



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

September 1, 1998

Mr. L. J. Maas
Manager, Regulatory Compliance
Siemens Power Corporation
2101 Horn Rapids Road
P.O. Box 130
Richland, Washington 99352-0130

SUBJECT: UF₆ CYLINDER RELOCATION, ADDITIONAL FILTER PRESSES, AND THE
SALE OF AMMONIUM HYDROXIDE (TAC NO. L31084)

Dear Mr. Maas:

In accordance with your application dated May 29, 1998, and pursuant to Part 70 of Title 10 of the Code of Federal Regulations, Materials License SNM-1227 is hereby amended to reflect the correct location of UF₆ cylinder storage, adding filter presses to Table I-4.1, and the sale of ammonium hydroxide for fertilizer. Safety Condition S-1 has been revised to include the date of May 29, 1998. All other conditions of the license shall remain the same.

Enclosed are copies of Materials License SNM-1227 and the Safety Evaluation Report, which includes the Categorical Exclusion determination. If you have any questions of this matter, please contact Mr. Paul Lain, the Project Manager for your facility, at (301) 415-6317.

Sincerely,


Charles W. Emeigh, Acting Chief
Licensing Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

Docket 70-1257
License SNM-1227
Amendment 13

Enclosures: 1. Materials License SNM-1227
2. Safety Evaluation Report

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Original signed by:
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Distribution: w/ encl. (Control No. 9GOS) [COMPLETED]

Docket 70-1227 PUBLIC NRC File Center Region IV PMDA
FCLB R/F FCSS R/F NMSS R/F WBritz, RIV SHO
[g:\amd_13.pw] * See previous correspondence

OFC	FCLB	FCLB	FCLB	FCLB	FCLB	FCLB	FCLB
NAME	PLain	HFelsher	SCotto	DDrake	PShea	MCaffrey	E
DATE	8/24/98	8/24/98	8/1/98	8/1/98	8/14/98	8/1/98	

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

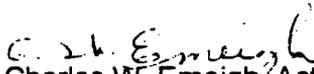
<p style="text-align: center;">Licensee</p> <p>1. Siemens Power Corporation</p> <p>2. 2101 Horn Rapids Road Richland, WA 99352-0130</p>	<p>3. License Number SNM-1227 Amendment 13</p> <hr/> <p>4. Expiration Date November 30, 2001</p> <hr/> <p>5. Docket No. 70-1257 Reference No.</p>
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6. Byproduct Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum amount that Licensee May Possess at Any One Time Under This License
A. Uranium enriched in U-235	A. Any	A. 350 g U-235
B. Uranium enriched up to 5.00 wt % U-235	B. Uranium compounds	B. 25,000 kg U-235
C. Plutonium	C. Sealed sources and standards	C. 1 mg Pu and not more than 1.5 millicuries
D. Plutonium	D. PuO ₂ -UO ₂ stored waste	D. 500 g Pu

9. Authorized place of use: The licensee's existing facilities at Richland, Washington.
10. This license shall be deemed to contain two sections: Safety Conditions and Safeguards Conditions. These sections are part of the license, and the licensee is subject to compliance with all listed conditions in each section.

FOR THE NUCLEAR REGULATORY COMMISSION

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 By: Charles W. Emeigh, Acting Chief
 Division of Fuel Cycle Safety
 and Safeguards
 Washington, DC 20555

