

United States Department of State

Washington, D.C. 20520 October 22, 2001

Ms. Janice Dunn Lee Director, International Programs United States Nuclear Regulatory Commission Rockville, Maryland

Dear Ms. Lee:

I refer to the letter from your office of August 15, 2001 requesting the views of the Executive Branch as to whether amendment of an export license in accordance with the application hereinafter described meets the applicable criteria of the Atomic Energy Act of 1954, as amended:

NRC No. XSNM03171/01--Application by Transnuclear, Inc to amend its existing license to authorize the export to Canada of an additional 10.0 kilograms of uranium in the form of metal enriched to a maximum of 93.3 percent, and to extend the expiration date of the license from April 30, 2002 to September 30, 2002. The highly enriched uranium (HEU) will be used for the production of medical isotopes in the NRU reactor operated by Atomic Energy of Canada Limited's (AECL) Chalk River Nuclear Laboratories.

The proposed export to Canada would take place pursuant to the Agreement for Cooperation Between the United States and Canada, as amended, as confirmed in the enclosed letter dated October 17, 2001 from the Canadian Nuclear Safety Commission.

The Executive Branch has reviewed the application and concluded that the requirements of the Atomic Energy Act, as amended by the Nuclear Non-Proliferation Act of 1978 and the Energy Policy Act of 1992, have been met and that the proposed export would not be inimical to the common defense and security of the United States.

The Executive Branch has reviewed the physical security measures that are applicable to the proposed export and concluded that physical security will be adequate. The consultations required under Section 133 of the Atomic Energy Act, as amended, have been completed.

The Executive Branch has also determined that the requirements of Section 134 of the Atomic Energy Act, as amended, (the Schumer Amendment) are met based on the following:

 Argonne National Laboratory has confirmed that there is no low enriched uranium target material currently available that can be used as an alternative to HEU for production of medical isotopes by Chalk River Laboratories.

Attachment 3

- (2) The Embassy of the United States in Canada and the Canadian Ministry of Foreign Affairs have exchanged diplomatic notes confirming that both Governments agree that all entities producing medical molybdenum-99 be required to use low enriched uranium targets when such targets are available. The Department of Energy (DOE), in a previously provided letter dated January 24, 2001 reported continued cooperation between Argonne National Laboratory and AECL on LEU target development.
- (3) Argonne National Laboratory has an active DOE-funded program underway for the development of low-enriched uranium targets for production of medical isotopes.

The applicant explains that this additional 10 kilograms of HEU for fabrication of medical isotope production targets for the NRU reactor is needed for two reasons:

- The steps ordered by the Canadian Nuclear Safety Commission (CNSC) prior to commissioning the two new Maple reactors and the associated New Processing Facility (NPF) for medical isotope production will require more time than originally anticipated.
- Demand for medical isotopes has increased HEU target consumption. Atomic Energy of Canada Limited (AECL) now estimates that the 10.05 kilograms of HEU for NRU targets authorized for export to Canada under license XSNM03171 will be used up by March 2002, instead of July 2002 as originally estimated.

AECL estimates that it will have to continue using the 40 year old NRU reactor and its associated isotope production facility for a least 4 to 6 months longer than previously planned; that is, until December 2002. AECL estimates that it will need 5 kilograms of HEU by December 2001 to allow sufficient time for fabrication of the HEU into targets. A second tranche of 5 kilograms of HEU will be needed by early 2002 to be fabricated into targets for NRU isotope production from September to December 2002. AECL estimates that December 2002 is the earliest date that the MAPLE reactors and the NPF could be ready for commercial operation.

In view of the foregoing, the Executive Branch recommends that the required determinations be made and that the license be amended as requested.

Sincerely,

Alex R. Burkart, Acting

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Director

Nuclear Energy Affairs

Enclosure: assurance letter

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Canadian Nuclear Safety Commission Commission canadienne de sureté nucléaire

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October 17, 2001

Mr. Adam M. Scheinman
Director
Office of Nuclear Transfer and Supplier Policy
National Nuclear Security Administration
Department of Energy
Washington, D.C. 20585
USA

Dear Mr. Scheimman:

Reference is made to your letter dated September 14, 2001, concerning licence application XSNM3171/01.

I confirm that the transfer of the material as identified on the above-noted licence application will be subject to all of the terms and conditions of the Agreement for Cooperation concerning the Civil Uses of Atomic Energy between the Government of Canada and the Government of the United States, and that the intermediate consigner, Atomic Energy of Canada Limited, Chalk River Laboratories, Chalk River, Ontario is authorized to receive and possess the material.

Yours sincerely,

W. Angus Laidlaw Senior Advisor

c.c.: Robin Delabarre, US DOE Betty L. Wright, USNRC

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