

DEC 7 1989

NOTE TO: Charles W. Emeigh, Section Leader  
International Assistance Section  
International Safeguards Branch

SUBJECT: PHYSICAL SECURITY REVIEW OF XSNM - 2491

The following information is being provided for the protection review of an export application for high enriched special nuclear material (Category I) to be used as fuel in a research reactor in the Netherlands. We have examined the application from the standpoint of Category I physical security during domestic transport.

Staff was informed on December 7, 1989, by Transnuclear, Inc., the license applicant, that the shipment of material under this license will move as a part of a larger Category I shipment. Transnuclear again plans to petition the Department of Energy (DOE) to transport and protect the high enriched uranium (HEU) on the domestic leg of the shipment from the enrichment plant to the Aerial Port of Embarkation. The French Air Force will fly the material from the Aerial Port of Embarkation directly to France.

In a letter to NRC dated October 24, 1986, confirming that DOE would provide transport on the domestic leg of an earlier shipment, DOE stated that "the domestic portion ...will be made in accordance with DOE directives..." DOE also stated that they plan to terminate use of the SST system for commercial purposes at the earliest possible time. In view of this, DOE may decline to make this shipment if a suitable commercial carrier can be found.

Transnuclear has a generic physical security plan which was approved by NRC on November 23, 1981. This generic plan relies upon domestic transportation and protection from a qualified carrier, i.e., Tri-State Motor Transit Company. (Tri-State withdrew from this activity forcing Transnuclear to request the support of DOE.) In addition, in accordance with 10 CFR 73.26(b), the licensee must submit a specific security plan to NRC prior to shipping.

We have reviewed the proposed export application and have determined that the following physical protection condition should be made a part of the license.

"The material to be exported under this license shall either be protected in transit, while within U.S. jurisdiction, in accordance with the requirements of 10 CFR Part 73 and the licensee's approved security plan or shall be protected in transit, while within U.S. jurisdiction, by the Department of Energy (DOE) Safe Secure Transport (SST) system in accordance with DOE requirements and directives for the transport of such material."

*15/ John R. Cook*  
John R. Cook, Section Leader  
Transportation Projects Section  
Transportation Branch

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PDR XPORT  
XSNM-2491 PNU

Recap of XSNM - 2491  
35.783 Kgs of U-235 contained in 38.291 kgs of U  
Type of Material: Metal - HEU - Maximum of 93.45%  
Supplier: US DOE, Oak Ridge, TN  
Licensee: Transnuclear, Inc., Hawthorne, NY  
End Use: Fuel for HFR - Petten  
NPT Agreement with NPT Safeguards in force: Yes  
Agreement for Cooperation expiration date: EURATOM - December 31, 1995  
Category I shipment.

DISTRIBUTION:  
NMSS/SGTB r/f & s/f  
CHillman  
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OFC: SGTB :SGTB : : : : :  
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