FORM NRC-7
(7-78)
10 CFR 110

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY GAO
B-180225(R0362)

APPLICATION FOR LICENSE TO EXPORT NUCLEAR MATERIAL AND EQUIPMENT *(See Instructions on Reverse)*

1. APPLICANT'S USE →	a. DATE OF APPLICATION	b. APPLICANT'S REFERENCE	2. NRC USE →	a. LICENSE NO.	b. DOCKET NO.
	July 3, 1980	(NUK-333) 80-149/01		XSNM01699	11002121

3. APPLICANT'S NAME AND ADDRESS	RIS	4. SUPPLIER'S NAME AND ADDRESS *(Complete if applicant is not supplier of material)*	RIS
a. NAME: Transnuclear, Inc.		U.S.D.O.E.	
b. STREET ADDRESS: One Skyline Place, 5205 Leesburg Pike		a. NAME: c/o Goodyear Atomic Corp.	
c. CITY: Falls Church; STATE: VA; ZIP CODE: 22041		b. STREET ADDRESS: Route One	
d. TELEPHONE NUMBER *(Area Code – Number – Extension)*: (703) 820-2450		c. CITY: Piketon; STATE: OH; ZIP CODE: 45661	

5. FIRST SHIPMENT SCHEDULED	6. FINAL SHIPMENT SCHEDULED	7. APPLICANT'S CONTRACTUAL DELIVERY DATE	8. PROPOSED LICENSE EXPIRATION DATE	9. U.S. DEPARTMENT OF ENERGY CONTRACT NO. *(If Known)*
		To be determined	One year from date of issuance	To be assigned

10. ULTIMATE CONSIGNEE	RIS	11. ULTIMATE END USE *(Include plant or facility name)*
a. NAME: Commission of the European Communities (J.R.C.)		Will be used for the H.F.R. Reactor at Petten, Netherlands (See attached End Use Statement)
b. STREET ADDRESS: Petten Establishment, Postbus 2, 1755ZG		11a. EST. DATE OF FIRST USE
c. CITY – STATE – COUNTRY: Petten, The Netherlands		

12. INTERMEDIATE CONSIGNEE	RIS	13. INTERMEDIATE END USE
a. NAME: Nukem, GmbH		Conversion and fabrication of fuel elements (See attached End Use Statement)
b. STREET ADDRESS: D-6450 Hanau		13a. EST. DATE OF FIRST USE
c. CITY – STATE – COUNTRY: Federal Republic of Germany		

14. INTERMEDIATE CONSIGNEE	RIS	15. INTERMEDIATE END USE
a. NAME: Transnuklear, GmbH		Intermediate for transport purposes only.
b. STREET ADDRESS: 645 Hanau, Postfach 110030, Wolfgang-bei-Hanau Industriegelande,		15a. EST. DATE OF FIRST USE
c. CITY – STATE – COUNTRY: Hessen, West Germany		

16. NRC USE	17. DESCRIPTION *(Include chemical and physical form of nuclear material; give dollar value of nuclear equipment and components)*	18. MAX. ELEMENT WEIGHT	19. MAX. WT. %	20. MAX ISOTOPE WT.	21. UNIT
	Uranium in the form of uranium hexafluoride enriched to 93.30 percent U235.	20.050 Kg U	93.3%	18.707 KgU	Kg

22. COUNTRY OF ORIGIN.-SOURCE MATERIAL	23. COUNTRY OF ORIGIN-SNM WHERE ENRICHED OR PRODUCED	24. COUNTRIES WHICH ATTACH SAFEGUARDS *(If Known)*
	U.S.	EURATOM

25. ADDITIONAL INFORMATION *(Use separate sheet if necessary)*

8007290452

26. The applicant certifies that this application is prepared in conformity with Title 10, Code of Federal Regulations, and that all information in this application is correct to the best of his/her knowledge.

