

March 31, 1981



SECY-81-212

POLICY ISSUE
(Information)



For: The Commission

From: William J. Dircks
Executive Director for Operations

Subject: EXECUTIVE BRANCH RESPONSE ON PENDING EXPORT APPLICATIONS
FOR HEU TO THE NETHERLANDS, XSNM01495, XSNM01632 AND XSNM01699

Purpose: To inform the Commission of the above subject.

Discussion: Enclosed for the information of the Commission are copies of the Executive Branch response on three pending export license applications. Also enclosed are copies of the original applications and related correspondence. Copies of the Executive Branch comments have been placed in the Public Document Room. A Commission Action Paper will be forwarded soon.

Commissioners are requested to advise the staff of any particular issues or information which they can identify at this stage and which they wish included in the staff's analysis.

A handwritten signature in cursive script, appearing to read "W. Dircks".

William J. Dircks
Executive Director for Operations

Enclosures:
As stated

CONTACT:
B. L. Wright, IP (49-27984)

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DEPARTMENT OF STATE

Washington, D.C. 20520

BUREAU OF OCEANS AND INTERNATIONAL ENVIRONMENTAL AND SCIENTIFIC AFFAIRS

MAR 03 1991

Mr. James R. Shea
Director of International Programs
United States Nuclear Regulatory Commission
Room 6714 - MNBB
Bethesda, Maryland

XSNM 01495

1632

1699

HEU for HFR research reactor, Petten, Netherlands

Dear Mr. Shea:

This letter is in response to the letters from your office dated April 13, 1979, December 19, 1979 and July 14, 1980, requesting Executive Branch views as to whether issuance of export licenses in accordance with the applications hereinafter described would be inimical to the common defense and security of the United States and whether the proposed exports meet the applicable criteria of the Atomic Energy Act of 1954, as amended by the Nuclear Non-Proliferation Act of 1978:

NRC Nos. XSNM01495, -01632 and -01699 — Applications by Transnuclear Inc. for authorization to export to the Netherlands via the Federal Republic of Germany: -01495 — 18.707 kgs. U-235 in 20.050 kgs. U; -01632 — 14.965 kgs. U-235 in 16.04 kgs. U; and -01699 — 18.707 kgs. U-235 in 20.050 kgs. U for a total of 52.479 kgs. U-235 in 56.14 kgs. U in the form of uranium hexafluoride enriched to 93.3 percent for use in the H.F.R. research reactor at Petten, Netherlands. Conversion of the exported material to uranium metal and fabrication into fuel elements will be performed at NUKEM, GmbH, Hanau, FRG.

The proposed exports would take place pursuant to the Additional Agreement for Cooperation Between the United States and the European Atomic Energy Community (EURATOM) as confirmed in letters from the Delegation of the Commission of the European Communities, copies of which are enclosed. EURATOM has adhered to the provisions of its Agreement for Cooperation with the United States.

The Executive Branch has reviewed these applications and concluded that the requirements of the Atomic Energy Act, as amended by the Nuclear Non-Proliferation Act of 1978, have been met and that the proposed exports

and security of the United States. Issued December 8, 1978 for NRC and -01241. In view of Executive period specified in the first proviso of 1954, as amended, to March valid. There has been no other submission.

DUPLICATE DOCUMENT
Entire document previously entered into system under:
ANO 8104010765
No. of pages: 5

