

August 22, 1980

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SECY-80-393

INFORMATION REPORT

For: The Commissioners

From: James R. Shea, Director
Office of International Programs

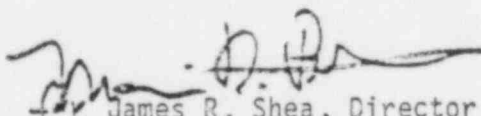
Thru: Acting Executive Director for Operations *JR for W.J.D.*

Subject: EXECUTIVE BRANCH RESPONSE ON PENDING EXPORT APPLICATION
XSNM01668, HEU FOR JAPAN

Purpose: To inform the Commission of the above subject.

Discussion: Attached for the information of the Commission are copies of the Executive Branch response on a pending export license application. Also attached is a copy of the original application. 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.



James R. Shea, Director AUG 21 1980
Office of International Programs

Attachments
As Stated

Contact:
B.L. Wright, IP (49-27984)
R.N. Moore, IP (49-27984)

DISTRIBUTION:

Commissioners
Commission Staff Offices
Acting Exec. Dir. for Ops.
Secretariat

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DEPARTMENT OF STATE

Washington, D.C. 20520

JAPAN
XSNM01668

OFFICE OF
INTERNATIONAL
PROGRAMS

BUREAU OF OCEANS AND INTERNATIONAL
ENVIRONMENTAL AND SCIENTIFIC AFFAIRS

AUG 13 1980

*XSNM01668
45% HEU
for JMITRC*

MEMORANDUM FOR JAMES R. SHEA
NUCLEAR REGULATORY COMMISSION

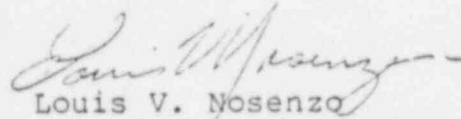
Enclosed is an Executive Branch review of a license application for export of medium-enriched uranium to Japan, via the Federal Republic of Germany for conversion and fabrication. In accordance with the Nuclear Non-Proliferation Act of 1978 (P.L. 95-242), the Executive Branch considered how the requirements of Section 126 a.(1) of the Atomic Energy Act, as amended, are met, including the specific criteria of Sections 127 and 128, as well as certain additional factors, envisaged by Section 126 a. (1).

The Executive Branch, on the basis of its review of the application, has concluded that the requirements of the Atomic Energy Act, as amended by P.L. 95-242, have been met and that the proposed export would not be inimical to the common defense and security of the United States, provided that the transport of the material proposed for export shall, for the international portion of shipment, be in accordance with a physical security plan which is acceptable to the concerned agencies.

A detailed analysis for Japan was submitted April 30, 1979 for NRC application No. XSNM01435. In regard to the export to the FRG, a EURATOM member state, as intermediate consignee, a detailed analysis for the FRG and the European Community was submitted November 27, 1979 for the application No. XU08427. A detailed analysis regarding physical security arrangements in EURATOM was submitted December 8, 1978 for application XSNM-1241. There has been no material change in circumstances regarding Japan since those submissions. In view of Executive Order 12193, extending the duration of the period specified in the first proviso to Section 126a(2) of the Atomic Energy Act of 1954, as amended, to March 10, 1981, the detailed analyses for EURATOM remain valid. There has been no other material change in circumstances since that submission.

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Moreover, Japan and EURATOM (for the FRG) have adhered to the provisions of their Agreements for Cooperation with the United States. Therefore the Executive Branch recommends issuance of the requested export license.



Louis V. Nosenzo
Deputy Assistant Secretary

Enclosures:
As stated

XSNM01668

Country: Japan

Transaction: The export of 10.053 kilograms of U-235 contained in 22.142 kilograms of uranium in the form of uranium hexafluoride enriched to 45.4 percent to be converted to uranium metal by NUKEM, GmbH, Hanau, FRG and fabricated into fuel elements for criticality experiments in the Japan Materials Testing Reactor Critical Facility (JMTRC).

Applicant: Transnuclear Incorporated

Date of Application: March 25, 1980

Quantity of Unirradiated HEU (kgs of U-235) Excluding Current Request

	<u>JMTRC</u>
On hand at reactor sites	13.6 kgs. -- 34 elements 90-93%
In fuel fabrication process	--
Totals	13.6 kgs.

