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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 11, 1998

Mr. Robin DeLaBarre
Office of Nuclear Energy Affairs
Bureau of Political-Military Affairs
U.S. Department of State
Washington, DC 20520

Dear Mr. DeLaBarre:

Enclosed is an application from Siemens Power Corporation requesting a license for the export of a Dry Conversion Process Facility to Russia for conversion of uranium hexafluoride (UF6) to uranium dioxide powder (UO2).

Before taking action on this request, we would appreciate your views in accordance with established procedures and from the overall perspective of the Executive Branch, as to whether the requested export meets the applicable criteria in the Atomic Energy Act of 1954, as amended.

Sincerely,

Ronald D. Hauber

Ronald D. Hauber, Director
Division of Non-Proliferation, Exports
and Multilateral Relations
Office of International Programs

Enclosure: Export Lic. Appl. dtd 1/12/98
(XCOM1108)

cc w/encl: T. Lee, DOE
C. Riendeau, DOE
J. Chuchla, DOC
M. Johnson, DOD
M. Rosenthal, ACDA

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Ig-1-1 Imp. Ap.

NRC FORM 7 (3-94) 10 CFR 110 — U.S. NUCLEAR REGULATORY COMMISSION

# APPLICATION FOR LICENSE TO EXPORT NUCLEAR MATERIAL AND EQUIPMENT

(See Instructions on Reverse)

APPROVED BY OMB: NO. 3150-0027
EXPIRES: 3-31-97

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 1.7 HOURS. THIS MANDATORY SUBMITTAL IS REVIEWED TO ENSURE THAT THE APPLICABLE STATUTORY, REGULATORY, AND POLICY CONSIDERATIONS ARE SATISFIED. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0027), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

| 1. APPLICANT'S USE ——> | a. DATE OF APPLICATION | b. APPLICANT'S REFERENCE | 2. NRC USE ——> | a. DOCKET NUMBER | b. LICENSE NUMBER |
|---|---|---|---|---|---|
| | 1/12/98 | | | 11005018 | XCOM 1108 |

**3. APPLICANT'S NAME AND ADDRESS** RIS

a. NAME: Siemens Power Corporation

b. STREET ADDRESS (Facility Site): 2101 Horn Rapids Road

c. CITY: Richland | d. STATE: WA | e. ZIP CODE: 99352

f. TELEPHONE NUMBER (Area Code - Number - Extension): 509-375-8380

**4. SUPPLIER'S NAME AND ADDRESS** (Complete if applicant is not supplier of material)

a. NAME: See Attachment A

b. STREET ADDRESS:

c. CITY | d. STATE | e. ZIP CODE

| 6. 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) |
|---|---|---|---|---|
| May 1998 | | September 2001 | Sept. 2008 | |

**10. ULTIMATE FOREIGN CONSIGNEE** RIS

a. NAME: See Attachment B

b. STREET ADDRESS (Facility Site):

c. CITY | d. COUNTRY

**11. ULTIMATE END USE** (Include plant or facility name) | USE CODE

Conversion of UF6 to UO2 using the Dry Conversion Process

11a. DATE REQUIRED

**12. INTERMEDIATE FOREIGN CONSIGNEE** RIS

a. NAME: Advanced Nuclear Fuels GmbH

b. STREET ADDRESS: Pollersand-Industrepark, SUD. Postfach 1465

c. CITY: 49784 Lingen/EMS | d. COUNTRY: Germany

**13. INTERMEDIATE END USE** | USE CODE

Gather and stage the equipment and supplies necessary to construct the Dry Conversion Process Facility