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

SNM-1227

Docket or Reference Number

70-1257

Amendment No. 13

SAFETY CONDITIONS

- S-1 Authorized use: For use in accordance with the statements, representations, and conditions of Part I of the licensee's application dated October 28, 1996, and supplements dated February 21, March 12, March 18, May 1, June 9, July 30, August 4, August 13, August 28, January 28, and September 29, 1997; and February 6, April 23, and May 29, 1998.
- S-2 The licensee shall maintain and execute the response measures in the Emergency Plan, Revision 21, dated April 28, 1997; or as further revised by the licensee consistent with 10 CFR 70.32(i).
- S-3 Notwithstanding Section 6.5 of Part I of the license dated October 28, 1996, new uranium hexafluoride (UF₆) cylinders purchased by SPC shall conform to ANSI N14.1 or to the tinning requirements specified in NRC's Certificate of Compliance No. 9196 for Model UX-30 packages.
- i. The licensee shall not process alcohol rags through the Modular Extraction/Recovery Facility.
- j. Before processing in the Solids Processing Facility (SPF) filtrate tank, the licensee shall assure through periodic sampling of the lagoons and independent sampling of the SPF feed tank, which is before the SPF filtrate tank, that the enrichment is not more than 4.0 wt.% U-235.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number
SNM-1227

Docket or Reference Number
70-1257

Amendment No. 13

SAFEGUARDS CONDITIONS

Section 1.0 - Material Control & Accounting

SG-1.1 The licensee shall follow Sections 0.0, 1.0, and 6.0 (with all pages designated as Revision 28 and dated June 1996), and Sections 2.0 through 5.0, and 7.0 through 8.0 (with all pages designated as Revision 30 and dated February 1997) of its Fundamental Nuclear Material Control Plan, titled "Nuclear Materials Safeguards Procedures Description for the Fuels Fabrication Plants, EMF-12(P)." Revisions to this Plan shall be made in accordance with, and pursuant to, the provisions of either 10 CFR 70.32(c) or 70.34.

SG-1.2 Notwithstanding Chapter 0.0 of the Plan identified by Condition SG-1.1, which commits to meeting all Affirmation Statements contained in NUREG-1065 (Rev. 1), the licensee is hereby granted a limited exception from the first Affirmation contained in Section 4.3 of NUREG-1065 in that receipt of returned fuel rods and/or fuel assemblies (that were originally fabricated at the licensee's facility and whose SNM encapsulation has not been compromised) need not be measured if the original fabrication values are booked as receipt values.

SG-1.3 A special shutdown, cleanout physical inventory shall be initiated whenever:

(i) a loss/theft indication involving an SNM quantity equal to or greater than the licensee's Detection Quantity (as defined in Section 8.2.7 of the Plan identified by Condition SG-1.1) cannot otherwise be resolved within 60 days of the initial recognition of such indication, and

(ii) a Regulatory ID (as defined in Section 5.13 of the Plan identified in Condition SG-1.1) equals or exceeds the licensee's Detection Threshold Quantity (as defined in Section 8.2.7 of the Plan identified by Condition SG-1.1).

Whenever a special inventory is required by either (i) or (ii) above, all unsealed and unencapsulated SNM items that are on hand at the time that such a situation is determined to exist, shall be measured (even if previously measured) for SNM content.

SG-1.4 Operations involving special nuclear materials which are not described in the Plan identified in Condition SG-1.1 shall not be initiated until an appropriate safeguards plan has been approved by the appropriate safeguards licensing authority of the Nuclear Regulatory Commission.

Section 2.0 - Physical Protection For SNM of Low Strategic Significance

SG-2.1 The licensee shall follow the physical protection plan entitled "Siemens Power Corporation Physical Protection Plan for Special Nuclear Material of Low Strategic Significance," Revision 15, dated January 1998 (letter dated January 22, 1998); and as it may be further revised in accordance with the provisions of 10 CFR 70.32(e).

SG-2.2 The licensee shall ensure that the UO₂ Building is locked when unoccupied.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

SNM-1227

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Section 3.0 - International Safeguards

- SG-3.1 The licensee shall follow, as applicable, Codes 2 through 7 of Transitional Facility Attachment No. 1a dated May 1, 1986, to the US/IAEA Safeguards Agreement.
- SG-3.2 Notwithstanding the requirements of 10 CFR 75.11(d) to submit facility data on forms supplied by the Commission (including IAEA DIQs), the licensee may submit required data in the Advanced Nuclear Fuels Corporation license paper format.



