

POLICY ISSUE

NOTATION VOTE

SECY-00-0190

September 1, 2000

FOR: The Commissioners
FROM: Janice Dunn Lee, Director
Office of International Programs
SUBJECT: PROPOSED LICENSE TO EXPORT LOW-ENRICHED URANIUM TO JAPAN FOR USE AS RELOAD FUEL IN THE FUGEN ADVANCED THERMAL REACTOR (APPLICATION NO. XSNM03149)

- PURPOSE:
- DISCUSSION:
 - International Safeguards
 - Physical Protection
 - Staff Review and Analysis of Other Information
- CONCLUSION:
- RECOMMENDATION:

PURPOSE:

To request Commission approval of a license to Transport Logistics International authorizing the export to Japan of low-enriched uranium for use as reload fuel in the Fugen Advanced Thermal Reactor (ATR). This application is being referred to the Commission in accordance with [10 CFR 110.40\(b\)\(4\)](#) because the Fugen ATR is considered an advanced reactor.

DISCUSSION:

On May 25, 2000, Transport Logistics International applied for a license ([Attachment 1](#) ) to export to Japan 7,300 kilograms of uranium containing 57.67 kilograms of uranium-235, enriched to a maximum of 0.79 percent. The material, in the form of uranium dioxide powder, will be fabricated into fuel at JNC Tokai Works Plutonium Fuel Center for eventual loading into the Fugen ATR. The Fugen ATR is a 165 Mwe heavy water moderated, light water cooled reactor, owned and operated by the Japan Nuclear Cycle Development Institute (JNC). Since commencing operation in 1979, Fugen ATR has been used to develop new fuels and improve operation and maintenance techniques. It was the first thermal reactor in the world to use mixed-oxide fuel on a full core scale, but is now nearing the end of its operational life. The U.S. supplied nuclear fuel and equipment prior to and during its first years of operation. There have been no subsequent Fugen ATR export requests until the present case.

In response to NRC's request for views on the proposed export, the Executive Branch, in a letter dated August 28, 2000 ([Attachment 2](#) ) , recommends that the license be approved. The letter notes that the proposed export to Japan would take place pursuant to the 1988 U.S.-Japan Agreement for Peaceful Nuclear Cooperation as confirmed in Japan Foreign Ministry Note No. 179 dated August 24, 2000. The Note also confirms that the proposed recipients are authorized persons in Japan. A copy of the Japanese Note is also attached. The Executive Branch judges that the proposed export will not be inimical to the common defense and security of the United States, and is consistent with the provisions of the Atomic Energy Act of 1954, as amended.

International Safeguards

Japan is a party to the Non-Proliferation Treaty and, as such, accepts IAEA safeguards on all source and special nuclear material in its nuclear activities. IAEA Facility Attachments are in force for both of the facilities mentioned above.

Physical Protection

With regard to physical protection, NRC staff visited Japan in May 1997. The conclusion of this review was that Japan's physical protection program was consistent with the then-current version of INFCIRC/225 (i.e., Rev.3). Staff has reviewed subsequent information received to date, and has determined that there is no indication that the physical protection program has degraded in this country. In addition, staff has determined, on the basis of currently available information, that physical protection measures to protect against proliferation of nuclear weapons are in conformance with the current version of INFCIRC/225 (i.e., Rev.4).

Staff Review and Analysis of Other Information

The NRC staff has determined that the NRC licensing criteria contained in 10 CFR Part 110.42 are fully satisfied.

The staff closely and routinely monitors, through cable traffic and other means, nuclear non-proliferation-related activities and issues in and involving Japan. The staff is not aware of any concerns about Japan's commitment to full-scope international safeguards or its fulfillment of obligations to the U.S. under the U.S.-Japan Agreement for Peaceful Nuclear Cooperation.

CONCLUSION:

The staff concurs with the Executive Branch judgment that the proposed export would not be inimical to the common defense and security of the United States and is consistent with the provisions of the Atomic Energy Act of 1954, as amended by the Nuclear Non-Proliferation Act of 1978. The Office of the Executive Director for Operations concurs. The Office of General Counsel has no legal objection.

RECOMMENDATION:

That the Commission authorize the issuance of the requested license to Transport Logistics International.

/RA by Ronald D. Hauber Acting For/

Janice Dunn Lee, Director
Office of International Programs

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Attachments: 1. [05/25/00 Transport Logistics International Export License Application](#) 
2. [08/28/00 DOS Letter R.J.K. Stratford to J.D. Lee](#) 