13a. DATE REQUIRED

**14. INTERMEDIATE FOREIGN CONSIGNEE** RIS

a. NAME:

b. STREET ADDRESS (Facility Site):

c. CITY | d. COUNTRY

**15. INTERMEDIATE END USE** | USE CODE

15a. DATE REQUIRED

| 16. COM CODE | 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 WEIGHT | 21. UNIT |
|---|---|---|---|---|---|
| | Supply Dry Conversion Process and Plant Equipment including Powder Preparation System to convert uranium hexaflouride to uranium dioxide powder (UF6 to UO2), with a maximum enrichment of 5.0 w/o U235. (See equipment list Attachment B) | | | | |

| 22. COUNTRY OF ORIGIN – SOURCE MATERIAL | 23. COUNTRY OF ORIGIN – SNM WHERE ENRICHED OR PRODUCED | 24. COUNTRIES WHICH ATTACH SAFEGUARDS (If known) |
|---|---|---|
| NA | NA | NA |

**25. ADDITIONAL INFORMATION ON CONSIGNEES, END USES, AND PRODUCT DESCRIPTION** (Use separate sheet if necessary)

Rec 2/9/98
10:01 am

**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 |
|---|---|---|
| | W. L. Ross | Senior Scientist-Safeguards |

NRC FORM 7 (3-94)

4/03/30000 ENF

**Attachment A**

**NRC Form 7 - Application for License to Export Nuclear Material and Equipment**

| 4. Supplier's Name and Address | Description |
|---|---|
| Huntington Steel & Supply<br>100-T 3rd Ave<br>Huntington, WV 25701-1214 | Inconel Steel Plates |
| ABB Air Preheater, Inc.<br>650 Warrenville Road<br>Lisle, Illinois 60532 | Rotary Calciner |
| Trent, Inc.<br>201 Leverington Avenue<br>Philadelphia, Pennsylvania 19127 | Electrically Heated Jackets |
| Indeeco<br>425 Hanley Industrial Court<br>St. Louis, Missouri 63144 | Gas Super Heaters |
| Custom Sensors and Technology<br>7534 Watson Road<br>St. Louis, Missouri 63119 | Uranium Analyzers |
| Panametrics<br>221-T Crescent St.<br>Waltham, MA 02154 | Moisture Analyzers |
| Canberra<br>3610-T Holland-Sylvania Rd.<br>Toledo, OH 43615 | $UF_6$ Enrichment Assay |
| EIT (Exidyne Instrumentation Technologies, Inc.)<br>251 Welsh Pool Road<br>Exton, Pennsylvania 19341 | HF Detectors |
| Siemens Power Corporation<br>2101 Horn Rapids Road<br>Richland, WA 99352 | Management Services and Miscellaneous Parts and Equipment |

**Attachment B**

**NRC Form 7 - Application for License to Export Nuclear Material and Equipment**

10. Ultimate Foreign Consignee

Consignee:
Mashinostroitelny
Zavod Elektrostal

Buyer:
State Enterprise Foreign Trade
Company (Energia)

144001,
12, K. Marx St.
Moscow Region, Elektrostal
Russian Federation
Organized under the laws of the Russian Federation

17. Description

Major Components of the Dry Conversion Process:

1. Calciner
2. Reactor construction material and heating jackets
3. Gas superheater
4. Uranium powder drums
5. Uranium analyzer
6. Hot boxes for three autoclaves
7. Prefabricated flow control panels for reactor flow control, pressure control, calciner control, moisture control and stabilizer control
8. Filter blow back systems
9. Caustic scrubber system
10. Powder receiving station
11. Moisture Analyzer
12. $UF_6$ Enrichment Analyzer
13. HF Detectors
14. Other associated hardware and sub-components necessary to complete the Dry Conversion process as contracted, plus replacement parts

Department of Energy
Washington, DC 20585

July 27, 1994

Mr. David G. McAlees
Senior Vice President
Siemens Power Corp.
105 108th Avenue NE
P.O. Box 90777
Bellevue, WA 98009-0777

Dear Mr. McAlees:

I am pleased to inform you that the Secretary has approved Siemens Power Corporation's March 16, 1994, application pursuant to 10 CFR Part 810 to transfer to Russia technology for the conversion of uranium hexafluoride to uranium dioxide.

