# $\begin{array}{c} \text{NUKEINFO} \\ \hline \text{Sep./Oct.} \end{array}$

No. 31

c/o Citizens' Nuclear Information Center 302 Daini Take Bldg., 1-59-14 Higashi-nakano, Nakano-ku, Tokyo 164 JAPAN Phone:81-3-5330-9520, Fax:81-3-5330-9530

## Akatsuki-maru Bound for France



5

6

(Photo by Asahi Shimbun)

IN THIS ISSUE
Don't Approve Pu Export
Actions to Stop Pu Transport
NEWS WATCH
Japan to Supply R-Reactors to Thai/
Tube Damage Found in Mihama 1/
Longterm Storage of Spent N-Fuel/

Advances in Higashidori N-Plant

Akatsuki-maru Departs for France Japan's plutonium carrier the Akatsukimaru left Yokohama harbor on August 24, bound for France where it will be loaded with over one metric ton of plutonium to be shipped back to Japan. The Japanese

government, meanwhile, still maintains charade of secrecy, and refuses to release any information regarding this shipment, including the route and even the name of the ship.

On the day of its departure, concerned citizens and groups went to the Power Reactor and Nuclear Fuel Development Corp (PNC) to issue a statement of protest. The statement says:

"If these transports take place, there will be a huge stockpile of plutonium in Japan. At a time when most countries are giving up plutonium utilization, because of its high risks and costs, Japan's acquisition of massive amounts of plutonium poses a huge new threat to world security. This plutonium transport is morally unjustifiable as well, because it will expose the whole world and the environment to the threat of plutonium, just for the sake of Japanese plutonium policy. Japanese citizens intend to stop this transport by joining hands with people all around the world."

#### Controversy in US Government

In the meantime, it was revealed that the Bush Administration had sent a letter to key congressional committees in the name of the State Department on August 13, saying that Japan had come up with a plan for transporting plutonium 'that constitutes a sound basis' for going ahead with a shipment this fall. The administration said it intended to give the go-ahead to Japan, along with notification of the security assistance it would provide for the shipment.

However, there is concern within the U.S. Congress about the safety of plutonium shipments. The currently pending bill for the Comprehensive National Energy Policy Act includes an amendment introduced by Representative Neil Abercrombie and passed by the House, which would bar from U.S. ports any plutonium-bearing ship bound for Japan whose containers fail to meet standards set by the U.S. Nuclear Regulatory Commission, and this will be discussed in the Senate in coming months.

U.S. Senator John Glenn on August 12

called on the Bush administration to reverse its policy of condoning the commercial use He said 'the proposed of plutonium. shipments will present new risks to the environment, new risks of terrorism, and new risks of weapons proliferation.' added that these risks are needless 'since compelling economic there is no justification for the commercial use of plutonium in Japan or any other country.' Glenn outlined the above in a letter to the U.S. General Accounting Office, which will investigate the proposed shipments at the Senator's request.

U.S. Vice-Presidential candidate Senator Al Gore in a June 17 speech about a Comprehensive Test Ban to stop the production of weapons-grade fissionable material, highly enriched uranium, and plutonium, made clear his views about the Japanese and French nuclear programs. He stated, 'I believe that ultimately the civil nuclear energy programs of France and Japan will come under review' and that 'By leaving a United States-Russia agreement open for others, we can emphasize the need to block further accumulation of bomb grade material anywhere for any reason.'

There will be more discussions of the issue in the American Congress this autumn, and we will have to wait and see what the outcome will be.

#### Increasing Concern

Meanwhile, increasing concern is being expressed by the countries en route. As we reported in the last issue, the Governor of Hawaii, the U.S. Western Governors' Association, the South Pacific Forum, and South Africa had already made official statements opposing the transport.

In mid-August the Green Party of France made an official statement to the Prime Minister and the Environment Minister demanding the cancellation of the reprocessing contract with Japan and a halt to the plutonium shipment.

#### Cape Horn Route

The foreign minister of Chile, along the Cape Horn route, was quoted at the end of August as saying that if the shipment was to go around Cape Horn, they would 'inquire into the issue, and may ask Greenpeace for information.' Then on September 2, a group of Argentinean Congressmen attending the Environmental Conference in Ushuaia issued a statement to their president demanding that he bar shipments within Argentina's territorial waters. In neighboring Brazil Mr. Santana, chairman of the Commisao Nacional de Energia Nuclear (CNEN) is reported to have made an inquiry to the Japanese government regarding the route of the Akatsuki-maru. because "without detailed information we cannot make any plans to cope with the matter."

#### Cape of Good Hope Route

Along the Cape of Good Hope route, meanwhile, the Indonesian government officially asked the Japanese government at the end of August to avoid the straits of Malacca, which are one of the world's busiest commercial waterways. On August 23 there was actually a collision between a passenger vessel and a fishing boat, in which two people were killed and more than 100 are missing.

