

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

PDR

1. DATE OF APPLICATION AND APPLICANT'S REFERENCE NO. 10/04/82 NUK-420		2. NRC USE		3. LICENSE NO. XSNM01988		4. CHECKET NO. 11002977	
5. APPLICANT'S NAME AND ADDRESS NAME: Transnuclear, Inc. STREET ADDRESS: One Skyline Place, 5205 Leesburg Pike CITY: Falls Church STATE: VA ZIP CODE: 22041 TELEPHONE NUMBER (Area Code - Number - Extension): (703) 820-2450				6. SUPPLIER'S NAME AND ADDRESS NAME: U.S.D.O.E. STREET ADDRESS: c/o Goodyear Atomic Corp., Route One, Piketon, OH or Union Carbide Corp. K-25 Plant, Oak Ridge, TN STATE: ZIP CODE:			
7. FIRST SHIPMENT SCHEDULED upon issuance of license	8. FINAL SHIPMENT SCHEDULED N/A	9. APPLICANT'S CONTRACTUAL DELIVERY DATE to be determined		10. PROPOSED LICENSE EXPIRATION DATE three years from date of issuance		11. U.S. DEPARTMENT OF ENERGY CONTRACT NO. (If Known) none assigned to date	
12. ULTIMATE CONSIGNEE NAME: RISO-Research Establishment RISO STREET ADDRESS: Postbox 49, DF-4000 CITY - STATE - COUNTRY: Roskilde, Denmark				13. ULTIMATE END USE (Include plant or facility name) Fuel elements will be used for insertion into the Reactor DR3 at Riso (see attached End Use Statement)			
14. INTERMEDIATE CONSIGNEE NAME: Nukem, GmbH, D-645 Hanau, Fed. Rep. of Germany STREET ADDRESS: and Elsinore Shipyard CITY - STATE - COUNTRY: RISO, Denmark				15. INTERMEDIATE END USE 11a. EST. DATE OF FIRST USE Nukem shall perform conversion of UF6 into U metal. Elsinore Shipyard shall manufacture fuel elements at their workshop at RISO. (See attached End Use Statement).			
16. INTERMEDIATE CONSIGNEE NAME: Transnuclear, GmbH STREET ADDRESS: 645 Hanau, Postfach 110030 Wolfgang-bei-Hanau Industriegelande CITY - STATE - COUNTRY: Hessen, W. Germany				17. INTERMEDIATE END USE 12a. EST. DATE OF FIRST USE intermediate for transport purposes only.			
18. NRC USE	17. DESCRIPTION (Include chemical and physical form of nuclear material, give dollar value of nuclear equipment and components)			19. MAX. ELEMENT WEIGHT	20. MAX. WT. %	21. MAX. ISOTOPE WT.	22. UNIT
	Uranium in the form of uranium hexafluoride enriched to a maximum of 93.3 percent			15.038 Kg U	93.3%	14.030 U235	Kgs.
23. COUNTRY OF ORIGIN - SOURCE MATERIAL		24. COUNTRY OF ORIGIN - SNM WHERE ENRICHED OR PRODUCED U.S.A.		25. COUNTRIES WHICH ATTACH SAFEGUARDS (If Known) EURATOM			

26. ADDITIONAL INFORMATION (Use separate sheet if necessary)

27. The applicant certifies that this application is prepared in accordance with Title 10, Code of Federal Regulations, and that all information in this application is correct to the best of the applicant's knowledge.

28. AUTHORIZED OFFICIAL: [Signature] Traffic Coordinator, Transnuclear, Inc.



Date 1982.09.09
Your ref.
Our ref. HF/al
Dept. Reactor DR 3

To whom it may concern

End Use Statement

The undersigned certifies that quantity of 15.038 kgs of uranium (93.3 percent U-235 enriched) in the form of UF_6 and containing 14.030 kgs of U-235, which will be furnished to us under a Short-Term, Fixed-Commitment Contract with US-DOE will be used by us as follows:

NUKEM GmbH, D-6450 Hanau, Federal Republic of Germany shall perform conversion of the UF_6 into uranium metal. After conversion, Elsinore Shipyard shall manufacture fuel elements at their workshop at Riso. The fuel elements will be used for insertion into the Reactor DR 3 at Riso. We authorize Transnuclear Inc., Falls Church, Virginia to apply for the US export licence.

Date: 9/29/82

Signature: [Handwritten Signature]

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

Date 13/9 1982.

1. Name of Facility: Reactor DR3, Riso, Denmark.
2. Quantity of Uranium Requested (Kgs): 15 kg.
3. Enrichment in the Isotope U-235 (%): 93 %.
4. Sale or Toll Enriching: Toll Enrichment.
5. Current Core Loading (Kgs of U-235): Average 2,6 kg.
6. Current Power Level (MWth): 10 MW.
7. Criticality and Full Operating Power Dates and Power Rating (if request involves new facility): _____
8. Name of Converter and Fabricator of Fuel: Converter: Nukem
Fabricator: Elsinore Shipyard (Workshop at Riso site)
9. Breakdown of Fuel Inventory (Kgs of U-235):
 - a. Amount of U-235 in Fabrication outside USA Including Scrap Allowances: 21,654 kg.
 - b. Amount of U-235 in Storage in Completed, Unirradiated Fuel Elements: 12,015 kg.
 - c. Amount of U-235 in Core: 2,456 kg.
 - d. Amount of U-235 in Spent Fuel Storage within the Community Including Chemical Reprocessing Plants, and the Reprocessing Schedule for Such Material: 4,819 kg.
 - e. Amount of U-235 Lost and/or Consumed During Operation of Above Facility: 79,788 kg.
 - f. Amount of U-235 per Fuel Element: 150 g.
 - g. Average Core Life: 4 month
 - h. Average Lead Time for Conversion and Fuel Fabrication if Conversion and Fabrication is to be Done Abroad: 1 month