement into transport containers, is unclear. The facility was not included in the original licensing procedure. Therefore, a specific licensing procedure, including a safety analysis and an environmental impact assessment, is warranted under both French and European law.

Fourth, international law imposes a duty on the governments of France and Japan to inform and consult with the countries along the ship's route because of the significant environmental harm that could occur in the event of a serious accident or incident at sea. These countries should be given every opportunity to express their views on the environmental impact assessment and other aspects of the shipment and to participate fully in advance planning for any emergencies that may arise (Article 199 of U.N. Convention on the Law of the Sea). They should not be presented with a fait accompli.

Fifth, the environmental impact assessment should review the characteristics of the British transport vessel. Will a purpose-built ship be used to transport these highly radioactive nuclear materials? Will the ship meet or exceed the requirements of the IMO code? Additional questions include the planned and alternative routes of the ship, emergency port call, and the level of physical protection that should be provided it.

Finally, given the number of industrial and governmental participants in this shipment, please indicate to us who would be held liable for any damage to humans and the environment resulting from the vitrified waste shipments.

An environmental impact assessment is essential if the world community and the potentially affected states, in particular, are to have confidence in the safety of this and succeeding shipments. We urge you to begin this process promptly, so that interested governments and citizens will have ample time to respond to the issues raised.

We look forward to receiving your response.

Sincerely,

Jinzaburo Takagi, Citizens' Nuclear Information Center
Mycle Schneider, WISE Paris
Paul Leventhal, Nuclear Control Institute
Damon Moglen, Greenpeace International

Gensuikin Toward 50th Anniversary of Hiroshima & Nagasaki Bombings

This year was the 50th anniversary, by the Buddhist tradition of the deaths of those killed in the Hiroshima/Nagasaki bombings. One of the main themes of the Gensuikin (Japan Congress Against A and H Bombs)'s Hiroshima/Nagasaki Memorial Ceremony this year was to urge the government to provide financial relief for the victims, and this will continue to be one of Gensuikin's biggest themes for the coming 50th anniversary of the bombings next year.

Another major topic over the next year will be the Nuclear Non-Proliferation Treaty, the future of which will be discussed next year when its 25-year-term expires.

Gensuikin plans to designate the period from February 3, which will be its 30th anniversary, to August 9, marking the end of the Gensuikin Annual Convention, as a period for anti-nuclear and nuclear-free action projects. The theme for the campaign will be to 'strengthen the NPT to achieve complete nuclear disarmament.' Objectives include the conclusion of the Comprehensive Test Ban Treaty and negotiation of a treaty for production cut off of fissile material, including those for civil purposes, and finally a freeze on the Japanese plutonium policy.

Gensuikin will focus mainly on the production cut off treaty. Basically, the Japanese government is for this treaty, since it covers only materials for military use. It would therefore be easy to approach different political parties and government agencies and start a discussion. It will be easy as well for various labor unions to take up the issue and start off campaigns.

It is important in the course of the discussion, to bring about a recognition of the inconsistency of the government's support for the treaty to ban weapons plutonium while at the same time it condones the production of huge amounts of civil plutonium, since plutonium is plutonium whether for military or civil purposes. If nuclear disarmament is a good thing and the Japanese government is in favor of it, how can it justify possessing voluminous quantities of plutonium which can easily be diverted to nuclear weapons production?

Gensuikin will encourage all of its member unions to bring such arguments directly to the Foreign Ministry and demand that, if Japan is to support the cut off treaty, it must inevitably include materials for civil use as well.

Gensuikin's aim is to create a world where nuclear weapons don't make any sense, which is truer than ever today. Hence, it will lobby the Foreign Ministry to create a Nuclear Free Asia so that there will be no need for the nuclear umbrella assured by the Japan-US Security Pact and other bilateral pacts with the United States. Nuclear weapons have actually lost their meaning and become a burden. Possessing them only heightens regional political tensions. The nuclear weapons regime itself has collapsed and plutonium is now a legacy of the past.

1995 will be the 50th year since the first nuclear weapons were developed. Gensuikin will hold a Nuclear Victims' Forum at the annual convention in August next year, with the aim of establishing an independent committee within the United Nations for all the world's nuclear victims.

Kuniaki SAKAMOTO
Secretary, Gensuikin

Social Democratic Party of Japan's New Nuclear Power Policy

- Interview with Mr. Masanori Goto

Mr.Goto, a member of the House of Representatives, is the Social Democratic Party of Japan's deputy general secretary and the director of its Social Policy Bureau.