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

1. APPLICANT'S USE		a. DATE OF APPLICATION 4/11/79		b. APPLICANT'S REFERENCE NUK278 79121/01		2. NRC USE		a. LICENSE NO. XSNM01495		b. DOCKET NO. 11000582			
3. APPLICANT'S NAME AND ADDRESS a. NAME Transnuclear, Inc. b. STREET ADDRESS 5205 Leesburg Pike c. CITY Falls Church d. TELEPHONE NUMBER (Area Code - Number - Extension) 703-820-2450						4. SUPPLIER'S NAME AND ADDRESS (Complete if applicant is not supplier of material) RIS U.S.D.O.E. a. NAME c/o Goodyear Atomic Corp. b. STREET ADDRESS Route One c. CITY Piketon STATE VA ZIP CODE 22041 STATE OH ZIP CODE 45661							
5. FIRST SHIPMENT SCHEDULED		6. FINAL SHIPMENT SCHEDULED		7. APPLICANT'S CONTRACTUAL DELIVERY DATE to be determined		B. PROPOSED LICENSE EXPIRATION DATE one year from date of issuance		9. U.S. DEPARTMENT OF ENERGY CONTRACT NO. (If Known) to be assigned					
10. ULTIMATE CONSIGNEE a. NAME Commission of the European Communities (J.R.C.) b. STREET ADDRESS Petten Establishment, Postbus 2, 1755ZG c. CITY - STATE - COUNTRY Petten The Netherlands						11. ULTIMATE END USE (Include plant or facility name) Will be used for the community reactor at Petten, Netherlands (See attached End Use Statement) 11a. EST. DATE OF FIRST USE							
12. INTERMEDIATE CONSIGNEE a. NAME Nukem GmbH b. STREET ADDRESS D-6450 Hanau c. CITY - STATE - COUNTRY Federal Republic of Germany						13. INTERMEDIATE END USE Conversion and fabrication of fuel elements (See attached End Use Statement) 13a. EST. DATE OF FIRST USE							
14. INTERMEDIATE CONSIGNEE a. NAME Transnuklear GmbH b. STREET ADDRESS 645 Hanau, Postfach 110030 c. CITY - STATE - COUNTRY Hessen, W.Germany Wolfgang-bei-Hanau Industriegelände /						15. INTERMEDIATE END USE Intermediate for transport purposes only. 15a. EST. DATE OF FIRST USE							
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 KgU		93.3%		18.707 KgU		235 Kg	
22. COUNTRY OF ORIGIN - SOURCE MATERIAL						23. COUNTRY OF ORIGIN-SNM WHERE ENRICHED OR PRODUCED U.S.						24. COUNTRIES WHICH ATTACH SAFEGUARDS (If Known) INTERNAT'L SFGDRS	
25. ADDITIONAL INFORMATION (Use separate sheet if necessary) Dupe 7904250443													
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 <i>[Signature]</i>			b. TITLE Assistant Manager, Washington Oper.				



RECEIVED
11. APR 1979

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

1979 APR 11 AM 10 02

EXPORT/IMPORT
AND
INTERNATIONAL SFGRDS
TO WHOM IT MAY CONCERN

Our reference: FD/mh/83.530 Your reference:

Petten, 26th March 1979

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 community 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.

Mr. P.J. VAN WESTEN
(director)



WA

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

Date: 1st April 1979

1. Name of Facility: HIGH FLUX REACTOR / PETTEN
2. Quantity of Uranium Requested (Kgs): 20,050 KGS - FEDERAL RECORDS
3. Enrichment in the Isotope U-235 (%): 93%
4. Sale or Toll Enriching: _____
5. Current Core Loading (Kgs of U-235): 10,9 Kgs.
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 Converter and Fabricator of Fuel: NUKEM GmbH - HANAU
FEDERAL REPUBLIC OF GERMANY
9. Breakdown of Fuel Inventory (Kgs of U-235): as per 1st April 1979.
 - a. Amount of U-235 in Fabrication outside USA Including Scrap Allowances: 39 Kgs (NUKEM) + 5,5 Kgs (CERCA)
 - b. Amount of U-235 in Storage in Completed, Unirradiated Fuel Elements: 22,4 Kgs.
 - c. Amount of U-235 in Core: 10,9 Kgs
 - d. Amount of U-235 in Spent Fuel Storage within the Community Including Chemical Reprocessing Plants, and the Reprocessing Schedule for Such Material:
 - a. spent fuel in HFR pools: 10,3 Kgs partly BU + 21,5 Kgs full BU
 - b. TO RECALL: 41,7 Kgs 75% at DOE-Savannah River (after reprocessing).
 - e. Amount of U-235 Lost and/or Consumed During Operation of Above Facility:

consumption: averages 16 Kgs / year (burn-up rate 50%)
 losses: averages 0,4 Kgs / year (in fabrication plants)
 - f. Amount of U-235 per Fuel Element: 390 gms per fuel elem. and 270 gms per 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: APPROX. 12 months.
- a) Requested export licenses still awaiting approval.

TRANSNUCLEAR, INC.



April 11, 1979

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

Re: Export License Application: TN Ref: 79-121/01
(NUK-278)

Dear Mr. Moore:

Enclosed is an export license application for your handling on
the following:

20.050 Kg U, containing 18.707 Kg U235,
enriched to 93.30 percent U235.

Thanking you in advance for your help and cooperation.