27. AUTHORIZED OFFICIAL	a. SIGNATURE	b. TITLE
		Assistant Manager-Wash. Operations

Commission of the European Communities

JOINT
RESEARCH
CENTRE

The Establishment Director

Petten Establishment

Postbus 2, 1755 ZG Petten, The Netherlands
Tel. (02246) 6442 - Telex 57211 REACP

TO WHOM IT MAY CONCERN

End use Statement

The undersigner certifies that the following material, i.e. 20.050 kgs of uranium (93,3% U-235 enriched) in the form of UF6 and containing 18.707 kgs of U-235 which will be furnished to us under a Short-Term Fixed Commitment Contract with US-DOE will be used for the reactor at Petten, Netherlands.

NUKEM GmbH, D 6450 Hanau, Federal Republic of Germany shall perform the conversion work for us. Manufacturing of the fuel elements shall be performed by NUKEM, Hanau.

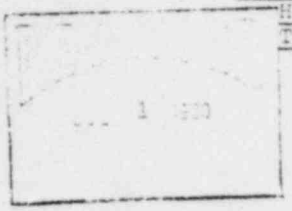
We authorize Transnuclear Inc., Falls Church, Va., to apply for the export license.

Petten, june 6, 1980

P.J. VAN WESTEN

COMMUNITIES.

CHECKLIST FOR USE IN REVIEW OF REQUESTS FOR HIGHLY ENRICHED URANIUM TO DETERMINE TECHNICAL AND ECONOMIC JUSTIFICATION



Date, June 5, 1980.

1. Name of facility : HIGH FLUX REACTOR PETTEN.
2. Quantity of Uranium Requested (Kgs) : 20,050 Kgs.
3. Enrichment in the Isotope U-235 (%) : 93 %.
4. Sale or Toll Enriching :
5. Current Core Loading (Kgs of U-235) : 10,9 Kg
6. Current Power Level (MWth) : 45 MW.
7. Criticality and Full Operating Power Dates and Power Rating (if request involves new facility) :
8. Name of Convertor and Fabricator of Fuel : NUKEM HANAU, FEDERAL REPUBLIC OF GERMANY.
9. Breakdown of Fuel Inventory (Kgs of U-235) : as per 15th april 1980.
   a). Amount of U-235 in Fabrication outside USA, Including Scrap (%) :

   Allowances : 49.981 gms. (NUKEM and CERCA plants)

   b). Amount of U-235 in Storage in Completed, Unirradiated Fuel Elements : 15.258 gms.

   c). Amount of U-235 in Core : 10.887 gms.

   d). Amount of U-235 in Spent Fuel Storage within the Community Including Chemical Reprocessing Plants, and the Reprocessing Schedule for such Material (1) In HFR pools:

   a) 13.941 gms. with partly Burn up.(U 84%

   b) 12.592 gms. with full Burn up.(U 74%)

   e). Amount of U-235 Lost and/or Consumed During Operation of Above Facility Consumption: averages 16 kgs/year(burn up rate 5
   Losses: averages 0,4 kgs/year (in fabrication plants)

   f). Amount of U-235 per Fuel Element :

   405 grams per fuel element and 280 gms.per control rod.

   g). Average Core Life : one cycle covers 28 operation days.

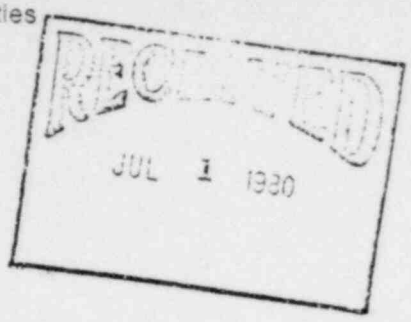
   h). Average Lead Time for Conversion and Fuel fabrication if Conversion and Fabrication is to be Done Abroad :

   approxemately 12 months.

   (1) Reprocessing schedule at savannah river plant:
   20 Kg TOT U/year (14, 4 Kg U_{235})

Commission of the European Communities

JOINT RESEARCH CENTRE



PETTEN ESTABLISHMENT
Postbus 2, 1755 ZG Petten, The Netherlands
Tel. (02246) 6442 - Telex 57211 REACP

ANNEX TO THE PETTEN URANIUM BREAKDOWN

as per 15th April 1980.

Last minute information:

N.R.C. just granted the below export licences:

- X S N M 1412 (18 Kg U_5)
- X S N M 1333 (18,7 Kg U_5)