The Malaysian government echoed the Indonesian stance on the following day, and now, at the beginning of September, the four Southeast Asian countries, Indonesia, Malaysia, Singapore and the Philippines, are reported to be discussing how to handle the situation if and when a Japanese vessel carrying plutonium passes near their coasts. It has also become a hot issue in Hong Kong, after Greenpeace made contact with the Governor and notified him that the shipment may pass near the coast.

# Japanese Government on the Defensive

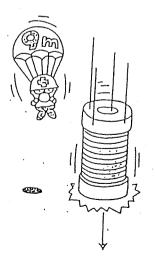
In Japan the Science & Technology Agency has received inquiries from more than 20 Tokyo Embassies during the past month. Inquiries had evidently kept the Agency so busy that it decided to publish an English language pamphlet explaining the plutonium utilization program and the safety aspects of plutonium transport. It was reported that they had distributed this pamphlet to all the countries concerned at the end of July.

The section on safety was illustrated with cartoons, and was exactly the same text as was distributed during the Post-Forum Dialogue of the South Pacific Forum, where it was considered to be an insult to the intelligence of Forum leaders.

#### B. Special Conditions

#### 1. Drop Test I

The specimen shall be dropped from a height of 9 m onto the target so as to suffer the maximum damage.



Prime Minister Miyazawa had actually written an answer to the letter written by the South Pacific Forum countries during the Forum. In it, he stated that 'the government of Japan fully understands the South Pacific Region's concern over possible accidents during the shipment' and that 'the shipment will be made in accordance with the highest international safety and security standards and in a manner which satisfactorily addresses all possible contingencies.' He also stated that 'the use of plutonium is indispensable for Japan's nuclear energy program, which reduces the emission of greenhouse gases from fossil fuels and contributes to our efforts to protect the global environment.'

In fact, plutonium does not contribute to our energy program at all, since the fast breeder reactor project, in which the plutonium is supposed to be burnt as fuel, is still at the R&D stage and has been abandoned, as everybody knows, by USA, UK, Germany and now even France, due to its technical difficulties and economic drawbacks. The Japanese plutonium utilization program will only contribute to a huge stockpiling of plutonium in Japan.

Neither will it contribute to reducing the emission of greenhouse gases in any way, since huge amounts of fossil fuel are consumed in the construction of nuclear facilities, including power plants, fast breeder reactors and waste facilities, in the transport of nuclear materials, waste, and plutonium, and in reprocessing. Since nuclear power plants cannot adjust output to fluctuating power demands, you need to have thermal power plants alongside them to gain flexibility. As a matter of fact, the number of thermal power plants has increased at the same rate as nuclear power plants in Japan.

We are angered that the Prime Minister has written such a deceptive, misleading letter to the Forum leaders, and we have sent them a further letter to set the record straight, with detailed information on the needs issue, recent news briefings, and press clippings.

The Akatsuki-maru has left Japan and is due to arrive in France at the end of September. However, amid growing tension and criticism, and opposition from all the countries en route, it will certainly be difficult for Japan and France to push through with the plan. If they do so in the face of such global criticism, Japan along with France, UK, and USA when they give their final approval for this transport, will stand isolated in the international community.

#### Continued from page 5

Based on the above, we have recommended in our letter that the French Government scrutinize Japan's plutonium inventory in order to avoid contributing to a large plutonium surplus in Japan by asking Japan for accurate basic information, and suggested as follows:

"The most straightforward way for the French Government to assess Japan's need to import plutonium is to obtain complete information on the Japanese plutonium inventory. This information is now held confidential by the Japanese government and the International Atomic Energy Agency. The best way for Japan to resolve the plutonium-need question is simply to authorize the IAEA to publicly release its accounting of Japan's plutonium inventory. Such a step would have the added advantage of establishing a valuable precedent for eliminating the secrecy that now surrounds inventories of materials in nuclear power and research programs worldwide.

Because it would create a dangerous precedent to authorize the transfer of highly toxic, weapons-usable plutonium in amounts that exceed a country's ability to absorb it in reactors, we have requested the French Government to independently establish Japan's need for plutonium before acting on the pending export application.

# Don't Approve Plutonium Export

### -- An Open Letter to the French Government

Jinzaburo TAKAGI

Paul Leventhal of the Washington-based Nuclear Control Institute and I jointly sent an open letter on Sept. 4 to the French Minister of Industry M. Dominique Strauss-Kahn, who is responsible for issuing a license to export plutonium from France to Japan. The letter asks the minister not to issue the export license because Japan has failed to demonstrate a need to import plutonium at this time or for the foreseeable future.

