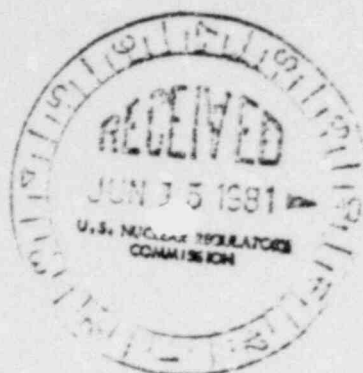
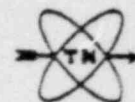


TRANSNUCLEAR, INC.



June 10, 1981

XSNM/D1627

Mr. N. Moore
Nuclear Regulatory Commission
Office of International Programs
7735 Old Georgetown Rd.
Bethesda, MD 20014

Re: Export License Application XSNM-1627 TN Ref: 79-231/01 (Misc 308)

Dear Mr. Moore

Enclosed is supplemental data which we received from the A.E.C.I., Canada, regarding inventories. This information should be reviewed in conjunction with our original Export License application.

Thanking you in advance for your help and cooperation.

Sincerely,

Vicki Matson
Assistant Manager
Washington Operations

cc: Mr. R. Delabarre
Dept. of State
Office of Nuclear Energy Technology Affairs
Room 7824A
Washington, D.C. 20520

Encl: as stated above

VM/sg

8106220492



Atomic Energy
of Canada Limited
Research Company
Chalk River
Nuclear Laboratories

L'Énergie Atomique
du Canada, Limitée
Société de Recherche
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de Chalk River

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613-587-5521
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Vicki pbe

Operations Division

1981 May 28

Ms Vicki Matson
Transnuclear Inc
1 Skyline Place
5205 Leesburg Pike
Bailey's Crossroads
FALLS CHURCH, Virginia 22041
USA

Dear Ms. Matson: EXPORT PERMIT APPLICATION XSNM-1627

To support your application on our behalf for the above export permit, I have attached a statement of AECL's high enriched uranium inventory as of 1981 April 30. I will also forward to you, once clearance has been received at CRNL, recent CRNL publications to update you on the status of the Low Enriched Uranium (LEU) Fuel Development Program at CRNL. This program's aim is to develop a low enriched uranium fuel to replace the high enriched fuel currently used in the NRX and NRU reactors. The target date for conversion is 1986, assuming a satisfactory replacement fuel can be found.

Please advise if any further information is required.

Yours sincerely

E.A.G. Larson

E.A.G. Larson - Acting Head
Nuclear Materials Control Branch

Attachment:

TABLE 1
SUMMARY OF CURRENT INVENTORY STATUS 1981 APRIL 30

Fuel Type	In Process			On Hand			In Core			Spent Fuel in Storage		
	kg U	w/o U-235	kg U-235	kg U	w/o U-235	kg U-235	kg U	w/o U-235	kg U-235	kg U	w/o U-235	kg U-235
1. NRX-NRU Fuel (incl. Mo-99 targets)	118.6274	93	110.3649	38.4513	93	34.5776	77.1393	93	71.8778	102.7027	(1)	95.561
2. SLOWPOKE Fuel	10.798	93	10.060	2.4090	93	2.2453	.9650	93	.8980	1.5779	(1)	1.461
3. Enr. U/Al FN Rods	10.9449	93	10.1959	--	--	--	.8679	--	.8083	2.4151	(1)	2.241
4. Enr. ThO ₂ ·UO ₂ FN Rods	--	--	--	1.7309	93	1.6104	--	93	--	9.5470	--	8.851
5. Pool Test Reactor Fuel	--	--	--	3.6170	93	3.3657	2.2023	--	2.0513	--	--	--
6. Exp. Fuel (Misc)	--	--	--	8.7496	93	8.1387	.1137	--	.1059	7.4709	(1)	6.93
7. LEU Fuel Development	.3897	93	.3604	--	--	--	--	--	--	--	--	--

(1) These are initial weights for these types of spent fuel in storage.

At present there is no NRX/NRU spent fuel being reprocessed at the US DOE Savannah River Plant. There is, however a credit to AECL of approximately 4 kg 93% enriched uranium following reprocessing and analysis of the last Batch (Batch 5) of NRX/NRU fuel at Savannah River. Batch 5 material had been shipped to Savannah River in 1980. The approximately 4 kg 93% enriched uranium will be returned to CRNL as Enr. U Metal and will be included in material to be shipped under export permit application XSNM 1627. At the present time, Enr. U is obtained exclusively from US DOE. No enriched uranium from other sources is in inventory.

*LEU - Low Enriched Uranium Fuel Development - Program to find alternative LEU fuel (less than 20 wt% U-235) for CRNL's NRX and NRU reactors.