

DEPARTMENT OF STATE

Washington, D.C. 20520

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BUREAU OF OCEANS AND INTERNATIONAL ENVIRONMENTAL AND SCIENTIFIC AFFAIRS

JAN 3 0 1981

Mr. James R. Shea Director of International Programs United States Nuclear Regulatory Commission Bethesda, Maryland

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Dear Mr. Shea:

I refer to discussions between NRC and OES staff members regarding use by the Canadians of U.S.-supplied HEU, proposed for export under license application XSNM01355, now under review by the NRC, for the production of molybdenum-99. As recovery of the Mo-99 requires dissolution of the Mo-99 production targets, the NRC staff has raised the question as to whether U.S. Government prior consent is required for such alteration in form and content of an element containing U.S.-supplied special nuclear material.

The favorable Executive Branch recommendation and analysis for XSNM01355 dated January 14, 1981, did not specifically address in detail all of the various uses proposed by Atomic Energy of Canada Limited (AECL) for the 101 kilograms HEU proposed for export. The Executive Branch, however, did review and take into account the background material furnished by AECL in January 1978 which contained the information about the Mo-99 production.

We note that from 8 to 10 kilograms of HEU per year will be utilized for fabrication of NRU and NRX Mo-99 U/A1 production targets which, after irradiation, will be transferred to a hot cell facility for dissolution and separation of the Mo-99. Fuel element reprocessing is not done in Canada but at U.S. DOE's Savannah River plant. We also note that AECL utilizes a smaller amount of U.S.-supplied HEU (about 2 kilograms per year) for development of alternative fabrication technologies for advanced fuels.

The Executive Branch, on the basis of its review of this request, has concluded that the export of the 101 kilograms of HEU for all of the purposes cited by AECL in its application XSNM01355 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, as amended.

I hope the foregoing will be helpful to the NRC in completing action at an early date on XSNM01355.

Sincerely,

Louis V. Nosenzo

Deputy Assistant Secretary

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