Sincerely,

Vicki Matson
Assistant Manager
Washington Operations

Enclosure: Original E.U.S.
Original Reactor Checklist

VM/ak

RECEIVED
U.S. NRC

1979 APR 11 AM 10 02

EXPORT CONTROL
INTERNATIONAL SERVICES

Dupe 7905100417

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

1. APPLICANT'S USE		a. DATE OF APPLICATION December 17, 1979		b. APPLICANT'S REFERENCE (NUK-311) 79-337/01		2. NRC USE		a. LICENSE NO. XSNMO1632		b. DOCKET NO. 11000961	
3. APPLICANT'S NAME AND ADDRESS						4. SUPPLIER'S NAME AND ADDRESS					
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) 280-2450						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						11. ULTIMATE END USE					
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						13. INTERMEDIATE END USE					
12. INTERMEDIATE CONSIGNEE						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						15. INTERMEDIATE END USE					
14. INTERMEDIATE CONSIGNEE						15. INTERMEDIATE END USE					
a. NAME Transnuklear, GmbH						Intermediate for transport purposes only.					
b. STREET ADDRESS 645 Hanau, Postfach 110030, Wolfgang-bei-Hanau Industriegebiet,						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
13		Uranium in the form of uranium hexafluoride enriched to 93.30 percent U235.				16.04 Kg U		93.3%	14.965 Kg U		Kg
		Rec. 12-18-79 10:10 a.m. J.P.									
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)											
* Copy to TDS and ACC 12-18-79											
Duke 8001480170											
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. Operatic					



PETTEN INDUSTRIAL GROUP
Postbus 2 1755 ZG Petten The Netherlands
Tel 022-4616442 - Telex 8727 PTT NL

TO WHOM IT MAY CONCERN.
====

Our reference FD/ma/83.633 Your reference:

Petten, 19th November 1979.

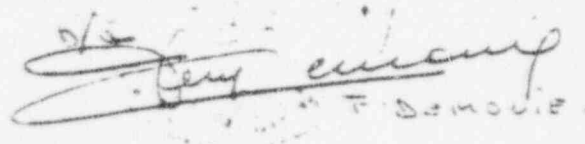
END USE STATEMENT.

The undersigner certifies that the following material, i.e. 16,04 kgs of uranium (93,3 % U-235 enriched) in the form of UF6 and containing 14.965 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 H.F.R.-reactor of the European Community located at Petten, the 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.

Mr. F.J. van Westen,
(Director)


F. J. van Westen

19th november 1979

HIGH FLUX REACTOR/PETTEN

1. Name of Reactor: PETTEN 16.04
2. Name of Fuel: U-235 93,3 %
3. Name of Fuel Element: U-235 10,9 Kgs
4. Name of Fuel Element (Type): U-235 45 MW
5. Name of Fuel Element (Type): U-235
6. Name of Fuel Element (Type): U-235
7. Name of Fuel Element (Type): U-235
8. Name of Converter and Fabricator of Fuel: NUKEM GmbH - HANAU

FEDERAL REPUBLIC OF GERMANY

9. Breakdown of Fuel Inventory (Kgs of U-235): as per 16th november 1979
- a. Amount of U-235 in fabrication outside USA including Germany (93,3 %)
Allowances: 40,7 Kgs (NUKEM) + 36,2 Kgs (CERCA)
- b. Amount of U-235 in elements in completion, unprocessed fuel elements
3,4 Kgs (93,3 %)
- c. Amount of U-235 in fuel 10,9 Kgs (86 %)
- d. Amount of U-235 in spent fuel elements within the Community including U.S.A.
a) spent fuel in HFR pools : 9,5 Kgs partly BU + 16,4 Kgs full BU
b) TO RECALL : 9,4 Kgs 75 % at DOE-Savannah River (After reprocessing)
- e. Amount of U-235 in spent fuel elements outside the Community including U.S.A.
- f. Amount of U-235 per Fuel Element: 405 gms per fuel elem. and 280 gms per
per rod. (alteration of the specificatio
- g. Average Core Life: _____
- h. Average Lead Time for Conversion and Fuel Fabrication of Converter, and its
operation to be done (Year):
averages 12 - 15 months

* Reenrichment can only occur after export licence granting by the U.S. Authorities.

