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. |
|---|---|---|---|---|---|
| | February 29, 1980 | Nuk 317, 80-033/01 | | XSNMo1661 | 11001066 |

| 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)* |
|---|---|---|---|---|
| as soon as license issued | | To be determined | One year from date of issuance | none assigned to date |

| 10. ULTIMATE CONSIGNEE | RIS | 11. ULTIMATE END USE *(Include plant or facility name)* |
|---|---|---|
| a. NAME: KFA-Kernforschungsanlage Juelich GmbH<br>b. STREET ADDRESS: Gesellschaft mit Geschrankter Haftung<br>c. CITY – STATE – COUNTRY: Postfach 3640, 7500 Karlsruhe 1, F.R.G. | | -11.3 Kg U at 93.3 percent U235 will be used for the manufacture of fuel elements for the reactor FRJ-1 (MERLIN) at Kernforschungsanlag Julich GmbH (KFA) (continued Page 2)<br>11a. EST. DATE OF FIRST USE |
| **12. INTERMEDIATE CONSIGNEE** | **RIS** | **13. INTERMEDIATE END USE** |
| a. NAME: Nukem, GmbH, D-6450 Hanau, Fed. Rep. of Germany<br>b. STREET ADDRESS: and Hobeq mbH, D-6450 Hanau, Federal Republic<br>c. CITY – STATE – COUNTRY: of Germany | | Nukem, GmbH, Federal Republic of Germany shall perform the conversion of 14.3 Kg U at 93.3 percent U235 as well as the manufacture of the fuel elements for the FRJ-1 Reactor (11.3 Kg U) (continued Page 2)<br>13a. EST. DATE OF FIRST USE |
| **14. INTERMEDIATE CONSIGNEE** | **RIS** | **15. INTERMEDIATE END USE** |
| a. NAME: Transnuklear, GmbH<br>b. STREET ADDRESS: 645 Hanau, Postfach 110030 Wolfgang-bei-Hanau Industriegelande<br>c. CITY – STATE – COUNTRY: Hessen, West Germany | | Intermediate for transport purposes only<br>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 a maximum of 93.3 percent.<br><br>*Copy to PDR and ACC 3-4-80.* | 14.3 Kg U | 93.3% | 13.342 Kg U235 | Kgs |

| 22. COUNTRY OF ORIGIN – SOURCE MATERIAL | 23. COUNTRY OF ORIGIN – SNM WHERE ENRICHED OR PRODUCED | 24. COUNTRIES WHICH ATTACH SAFEGUARDS *(If Known)* |
|---|---|---|
| 1980 MAR 5 PM | U.S. | EURATOM |

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

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 |
|---|---|---|
| | | Asst. Mgr., Wash. Opers. Transnuclear, Inc. |

8003280330

APPLICATION FOR LICENSE TO EXPORT NUCLEAR

MATERIAL AND EQUIPMENT

#11. ULTIMATE END USE (cont.)

-3.0 Kg U at 93.3 percent U235 will be used for the manufacture of irradiation-test-samples in the frame of "Phase II of the Project HBK, in irradiation experiments (Project High Temperature Reactor Fuel Cycle)". These irradiation test samples will be inserted into the following reactors:

- BR-2, Mol, Belgium
- HFR, Petten Netherlands
- R-2, Studsvik, Sweden
- FRJ-2, Julich, West Germany
- Siloe, Grenoble, France

(see attached End Use Statement)

#13 INTERMEDIATE END USE (cont.)

Hobeg GmbH, Federal Republic of Germany shall perform the manufacturing of the irradiation-test-samples (3.0 Kg U)

(see attached End Use Statement)

KERNFORSCHUNGSANLAGE JÜLICH
GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG

To whom it may concern

End-Use-Statement

The undersigners certify that the quantity of

14,3 kgs of uranium (93.3 per cent U-235 enriched) in form of $UF_6$ and containing 13.342 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:

- 11,3 kgs of u (93.3 per cent) shall be used for the manufacture of fuel elements for the reactor FRJ-1 (MERLIN) at Kernforschungsanlage Jülich GmbH (KFA)
- 3 kgs of u (93.3 per cent) shall be used for the manufacture of irradiation-test-samples in the frame of "Phase II of the Project HBK in irradiation experiments (Project High Temperature Reactor Fuel Cycle)". These irradiation-test-samples shall be inserted into the following reactors:
  BR-2 at Mol, Belgium,
  HFR at Petten, Netherlands,
  R-2 at Studsvik, Sweden,
  FRJ-2 at Jülich, Germany,
  Siloe at Grenoble, France.





NUKEM GmbH, D-6450 Hanau, Federal Republic of Germany shall perform the conversion work of the 14,3 kgs of u (93.3 % U-235) and the manufacturing of the fuel elements for the reactor FRJ-1.

HOBEG mbH, D-6450 Hanau, Federal Republic of Germany shall perform the manufacturing of the irradiation-test-samples.

We authorize Transnuclear Inc., Falls Church, Virginia/USA to apply for the export license.

Julich, February 12, 1980.

Kernforschungsanlage Jülich
Gesellschaft mit beschränkter Haftung

(Plattenteich) (Wegmann)