Every country receiving plutonium from France must supply an official certificate justifying its need for plutonium before an export license is issued ("Nuclear Fuel," Aug. 31). This policy has its basis in the Declaration of Common Policy Adopted on 20th November 1984 by the Ministers of Foreign Affairs of the Member States of the European Community. The declaration states, in part,

"Until such time as (it is) used, separated plutonium ... will be stored by the Member States at the place of separation of fuel containing plutonium ..., at the places of fabrication of fuels containing plutonium ..., or in a store established and administered by a Member State, or in a place to be determined by common agreement between the Member States concerned."

We understand that France implements this policy by requiring that exported plutonium be put to immediate and effective use and not simply stored. Although PNC (Power Reactor and Nuclear Fuel Development Corp.) claims it needs plutonium from France for immediate use, this claim is based only on the incomplete and highly questionable data that it released recently. The PNC data appear to understate the amount of separated

plutonium produced and overstate the amount of plutonium consumed as fuel in Japan's nuclear program, thus creating an artificial shortage in order to justify a "need."

For example the value of 0.5% given as the recovery rate of fissile plutonium from the spent fuel reprocessed at the Tokai reprocessing plant seems unrealistically low compared with the plutonium content of the high burn-up fuels now being achieved in light water reactors. Even more surprising and inexplicable is that PNC's value of 0.5% is much less than the 0.57% given by the Science and Technology Agency as the fissile plutonium recovery rate at Tokai plant in 1987 (hearing of the Science and Technology Committee, Japan House of Representatives, April 12, 1988).

Hence in our analysis we use a 0.57% rate of fissile plutonium recovery from spent fuel reprocessed at Tokai from 1987 to the present -- resulting in some 600kg more fissile plutonium recovered at Tokai than claimed by PNC. Our analysis indicates when Japan's present production of separated plutonium is consumption with plutonium-fueled reactors, there is not a current annual plutonium deficit of 300kg as PNC asserts; instead, the annual supply and demand of plutonium are in balance, supplemented by a substantial plutonium reserve. Indeed, our analysis indicates that when the plutonium previously produced, purchased and imported is taken into account, the cumulative surplus in Japan is not 0.4 tons, as stated by PNC, but at least 1.4 tons -- a cushion sufficient to meet Japan's actual plutonium requirements for three years.

Continued to page 4

# Actions to Stop Pu Transport

Although the Akatsuki-maru has left Japan for France, we intend to do as much as we can to stop the first transport. Since the ship left at the end of August, it is expected to arrive in France in the end of September. Assuming it stays for a week or two at the longest for loading, it will probably leave France around mid-October, and depending on which route it takes, it is expected to arrive back to Japan at the end of November or beginning of December if everything goes according to schedule.

On September 6, a Plutonium Action Nationwide Network meeting was held in Hiroshima to discuss international and domestic campaigns.

On the domestic local level, it was proposed to send out an information pack to Diet members and local assemblies around the country, to do a Q&A survey at the nuclear-free local authorities, and to send alerting letters to the local authorities along the Monju plutonium fuel transport route. Although concern has been mounting among countries along the route of the plutonium transport from France, it should really be the Japanese people who are most concerned because the Japanese are the ones who will have to live with a huge stockpile of plutonium, frequent transports of plutonium fuel, and the risk of burning plutonium in a fast breeder reactor.

In order to expand the anti-plutonium movement domestically, two big national campaigns were proposed. First, a signature campaign, demanding shutdown of FBR Monju, cancellation of the transport of plutonium from Europe, and cancellation of the construction of the nuclear-fuel cycle facilities including reprocessing Rokkasho-mura plant. Signatures will be collected intensively during September and October, and will be submitted to the Japanese government at the end of October.

The other major campaign will be to

place an opinion ad in a Japanese newspaper. Since a full-page ad costs so much in Japan (more than 7 times more than the New York Times) we may only be able to afford a half-page, or a 1/4 page ad, depending on how much money we can collect.

A big project on the international level is the Asia-Pacific Forum on the Transport of Japanese Plutonium, to be held on October 4 & 5, and co-sponsored by CNIC and the U.S. Nuclear Control Institute. The Forum will consist of two sessions, a briefing session on issues of concern related to plutonium transport, and a session for people from the countries en route to voice their concerns. Representatives from the Northern Mariana Islands, Nauru, Guam, Philippines, Indonesia, South Korea, and the Pacific Concerns Resource Center will be invited to speak. A resolution will be adopted on the second day, and this will be brought to the STA and Diet members the following day.

We believe this Forum and all the actions to be taken will open a new phase in the Japanese plutonium utilization policy. We hope to establish the understanding that the plutonium program is not just an internal domestic energy issue for Japan but represents an environmental and security threat to the whole world, including the citizens of Japan.