TRANSNUCLEAR, INC.



December 17, 1979

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

Re: Export License Application
TN Ref: 79-337/01 (NUK-311)

Dear Mr. Moore:

Enclosed is an export license application for your handling on the following:

16.04 Kg U, containing 14.965 Kg U235,
enriched to 93.30 percent U235.

Thanking you in advance for your help and cooperation.

Sincerely,

Vicki Matson
Assistant Manager - Washington Operations

VM/lr

Enclosures: Original E.U.S.
Original Reactor Checklist

Dupe 80010E0144

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

1. APPLICANT'S USE		a. DATE OF APPLICATION July 3, 1980		b. APPLICANT'S REFERENCE (NUK-333) 80-149/01		2. NRC USE		a. LICENSE NO. XSNM01699		b. DOCKET NO. 11002121							
3. APPLICANT'S NAME AND ADDRESS						4. SUPPLIER'S NAME AND ADDRESS											
a. NAME Transnuclear, Inc.						a. NAME U.S.D.O.E.											
b. STREET ADDRESS One Skyline Place, 5205 Leesburg Pike						b. STREET ADDRESS Route One											
c. CITY Falls Church				STATE VA		ZIP CODE 22041		c. CITY Piketon									
STATE VA				ZIP CODE 22041		STATE OH		ZIP CODE 45661									
5. FIRST SHIPMENT SCHEDULED						6. FINAL SHIPMENT SCHEDULED		7. APPLICANT'S CONTRACTUAL DELIVERY DATE		8. PROPOSED LICENSE EXPIRATION DATE							
								To be determined		One year from date of issuance							
9. U.S. DEPARTMENT OF ENERGY CONTRACT NO. (If Known)						To be assigned											
10. ULTIMATE CONSIGNEE						11. ULTIMATE END USE											
a. NAME Commission of the European Communities (J.R.C.)						a. NAME (Include plant or facility name)											
b. STREET ADDRESS Petten Establishment, Postbus 2, 1755ZG						Will be used for the H.F.R. Reactor at Petten, Netherlands (See attached End Use Statement)											
c. CITY - STATE - COUNTRY Petten, The Netherlands						11a. EST. DATE OF FIRST USE											
12. INTERMEDIATE CONSIGNEE						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						15. INTERMEDIATE END USE											
14. INTERMEDIATE CONSIGNEE						15a. EST. DATE OF FIRST USE											
a. NAME Transnuklear, GmbH						Intermediate for transport purposes only.											
b. STREET ADDRESS 645 Hanau, Postfach 110030, Wolfgang-bei-Hanau Industriegelände,						15a. EST. DATE OF FIRST USE											
c. CITY - STATE - COUNTRY Hessen, West Germany																	
3. NRC USE		17. DESCRIPTION <i>(Include chemical and physical form of nuclear material, give dollar value of nuclear equipment and components)</i>				18. MAX. ELEMENT WEIGHT		19. MAX. WT. %		20. MAX. ISOTOPE WT.		21. UNIT					
103		Uranium in the form of uranium hexafluoride enriched to 93.30 percent U235.				20.050 Kg U		93.3%		18.707 KgU		Kg					
22. No. of pages: 4						24. COUNTRIES WHICH ATTACH SAFEGUARDS (If Known) EURATOM											
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.						25. No. of pages: 4											
27. AUTHORIZED OFFICIAL						a. SIGNATURE						b. TITLE Assistant Manager-Wash.Operations					

DUPLICATE DOCUMENT

Entire document previously entered into system under:

ANO 8007290452

No. of pages: 4

TRANSNUCLEAR, INC.



1980 JUL 7 PM 1 34

RECEIVED
U.S. NUCLEAR REGULATORY COMMISSION

July 3, 1980

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

Re: Export License Application
TN Ref: 80-149/01 (NUK-333)

Dear Mr. Moore:

Enclosed is an export license application for your handling on the following:

20.050 Kg U, containing 18.707 Kg U235,
enriched to 93.30 percent U235.

Thanking you in advance for your help and cooperation.

Sincerely,

Vicki Matson
Assistant Manager - Washington Operation

Enclosure: Original E.U.S.
Reactor Checklist

VM/jcw

Dupe 8007290446