This authorization, a copy of which is enclosed, is subject to U. S. Government receipt of Russian Government assurances that:

- Technology transferred under the authorization will be used only for the fabrication of nuclear fuel for civilian nuclear power reactors and will not be used for any military purpose.

- Retransfer to another country of technology transferred under the authorization will be subject to prior U.S. Government consent.

The Department of State has been requested to obtain the Russian Government assurances.

Further, in order to exercise the authorization, Siemens Power must obtain any necessary Department of Commerce export licenses in connection with the proposed transfer.

In accord with section 810.10 (d), a copy of this determination will be made available at the Department's Public Reading Room in about 30 days unless Siemens Power objects and shows that "public disclosure will cause substantial harm to its competitive position." I also call your attention to the reporting requirements imposed by section 810.13(a) on the recipient of a specific authorization.

If you have any questions regarding this matter, please contact Mr. Zander Hollander of my staff. His telephone is (202) 586-2125.

Sincerely,

Trisha Dedik
Director
Export Control Operations Division
Office of Arms Control
and Nonproliferation

Enclosure

Washington, DC 20585

DETERMINATION PURSUANT TO DEPARTMENT OF ENERGY REGULATIONS
10 CFR PART 810 ON SIEMENS REQUEST TO TRANSFER
URANIUM HEXAFLUORIDE CONVERSION TECHNOLOGY TO RUSSIA (94RS001)

Having considered the factors listed in 10 CFR Part 810.10, the Department of Energy staff recommendation of approval, the Department of State concurrence, and the consultations with the Departments of Defense and Commerce, the Arms Control and Disarmament Agency, and the Nuclear Regulatory Commission, I have determined that it will not be inimical to the interest of the United States for Siemens Power Corporation to transfer to Russia technology for the conversion of uranium hexafluoride to uranium dioxide.

I, therefore, authorize the activities described in the Siemens Power Corporation March 16, 1994, letter of application subject to U.S. Government receipt of Russian Government assurances that:

- Technology transferred under the authorization will be used only for the fabrication of nuclear fuel for civilian nuclear power reactors and will not be used for any military purpose.

- Retransfer to another country of technology transferred under the authorization will be subject to prior U.S. Government consent.

Hazel R. O'Leary

July 26, 1994
Date

# SIEMENS



January 30, 1998
DLN:98:003

U.S. Nuclear Regulatory Commission
Attn.: Mr. Ronald D. Hauber, Assistant Director
Exports, Security, and Safety Cooperation
Office of International Programs
Mail Stop 3H-5
Washington, DC 20555

Dear Mr. Hauber:

Enclosed is a request for issuance of a license to export Dry Conversion process and plant equipment for end use by Mashinostroitelny Zavod, Elektrostal, Moscow Region in the Russian Federation. Some or all of the equipment may be shipped directly to Russia or to the intermediate consignee, Advanced Nuclear Fuels GmbH in Lingen, Germany for preparation and staging. Shipments may originate from our plant in Richland, Washington or from various supplier facilities located within the United States.

For information, Advanced Nuclear Fuels, GmbH has applied to the German government for an export license to ship materials, for this project, originating in the Euratom community to Russia. That application number is, DE/2642624 and was submitted December 12, 1997. In addition a letter from DOE giving SPC approval to transfer the Dry Conversion technology is attached. The Russian Government assurances were received by the U.S. Department of State on November 4, 1994.

Check number 151057 for $7,900, of which $5,000 is to cover the fee for this application is enclosed. The remaining $2,900 is for SPC's export application to send SNM to Kansai Electric Power Company in Japan.

Should you have any questions please feel free to give me a call.

Very truly yours,

D. L. Noss

D. L. Noss
Senior Scientist, Safeguards

pg

**Siemens Power Corporation**

Nuclear Division Headquarters
Engineering & Manufacturing

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