Japan Atomic Energy Commission 2003 Decision re Plutonium Utilization Plans

Basic Principles for the Utilization of Plutonium in Japan

(Provisional Translation)

August 5, 2003

Decision by the Atomic Energy Commission of Japan

Japan has used nuclear energy only for peaceful purposes in accordance with the Atomic Energy Basic Law. In supporting the controlled use of plutonium as part of its program, the Atomic Energy Commission of Japan (AEC) hereby sets forth the following basic principles for the utilization of plutonium with a view to enhancing transparency regarding the peaceful uses of nuclear material.

1. Policy for the Peaceful Uses of Plutonium

Japan is a signatory country to the Nuclear Non-Proliferation Treaty and is subjected to strict nuclear safeguards in accordance with this treaty. In this way, Japan has made an important pledge to the international community to utilize plutonium solely for peaceful purposes. However, in order to avoid doubts both at home and abroad about the utilization of such a sensitive substance, it is important that Japan should achieve enhanced transparency regarding the utilization of plutonium and thereby gain an improved understanding of the nation as well as the international community. To this end, AEC has laid down the principle of not holding surplus plutonium, i.e. plutonium for no specific purpose, Japan has published an inventory of its plutonium situation every year, and it has called on related organizations to proactively disclose information about the peaceful uses of plutonium.

The Rokkasho Reprocessing Plant, Japan's first commercial nuclear reprocessing facility, has reached the final phase of construction. In the anticipated stage of active tests, the plant will begin separating and recovering plutonium from spent fuel.

With the commercial operation of the Rokkasho Reprocessing Plant, a large amount of plutonium will be separated and recovered. Accordingly, AEC considers it necessary to define the purposes for which this plutonium will be used and thereby to achieve further transparency as to the anticipated utilization of the substance.

2. Measures to Clarify the Purpose of Plutonium Use

In order to clearly specify the purpose of plutonium use, AEC considers it necessary to carry out measures that comply with the following basic principles. The validity of the uses of plutonium that will be clarified by these measures will be confirmed and checked by AEC.

(1) Public Announcement of Plans for the Utilization of Plutonium

Electric power companies will be required to announce every year plans for the utilization of plutonium before separating plutonium, setting forth the names of owners of plutonium, the amount of plutonium in their possession, and the purposes for which plutonium will be used. The uses of plutonium should specify the quantities of plutonium involved, the places where plutonium will be used, approximate time of start using plutonium, and an approximate period of time required to use the material. Moreover, in order to achieve enhanced transparency, electric power companies should provide details of the uses as the actual plans progress.

(2) Revision of Plans for the Utilization of Plutonium

Plans for the utilization of plutonium must be based on the latest information and developments in order to effectively achieve objectives both at home and abroad. For example, since the plans for the utilization of plutonium are likely to be affected by the actual progress of electric power companies' MOX fuel utilization projects in light water reactors, as well as by the operation of the Rokkasho Reprocessing Plant owned by Japan Nuclear Fuel Limited (JNFL), the electric power companies and JNFL should examine the desired measures to be taken and, if necessary, revise the plans.

3. Plutonium Stored Overseas and Plutonium for Use in Research and Development

Plutonium stored overseas and for use under the MOX fuel utilization projects will be processed into MOX fuel in foreign countries, and this MOX fuel will be shipped to Japan. Accordingly, peaceful uses of this plutonium will not be doubted. Nevertheless, in order to enhance the transparency of the Japanese program, Japanese plutonium that is being processed into fuel in third countries should be subject to measures similar to the measures that will apply to plutonium separated and stored in Japan.

Plutonium being separated and recovered by Tokai Reprocessing Facility of the Japan Nuclear Cycle Development Institute (JNC) is stored at national research institutions, including JNC, and is used in research and development (R&D) projects. While recognizing that the plutonium used in R&D must be flexibly handled depending on changes in the situation concerning R&D projects, national research institutions, such as JNC, should also take measures similar to commercial plutonium so as to enhance the transparency of the utilization of such plutonium in Japan's R&D programs.