Nuke Info Tokyo (NIT): At its special national convention on September 3 the Social Democratic Party changed its basic policy. News reports also said that your party reassessed its policy on nuclear power.

Goto: We're holding to our fundamental line of phasing out nuclear power. It's extremely dangerous, and it is limited, so we want to begin phasing it out as soon as possible. But as the party that heads the government, we can't adopt a policy that substantially reduces energy use, or at any rate a policy that says, "Shut down the nuclear reactors!" We're up against a dilemma in which we are forced to use nuclear power.

NIT: Your party has always said that it will not allow new reactors to be built, but at the convention this was changed to allow replacement under certain conditions. This looks as though you're backing off from your fundamental policy line.

Goto: Replacement means exactly that -- building new plants to replace those that are decommissioned because of aging, or because they caused accidents. It's possible that a new plant will have a larger output than its predecessor. If this is really necessary to supply needed energy, then we can't say No without first considering the situation. Of course we have to cautiously assess the circumstances. That's what the new policy means.

From that perspective, we think it's important to obtain the approval of local citizens when considering a plant replacement. Another prerequisite will be to properly implement public information access and democratic procedures, which until now have received short shrift.

NIT: In your position as the governing party, could you give us a concrete description of your agenda for phasing out nuclear power?

Goto: Under this year's budget we have already instituted a program to assist photovoltaic power, and in the next fiscal year we will increase measures for encouraging and broadening the use of new energy sources. The replacement of local governments' municipal waste incinerators is also coming due, so we are going to set up an assistance program to make electricity generation possible.

Of course these will provide only small amounts of power. As a national project, a major issue is when thermal generating plants can begin switching over to using natural gas. We also want to promote the development of energy conservation technologies as a new primary industry.

NIT: What will the Social Democratic Party do about plutonium?

Goto: Personally, I think we should stop the test operation of [the fast breeder reactor] Monju as soon as possible, and reassess Japan's plutonium policy. Basically, I'd like to stop the use of plutonium. There are many differing opinions within the party. Still, at this time Japan is not dependent on plutonium for energy. Embarking on the use of plutonium means initiating a dangerous situation that differs qualitatively from what we've experienced heretofore, and in that sense the government should act with great care. That is my thinking. The party's new basic stance also maintains that we must be very prudent in studying the use of plutonium.

Significant Incidents at Nuclear Plants (July to December 1993)

Date	Plant	Short description of event
Jul. 6	Fukushima I-3	Recirculation pump failed due to malfunction of hydraulic pressure regulator meter (during test operation); power dropped to 34 %.
Jul. 17	Takahama 1	Reactor manually shut down due to steam leak from main steam pipe weld.
Jul. 21	PNC Tokai	Worker injured finger while cutting centrifuge casing at uranium enrichment test facility.
Jul. 29	Ohi 1	Damage to 421 steam generator tubes found during periodic inspection.
Aug. 18	Takahama 1	Reactor manually shut down due to coolant leak from primary pump side piping (during test operation).
Aug. 18	Mihama 1	Reactor manually shut down due to turbine lubricant pump failure (during periodical inspection).
Aug. 24	Mihama 3	Reactor power dropped due to damage to condenser tube.
Sep. 20	JAERI O-arai	Worker wounded in non-nuclear accident in JMTR hot-lab.
Sep. 22	Tsuruga 1	Reactor manually shut down due to failure of seal at recirculation pump.
Sep. 24	Genkai 3	Reactor manually shut down due to abnormal vibration of low pressure turbine shaft (during test operation).
Sep. 30	Fugen	Worker wounded in fall from height during periodic inspection.
Oct. 31	JRR-3	Control rod dropped due to loss of power to electromagnet, which induced automatic insertion of five residual control rods, leading to automatic reactor scram.
Nov. 9	Tsuruga 1	Reactor manually shut down due to increased drain water from auxiliary cooler in containment.
Nov. 14	Fugen	Reactor power reduced due to unstable water level in steam drum caused by malfunction of feed water regulation valve.
Nov. 16	Mihama 3	Damage to 262 steam generator tubes found during periodic inspection.
Nov. 22	Fukushima II-1	1.5m-long crack found at steam dryer weld during periodic inspection.
Nov. 25	Fugen	Reactor scrammed due to erroneous closure of four steam adjusting valves.
Nov. 27	Onagawa 1	Reactor scrammed due to neutron flux high signal (caused by change of core steam void situation induced by earthquake).
Dec. 1	Onagawa 1	Reactor manually shut down due to inverse rotation of feed water pump during restart preparation.
Dec. 22	Tsuruga 1	Reactor manually shut down due to increased drain water from auxiliary cooler in containment; two cracks found at emergency condenser welds.
Dec. 22	Fugen	Reactor scrammed due to error signal to steam adjusting valves caused by lightning.
Dec. 27	Tokai Repro. Plant	Four workers exposed to plutonium while replacing filters.

