



United States Department of State

Washington, D.C. 20520

**BUREAU OF NONPROLIFERATION AFFAIRS
OFFICE OF NUCLEAR ENERGY AFFAIRS**

July 6, 2000

**TO: Mr. William M. Hill, Jr.
Office of the Secretary
U.S. NUCLEAR REGULATORY COMMISSION
11555 Rockville Pike
Rockville, MD 20852-2738
Ph: 301 415 1661 fax: 301 415 1101**

**FROM: NP/NE – Robin DeLaBarre
ph: 202 647 3978; fax: 202 647 0775**

SUBJECT: July 10, 2000 Public Meeting Concerning XSNM03060

REF: June 29, 1999 Memorandum and Order in the matter of Transnuclear, Inc. (Export of 93.3% Enriched Uranium) CLI-99-20, 49 NRC 469 (1999)

As discussed with Ms. Vietti-Cook, transmitted is an advance copy of the Executive Branch views on the progress in development of low-enriched uranium targets for the Canadian MAPLE reactors. The Argonne National Laboratory report on this subject is in process of revision to take into account the results of Argonne's visit to SGN, the French company that designed the process for disposal of the isotope production waste in MDS Nordion's New Production Facility. We expect the revised Argonne report to be ready by tomorrow, July 7, and will forward copies to you as soon as the report is received.

Arrangements will be made tomorrow to courier the originals and copies of our letter to your office.

Attending the July 10, public meeting for the Executive Branch will be:

Richard J.K. Stratford, Director Office of Nuclear Energy Affairs, Department of State;

Robin DeLaBarre and Christine Martin of the Office of Nuclear Energy Affairs, State;

Richard Goorevich, Director of the Nuclear Transfer and Supplier Policy Division, Department of Energy;

Sean Tyson, International Policy and Analysis Division, Department of Energy; and

Dr. Armando Travelli, Manager RERTR Program, Argonne National Laboratory.



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July 6, 2000

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

XSNM-3060

Dear Ms. Lee:

I refer to the June 29, 1999, Memorandum and Order in the matter of Transnuclear, Inc., (Export of 93.3% Enriched Uranium) CLI-99-20, 49 NRC 469 (1999), in which the Commission accepted the Executive Branch's offer to submit its views on the progress in development of low enriched uranium (LEU) targets for the MAPLE reactors. The Commission requested that such views be submitted no later than thirty days after the submission of the annual status report by the Applicants. I refer also to the May 31, 2000, yearly status report submitted to the Nuclear Regulatory Commission (NRC) by the Applicant, MDS Nordion. The Executive Branch has reviewed the yearly status report and has concluded that the requirements of the Atomic Energy Act, in particular Section 134, continue to be met and that the further export of highly enriched uranium (HEU) targets under export license XSNM3060 would not be inimical to the common defense and security of the United States.

The Executive Branch assures the Commission of the continued cooperation between MDS Nordion and Argonne National Laboratory (ANL) in the development of LEU targets for the MAPLE reactors and the associated New Processing Facility (NPF). The Executive Branch believes that considerable progress has been made toward the resolution of the many technical difficulties in converting the reactors and NPF to use LEU targets. In a meeting at the Department of State on April 20, 2000, MDS Nordion representatives stated that they have completed the initial study of the feasibility of converting to LEU. They have accepted the new design for the LEU target as feasible and have stated that many of the dissolution difficulties resulting from the increased uranium concentration in the new targets, considered a major obstacle last year, have since been resolved. In view of MDS Nordion's acceptance of the LEU target design, ANL has not done a specific feasibility study on this issue. Rather, the focus of the ANL analysis was on the major remaining technical obstacles identified in MDS Nordion's report.

MDS Nordion and ANL agree that the major technical obstacle remaining involves the calcination process used to condition the waste. Further technical study of the current process is needed. As a first step, ANL personnel accompanied MDS Nordion on a visit to SGN, the French company that designed the calcination process for MDS Nordion. That visit took place on June 30, 2000.

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The MDS Nordion status report indicates that they have identified no minor modifications that can be made to the NPF at this time, before it begins processing radioactive material, that will minimize the future costs of conversion. Indeed, SGN verified at last week's discussions that the addition of a line to introduce a controlled precipitating agent into the calciner would not present special difficulties even after the facility has begun operations with HEU. ANL agrees with SGN that modifications toward conversion to an LEU process could be made to the NPF after operations had begun with HEU. The Executive Branch therefore sees no reason to forestall operation of the facility and risk disruption of production of critically important medical isotopes in view of the fact that substantial progress that has been made this year and is expected to continue.

We believe that MDS Nordion continues to be committed to the conversion of the MAPLE reactors and NPF. In their report, MDS Nordion noted that they are ready to begin to Phase 2 of the effort to convert the reactors and NPF. In addition to pursuing the resolution of the outstanding technical issues with ANL and AECL employees, MDS Nordion is prepared to begin to work with Canadian and U.S. regulatory agencies to develop the procedures that will be needed to test and certify the new target design and facility operation. We are encouraging MDS Nordion to move forward on these issues as quickly as possible.

In summary, we believe that MDS Nordion has demonstrated substantial progress towards resolving technical impediments to converting the MAPLE reactors and NPF. The Executive Branch supports the continued export of the HEU targets for production of molybdenum-99 at the MAPLE reactors. The Canadians will need to continue to use HEU until the LEU target design has been tested and approved by Canadian and U.S. regulatory authorities. We continue to support cooperation between MDS Nordion and ANL on the remaining technical issues. Funds have been made available in the FY01 budget for continued work by ANL in conjunction with MDS Nordion, SGN, and AECL on the calcining process.

We appreciate the opportunity to provide our views on this very important matter. Should you have any further questions, please do not hesitate to contact me.

Sincerely,



Richard J.K. Stratford
Director
Nuclear Energy Affairs