8.9 No Pu Day Action (Photo by Imai)

# NIWS WATCH

### Japan Bids to Supply Research Reactors to Thailand

The Japan Atomic Energy Research Institute (JAERI) sent a commission to Thailand on July 27-31 to investigate the feasibility of selling research reactors to that country. Thailand currently has a 2-MW research reactor near Bangkok international airport. This reactor is scheduled to be dismantled as it is planned to expand the airport, but the Thai government also plans to build new reactors.

JAERI and the Japan Atomic Industrial Forum investigated the situation at the request of the Thai Office of Atomic Energy Program (OAEP) and recommending 5-10 MW reactors. decided to send a mission, as the Thai plan equations many unanswered, including the purpose of the reactors. The Thai government has also requested support for the plan from the United States and Germany.

# Tube Damage Found in Mihama 1 Steam Generator

Further tube damage has been discovered in a steam generator of Kansai Electric Power Co.'s Mihama 1 (PWR; 340MW). On July 30 a warning signal was sounded by a radiation monitor in the secondary coolant system. On examination after the reactor had been manually shutdown, a leak

was found at the base of a steam generator tube, around the outlet of the primary coolant. It was the first time that damage had been found at this spot. The company is said to have extracted the damaged tube and examined it to find out the cause.

Steam generator tube damage has been a common problem with PWRs. Even after the cause was identified for certain tubes and countermeasures taken, other damage occurred at different spots due to other causes.

## Way Opened for Long-Term Storage of Spent Nuclear Fuel?

On August 20 the Nuclear Commission (NSC) completed a report claiming that a safe design is possible for the storage of spent nuclear fuel in dry casks. Japan's policy at present is to rapidly subject spent nuclear fuel to reprocessing, so that it only has to be stored temporarily before being sent to a reprocessing plant. This is "wet type storage," where the spent fuel is kept in pools inside reactor buildings reprocessing plants. But there is no room to extend these pools, and it would cost too much to build new pools elsewhere. Since the reprocessing plant at Rokkasho will begin operating later than initially planned, there are worries about insufficient pool capacity, and the recent report is thus a way of justifying the emergence of the dry storage plan.

Moreover, with the plan for plutonium utilization falling apart, the view is that

authorization for dry storage will lead to the long-term storage of spent fuel, i.e., a change in the policy calling for early reprocessing. And some people surmise that the Long-Term Plan for Nuclear Power Development and Utilization now under deliberation by the Atomic Energy Commission (AEC) will give definite indications of such a policy shift.

The first possible site for dry storage is the planned spent fuel storage facility, holding about 1,000 barrels, at Tokyo Electric's Fukushima I nuclear plant (six BWRs, 4,696MW total output).

# Advances in Plan for Higashidori N-Plant

The purchase of fishing rights of Aomori Prefecture's Higashidori Village by the electric companies, was approved on August 14 and 17 at the general assemblies of the two fishing cooperatives involved. Back in 1970, Tokyo Electric and Tohoku Electric approached the village with a joint plan to build a nuclear power plant in this location. At that time they were considering a giant facility with a total output of 20,000 megawatts, but the present plan apparently calls for four BWRs with a total output of 4,400 megawatts.

Many fishing coop members oppose the plan, and fought against it for a long time, but in the end the electric companies prevailed by forcing the opposition aside with mega-yen compensation payments of ¥13 billion (an average of ¥14 million for each person), as well as a ¥5 billion donation for a fisheries promotion foundation, amounts that far exceeded the "going price."

Because the construction of transmission lines to carry the power to Tokyo would cost at least \(\forall 2\) trillion, even the electric companies have had little enthusiasm for this project since the 1980s, when growth in the demand for electricity slowed, but it is said that the companies were pushed into a position from which they could not back out because of the government's policy promoting nuclear power and the village's request for the plant. It appears as though a plan is now proceeding for just one of the four originally planned reactors, which would not require the building of the new transmission lines. There are also rumors that a FBR and not a BWR will actually be built on the site, or that it will become home to a reprocessing plant or a repository for radioactive wastes.

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 \(\frac{45}{000}\)/year, subscriber \\$20/year or \(\frac{43}{000}\)/year). The subscription fee should be remitted from a post office to our post office account No:Tokyo 6-185799, HANGENPATU-NEWS by postal money order. We would also appreciate receiving information and newsletters from groups abroad in exchange for this newsletter.

NUKE INFO TOKYO Publishing Committee c/o Citizens' Nuclear Information Center 302 Daini Take Bldg., 1-59-14 Higashi-nakano, Nakano-ku, Tokyo 164, JAPAN Phone:81-3-5330-9520 Fax:81-3-5330-9530