Steps Taken to Determine the Possibility of Converting the Facility to Use of Fuel of Lower Enrichment

This export of MEU fuel is pursuant to the DOE high-density, lower-enrichment research reactor fuel program. The critical experiments in the JMTRC will provide important experimental data which can be applied to the conversion of the JMTR, JRR-2 and JRR-4 reactors to 45% enrichment fuel when this high density fuel is available. Based on independent studies at ANL and Japan Atomic Energy Research Institute (JAERI), the owner/operator of these reactors, JAERI is planning a 5-year program with the objective of a full-core demonstration with 45% fuel in the JMTR, JRR-2 and JRR-4 reactors in mid-1983. The ANL and JAERI also are planning a joint program to study the feasibility of using less than 20% enriched fuel in the three reactors.

EMBASSY OF JAPAN

2520 MASSACHUSETTS AVENUE, N.W.

WASHINGTON, D.C. 20008

(202) 234-2266

July 8, 1980

Colonel Vance H. Hudgins
Assistant Director for
Politico-Military Security Affairs
Division of International Security Affairs
Department of Energy
Washington, D.C. 20545

Dear Colonel Hudgins:

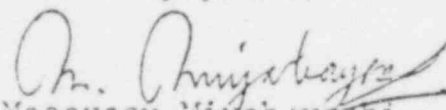
Concerning import of the special nuclear material for the facility noted below, this will confirm that the Government of Japan appointed Japan Atomic Energy Research Institute (JAERI) as an authorized person under the terms and conditions pursuant to Article VI of the Agreement for Cooperation between the Government of the United States of America and Government of Japan concerning Civil Uses of Atomic Energy which entered into force on July 10, 1968, amended by the Protocol on December 21, 1973.

Fuel for JMTRC of JAERI: 10.053 kgs of U-235
(45.40 % maximum enrichment) contained in 22.142 kgs of uranium

Further, it is confirmed that the transfer of the special nuclear material identified above will take place under all the terms and conditions of the Agreement for Cooperation between our Governments, and that the appointee(s) named above have been authorized to receive and possess the material by both Governments.

Also, the Government of Japan confirms that the safeguards and guarantees of the Agreement for Cooperation will always apply to this special nuclear material, except for that material subsequently retransferred with the written approval of the United States.

Sincerely yours,



Masayasu Miyabayashi
First Secretary (Scientific)

Ref: This is in reference to the case number of XSNM-1668 stated in your letter dated April 15, 1980.

DELEGATION OF THE COMMISSION OF THE EUROPEAN COMMUNITIES

EURATOM SUPPLY AGENCY

May 16, 1980

Mr. Vance H. Hudgins
Director, Division of Politico-
Military Security Affairs
Office of International Security Affairs
U.S. Department of Energy
Washington, D.C. 20585

Dear Mr. Hudgins:

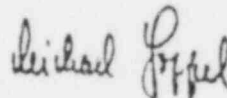
Subject: Transnuclear, Inc. application MISC 321 80-073/01
dated March 25, 1980 for Japan - XSNMol668

We certify that the material mentioned in this application, namely 10.053 kilograms of U_{235} contained in 22.142 kilograms of total uranium, and the transfer of this material will be subject to all terms and conditions of the Additional Agreement for Cooperation, dated July 25, 1960, as amended.

Further, we certify that Transnuklear, GmbH, Hanau, West Germany (for transport purposes only), and NUKEM, GmbH, Hanau, West Germany (for conversion and fabrication only), as intermediate consignees, are authorized by EURATOM to receive and possess this material pursuant to the aforementioned Agreement for Cooperation.

The material (in the form of UF_6) will be converted into U metal and fabricated into fuel elements by NUKEM for use in Japan.

Sincerely,



M. Goppel

ajs

cc: ✓ Mr. Robin De LaBarre, U.S. Department of State
Ms. Betty Wright, U.S. Nuclear Regulatory Commission
Ms. Vicki Matson, Transnuclear, Inc.

