Rokkasho and Japan's Nuclear Energy Policy

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By Asahi Shimbun

[Introduction: In late October, the Japanese government presented its nuclear plans for the next decade. As was widely expected, the strongly pro-nuclear Atomic Energy Commission declared that Japan should plow ahead with a nuclear fuel recycling program at Rokkasho in Aomori Prefecture.

The decision comes at a time when international concern over Rokkasho is intensifying. It ignores International Atomic Energy Agency head Mohamed ElBaradei’s call for a five-year moratorium on new nuclear fuel reprocessing facilities worldwide. Shunsuke Kondo, the head of the AEC, has said that it is "general knowledge" that the Rokkasho plant, which has not yet come into operation, is an existing facility, and therefore not included in the calls for a moratorium.

Meanwhile, with the failure of the nuclear non-proliferation talks in New York last June, pressure on Japan to rethink how Rokkasho is to be operated and inspected is growing from both the IAEA and the Bush administration, both of which wonder whether Japan can operate the facility as planned. Rokkasho’s opponents, which include many people who are fundamentally pro-nuclear power, fear Japan's insistence on operating the Rokkasho reprocessing plant will lead to a greater proliferation of nuclear fissile materials and technologies. Indeed, Iran has already pointed to Japan's pursuit of nuclear reprocessing facilities as an example of why it, too, should be allowed to proceed with its own reprocessing program.

Yet, ironically, as the Japanese government and many in the nuclear power bureaucracy continue to push hard for Rokkasho, the utility companies, who will supposedly be sending their spent nuclear fuel to Rokkasho for reprocessing and reuse, are taking a lower profile in the debate. Officially, they support Rokkasho. Unofficially, many are worried about the practical questions with Rokkasho that remain unresolved. Questions such as how much is it really going to cost to send their fuel to Rokkasho and back, and is it more economically efficient to do something else?

In early December, the Rokkasho plant is expected to begin the next phase of uranium testing, and Japan Nuclear Fuels Ltd., which runs the plant, still wants reprocessing to begin sometime in 2007. The Japanese media's positions on Rokkasho range between the ardently pro-Rokkasho and pro-nuclear Yomiuri Shimbun and the ardently anti-Rokkasho and anti-nuclear Mainichi Shimbun, with the Asahi Shimbun just slightly less opposed to Rokkasho than to support it. Eric Johnston]

The government has cobbled together an Outline of Nuclear-energy Policy for the next decade on the nation’s problem-plagued nuclear energy program.
The government decided to work out the outline because it thought its duty was to present a broad policy orientation rather than a traditional long-term program this time around. The focus of attention in the outline was whether the government would press ahead with its traditional policy of nuclear fuel recycling or change tack.

The Atomic Energy Commission of Japan discussed alternative policies, giving hope that the government might actually shift its stance. But the talks were half-baked, and the commission approved the continuation of the existing policy.

Japan plans to carry out a nuclear fuel cycle program in which plutonium is used as fuel after all spent nuclear fuel is reprocessed. Such a method is very expensive, and many foreign countries have given up on the idea. Even in Japan, an increasing number of experts have urged the government to reconsider this policy.

In discussing the nation’s future nuclear energy policy, the Atomic Energy Commission presented three alternatives in response to such critical views. Talks at the commission showed that reprocessing spent nuclear fuel would be 1.5 to 1.8 times as costly as a disposal method for the spent fuel.

But the commission decided to maintain the current policy, mainly because the government has not yet studied a direct disposal method of spent fuel and that a change in policy would waste all the money that has been invested in the nuclear fuel recycling program.

The commission also said a change in policy would invite resentment of local governments.

The commission’s arguments do not make sense. Japan has not inquired about a direct disposal method because it was assumed that such a study would be unnecessary. The commission itself is partly responsible for failing to look into this alternative.

If the government hesitates to change its policy by citing various obstacles that may arise, then it will never be able to switch policies.

It is inevitable even if the commission is criticized that it is not really ready for a change.

At any rate, the outline gives a stamp of approval to start operations of the Nuclear Fuel Reprocessing Plant in the village of Rokkasho in Aomori Prefecture. The plant will soon start testing high-level radioactive spent fuel, thus embarking on the road to nuclear fuel recycling.

Aerial view of Rokkasho.

Discussions on this nuclear fuel cycle have not been completed. Further and deeper talks must be held over the reprocessing plant.

But the outline does propose multifaceted inquiries into nuclear energy in preparation for possible future change in Japan's nuclear policy.

This is only natural. Even if the nuclear fuel reprocessing plant starts operating, the plutonium-thermal program, which uses plutonium produced by the reprocessing plant, is not yet under way.

Nor is there any plan for another reactor that will take over from the Monju prototype fast-breeder reactor. Japan’s nuclear fuel recycling program requires overcoming many difficult problems.
Nuclear reactors themselves are also fraught with problems. The government plans to operate the reactors for 60 years, but there is no guarantee they will be safe enough to run after such a long time. Power companies might also become reluctant to use such unwieldy nuclear reactors when demand for electricity declines.

Uncertainties surround nuclear power. The government should not stick to a single set of policies. It should study many other technologies to prepare for a possible policy shift if the situation changes. What is needed is a flexible approach.


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