NEWS WATCH

48th Reactor in Operation

Tokyo Electric Power Co's Kashiwazaki-Kariwa 4 (BWR, 1,100MW) began commercial operation on August 11, bringing the total number of reactors in operation in Japan to 48 (including the ATR Fugen) and the combined output to 39,641MW.

Reprocessed Uranium at Ningyo Toge

Test conversion and enrichment of reprocessed uranium started on August 12 at Ningyo-toge, Okayama Prefecture for the first time in Japan. The operation is being conducted by PNC (Power Reactor & Nuclear Fuel Development Co.) and as much as 360 ton U will be converted and enriched during the next three years. Anti-nuclear groups in Okayama are urging the Japanese government and PNC to abandon the plan, saying the prefectural government and PNC had agreed to convert and enrich only natural uranium, and that reprocessed uranium is dangerous since it emits gamma radiation.

More N-plants for Fukushima?

Tokyo Electric Power Co. (TEPCO) has submitted a proposal to the Fukushima prefectural government to conduct an environmental assessment with a view to building two more reactors at Fukushima I. There are already 6 reactors on the site and the combined output is 4,696MW. TEPCO is hoping to construct two 1,356MW ABWRs. The assembly of the local town, Futaba, passed a resolution in September, 1992 to ask TEPCO to construct additional reactors (see NIT No.26) but the plan has been opposed by the surrounding communities. So this time TEPCO has also proposed to construct a national training center for soccer in Iwaki city, Fukushima prefecture. TEPCO's tactics in trying to win people's acceptance of more reactors by appealing to their children's love of soccer has come in a criticism both within and outside the prefecture. Meanwhile some local people are complaining that the soccer facility in Iwaki city would have no merit for the local town.

Low-priced Reactors to be Developed for Export

The Nihon Keizai Simbun, Japan's major economic daily, reported at the top of the front page of its August 28 issue that the Ministry of International Trade and Industry (MITI) was looking at plan to develop a "low-priced" reactor for other Asian countries. The construction cost of reactors in Japan is as high as ¥400-500 billion, making it difficult for Japanese reactors to compete with those manufactured in the United States, European countries and Russia. The MITI plan, therefore, is an attempt to reduce the construction cost by 30-40% by jointly

developing a simplified-type light water reactor with manufacturers and electric power companies. The plan also includes the possibility of providing technical assistance to Asian countries for nuclear power, utilizing ODA. A proposal will be submitted this year to the Nuclear Power Subcommittee of the Advisory Committee for Energy, an advisory organ to the Minister of International Trade and Industry, and the plan will be concretized in fiscal 1995, the report said.

Shika N-plant Declared Safe(?)

The Kanazawa District Court on August 25 dismissed a request to suspend the operation and construction of Hokuriku Electric Power Co.'s Shika 1 reactor (BWR, 540MW). The suit was filed by 200 plaintiffs from all over the country including local citizens of Ishikawa Prefecture. Recognizing the potential danger of injury from a nuclear accident to those people living in an area 770 km away from the reactor, the court acknowledged their right to become plaintiffs in the lawsuit. However, it rejected the request, stating that it could not see any concrete danger of the plaintiffs' lives or livelihoods being threatened. This is the second case of its kind resulting in a similar judgement.

Meanwhile, the day after the court dismissed the request, an accident occurred at the very same Shika 1 reactor: a circulatory water pump cut out. The accident was widely reported as it occurred just after the court had guaranteed the reactor's safety. A regular inspection had overlooked a fault in the wiring at the pump's power sources.

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NUKE INFO TOKYO is a bi-monthly newsletter which aims to provide foreign friends with up-to-date information on the Japanese nuclear industry, as well as on the movements against this industry in Japan. Please write to us for a subscription (subscription rate: supporting subscriber $40/year or ¥5,000/year, subscriber $20/year or ¥3,000/year). The subscription fee should be remitted from a post office to our post office account No:00160-0-185799, HANGENPATU-NEWS by postal money order. We would also appreciate receiving information and newsletters from groups abroad in exchange for this newsletter.

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