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 1, 1998

DOCKET NO: 70-1257

LICENSEE: Siemens Power Corporation (SPC)
Richland, Washington

SUBJECT: SAFETY EVALUATION REPORT: UF₆ CYLINDER RELOCATION,
ADDITIONAL FILTER PASSES, AND THE SALE OF AMMONIUM
HYDROXIDE

BACKGROUND

By letter dated May 29, 1998, the licensee requested an amendment to Materials License SNM-1227 to reflect the correct location of UF₆ cylinder storage, adding criticality control information for Solids Processing Facility (SPF) filter presses to Table I-4.1, and the commercial sale of ammonium hydroxide. The NRC staff has reviewed and approved these changes in previous Safety Evaluation Reports (SER) dated November 15, 1996, and May 12, 1998. SPC has submitted this amendment to properly reflect current practices in Part I of its license.

DISCUSSION

UF₆ Cylinder Storage Location

SPC built a new UF₆ Receiving and Storage Facility away from the UO₂ Building to facilitate the safe storage and movement of UF₆ cylinders on-site. SPC added the facility description to Section 10 of the license during renewal and consequently the NRC approved the renewal by SER dated November 15, 1996. Inadvertently, SPC did not update a reference to the storage location in Section 1 of the license during the renewal. This change is administrative in nature, amends the license to properly reflect current SPC practice, and will have no significant effect on public health and safety or the environment.

Solids Processing Facility Filter Presses

By letter dated July 30, 1996, and supplement dated January 28, 1997, the licensee requested authorization to operate filter presses as part of the Solids Processing Facility (SPF). The NRC reviewed the criticality safety controls for the SPF filter presses and approved SPF operations in license amendment No. 12 (SER dated May 12, 1998). However, SPC did not provide all the necessary changes to the criticality control information for these filter presses in Table I-4.1. This amendment properly reflects approved SPC practices and will have no significant effect on public health and safety or the environment.

Release of Ammonium Hydroxide

By letter dated August 10, 1995, the licensee requested authorization to release ammonium hydroxide containing up to 0.05 ppm of uranium for the manufacture of ammonia fertilizer and

NH₄OH

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other industrial uses. The NRC reviewed and approved the licensee's request during the renewal of Materials License SNM-1227, SER dated November 15, 1996. As part of this review, the staff considered the environmental consequences of the release of ammonium hydroxide and determined that the release of this material will have no significant effect on public health and safety or the environment.

Apparently, the authorization was not included in Part I of renewed License SNM-1227 due to an oversight by the licensee. Therefore, in the submittal dated May 29, 1998, the licensee requested that the authorization to release ammonium hydroxide be included in Part I of the license, subject to the following conditions:

1. A representative sample of each batch of ammonium hydroxide product shall be obtained and analyzed for uranium;
2. A batch shall be no larger than 40,000 liters; and
3. The uranium concentration in the ammonium hydroxide shall not exceed 0.05 ppm.

These conditions are consistent with the original NRC approval of this activity and with the conditions governing the authorized release of other uranium-bearing materials from the SPC facility for unrestricted use. In addition, the batch size of 40,000 liters is within current average storage volumes of this type of material at the facility. Therefore, the staff has determined that inclusion of the authorization to release ammonium hydroxide in Part I of License SNM-1227 is acceptable.

CATEGORICAL EXCLUSION

These changes are considered procedural in nature. The staff has determined that the proposed changes do not adversely affect public health and safety or the environment and are categorically excluded from the requirement to prepare a site-specific environmental assessment. Therefore, in accordance with 10 CFR 51.22(c)(11), neither an environmental assessment nor an environmental impact statement is warranted for this action.

CONCLUSION

The proposed changes improve Part I of the license to reflect the facility and will increase the effectiveness of the NRC staff to monitor SPC. The changes will not adversely affect worker or public health and safety or the environment. Therefore, the staff recommends approval of this amendment request.

The Region IV inspection staff has no objection to the proposed licensing action.

PRINCIPAL CONTRIBUTORS

Susan Chotoo
David Drake
Harry Felsher
Paul Lain