N.B.: Our reference AGF/02/NUKEM/2

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

1. APPLICANT'S USE		a. DATE OF APPLICATION 3/25/80		b. APPLICANT'S REFERENCE MISC 321 80-073/01		2. NRC USE		a. LICENSE NO. XSNM01668		b. DOCKET NO. 11002002	
3. APPLICANT'S NAME AND ADDRESS a. NAME Transnuclear, Incorporated d. STREET ADDRESS 5205 Leesburg Pike, One Skyline Place c. CITY Falls Church STATE VA ZIP CODE 22041 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., Route One b. STREET ADDRESS Piketon, Ohio or Union Carbide Corp. c. CITY Oak Ridge STATE TN ZIP CODE 37830					
5. FIRST SHIPMENT SCHEDULED September, 1980		6. FINAL SHIPMENT SCHEDULED same as item 5		7. APPLICANT'S CONTRACTUAL DELIVERY DATE September 30, 1980		8. PROPOSED LICENSE EXPIRATION DATE August 31, 1982		9. U.S. DEPARTMENT OF ENERGY CONTRACT NO. (If Known) A.F.C. contract to be determined			
10. ULTIMATE CONSIGNEE a. NAME Japan Atomic Energy Research Institute b. STREET ADDRESS 2-2, Uchisaiwai-cho 2-Chome, Chiyoda c. CITY - STATE - COUNTRY Tokyo, Japan						11. ULTIMATE END USE (Include plant or facility name) Critical Experiments at Japan Materials Testing Reactor Critical Facility (JMTRC) in Japan Atomic Energy Research Institute Oarai Research Establishment 11a. EST. DATE OF FIRST USE April 1, 1981					
12. INTERMEDIATE CONSIGNEE a. NAME NUKEM GmbH b. STREET ADDRESS D-6450 Hanau II c. CITY - STATE - COUNTRY Federal Republic of Germany						13. INTERMEDIATE END USE Conversion of enriched UF6 into uranium metal and fabrication of uranium metal into fuel elements 13a. EST. DATE OF FIRST USE October 1, 1980					
14. INTERMEDIATE CONSIGNEE a. NAME Transnuklear, GmbH b. STREET ADDRESS 645 Hanau II, Postfach 110030 Wolfgang-bei-Hanau Industriegelände c. CITY - STATE - COUNTRY Hessen, West Germany						15. INTERMEDIATE END USE Intermediate Consignee 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 (UF6) enriched to a maximum of 45.40 percent U235				22.142		45.40	10.053	kg	
22. COUNTRY OF ORIGIN - SOURCE MATERIAL						23. COUNTRY OF ORIGIN - WHERE ENRICHED OR PRODUCED U.S.A.			24. COUNTRIES WHICH ATTACH SAFEGUARDS (If Known) EURATOM		
25. ADDITIONAL INFORMATION (Use separate sheet if necessary) Dup 1p - 80040885						EXPORT/IMPORT AND INTERNAT'L SFGROD					
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 Washington Operations		

TRANSNUCLEAR, INC.

RECEIVED
U.S. NRC



March 25, 1980

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

Re: Export License Applications: TN Ref: 80-073/01 (MISC-321)
80-074/01 (MISC-322)

Dear Mr. Moore:

Enclosed are two (2) Export License Applications for your handling on the following:

22.142 Kg U as UF₆, containing 10.053 Kg U235 enriched to a maximum of 45.4 percent U235 *XSNM01668*

40.480 Kg U as metal, containing 37.768 Kg U235 enriched to a maximum of 93.3 percent U235 *XSNM01669*

Thanking you in advance for your help and cooperation.

Sincerely,

Vicki Matson
Vicki Matson
Assistant Manager
Washington Operations

Enclosures: Two (2) License Applications
Two (2) E.U.S.
Two (2) Reactor Checklists
Two (2) Test Reactor Directories 26 APR 01

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VM/ma



Japan Atomic Energy Research Institute

2-2, Uchisaiwai-cho 2-chome, Chiyoda, Tokyo 100

(Fukoku Seimei Building)

Telephone: (03) 503-6111

Telex: J24396

Cable: JAERI NIPPON TOKYO

Our ref.:

To whom it may concern:

END USE STATEMENT

The undersigners certify that a quantity of

22.142 kgs of uranium (45.40 % U-235 enriched)

in form of uranium hexafluoride (UF₆) containing 10.053 kgs of U-235 which will be furnished to us under the Adjustable Fixed-Commitment Enrichment Contract with USDOE will be used by us for the critical experiments at Japan Materials Testing Reactor Critical Facility (JMTRC) in our Oarai Research Establishment, Oarai, Ibaragi, Japan.

The enriched UF₆ shall be converted into uranium metal by NUKEM GmbH, D-6450 Hanau 11, Federal Republic of Germany and fabricated into fuel elements also by NUKEM.

We authorize Nissho-Iwai American Corp., 1211 Avenue of the Americas, New York, U.S.A. and/or Transnuclear, Inc., 5205 Leesburg Pike, Falls Church, Virginia, U.S.A. to apply for the export license.

JAPAN ATOMIC ENERGY RESEARCH INSTITUTE

Shouichi Takahashi

Shouichi Takahashi

Head, Division of Contracts

DUPLICATE DOCUMENT

Entire document previously
entered into system under:

ANO 8004080085

No. of pages: 8

Research Establishment

Oarai Research Establishment

Gunma-ken 370-12
2731-46-1211

Oarai-machi, Ibaraki-ken 311-13
Telephone: (0292) 571-4111