

11-08-99
R2/E26

Mr. Robert A. Williams
Safeguards Coordinator
Westinghouse Electric Company
Commercial Nuclear Fuel Division
Drawer R
Columbia, South Carolina 29250

SUBJECT: PHYSICAL SECURITY PLAN REV. 27 AND OTHER (TAC NO. L31241)

Dear Mr. Williams:

In accordance with your application dated September 1, 1999, and pursuant to Part 70 to Title 10 of the Code of Federal Regulations, Materials License SNM 1107 is hereby amended to include Revision 27 to your "Physical Security Plan" dated September 1, 1999. Accordingly, Safeguards Condition SG-2.1 has been revised and reads as follows:

SG-2.1 The licensee shall follow the physical protection plan entitled, "Physical Security Plan," Revision 27 dated September 1, 1999 (letter dated September 1, 1999); and as it may be further revised in accordance with the provisions of 10 CFR 73.32(e).

In addition, Safety Condition 11 required that Westinghouse meet all financial assurance requirements within 30 days of the closing of ownership transfer of assets from Amendment 18 dated March 18, 1999. By letter dated March 30, 1999, and correction letter dated May 18, 1999, Westinghouse met the requirements of Safety Condition 11. Accordingly, Safety Condition 11 has been revised to read as follows:

11. Deleted by Amendment 20, November 1999.

Also, the asterisk and paragraph at the bottom of page 2 of the Materials License required that Westinghouse provide the date of the closing of ownership transfer of assets to the NRC Office Director by letter or facsimile not later than 30 days after Amendment 18. By letter dated March 23, 1999, Westinghouse met the requirements of the asterisk and paragraph by stating that the closing occurred on March 22, 1999. Accordingly, the asterisk and paragraph have been deleted.

All other conditions of this license shall remain the same.

Enclosed are copies of the revised Materials License SNM-1107 and the Safeguards Evaluation Report, which includes the Categorical Exclusion determination.

Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions 2
FOIA-2006-0026

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Mr. Robert A. Williams

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We have determined that the enclosures to your September 1, 1999, letter contain information of the type specified in 10 CFR 2.790(d). Accordingly, pursuant to Section 2.790(d)(1), such information is deemed to be commercial or financial within the meaning of 10 CFR 9.17(a)(4) and shall be withheld from public disclosure subject to the provisions of 10 CFR 9.23.

If you have any questions, regarding this licensing matter, please contact the Project Manager, Harry Felsher, of my staff at (301) 415-5521 or by e-mail at HDF@NRC.GOV.

Sincerely,

Theodore S. Sherr, Chief
Licensing and International
Safeguards Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

Docket 70-1151
License SNM-1107
Amendment 20

Enclosures: 1. Materials License SNM-1107
2. Safeguards Evaluation Report

Mr. Robert A. Williams

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We have determined that the enclosures to your September 1, 1999, letter contain information of the type specified in 10 CFR 2.790(d). Accordingly, pursuant to Section 2.790(d)(1), such information is deemed to be commercial or financial within the meaning of 10 CFR 9.17(a)(4) and shall be withheld from public disclosure subject to the provisions of 10 CFR 9.23.

If you have any questions, regarding this licensing matter, please contact the Project Manager, Harry Felsher, of my staff at (301) 415-5521 or by e-mail at HDF@NRC.GOV.

Sincerely,

Theodore S. Sherr, Chief
Licensing and International
Safeguards Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

Docket 70-1151
License SNM-1107
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- Enclosures: 1. Materials License SNM-1107
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DOCKET: 70-1151

LICENSEE: Westinghouse Electric Company, Columbia, SC

SUBJECT: PHYSICAL SECURITY PLAN AND OTHER (TAC NO. L31241)

BACKGROUND

By application dated September 1, 1999, the Westinghouse Electric Company, Columbia, SC, submitted changes to their physical security plan under the provisions of 10 CFR 70.32(e).

DISCUSSION

This revision falls within the provisions of 10 CFR 70.32(e) and does not decrease security effectiveness. Revision 27 reflects current organization names, updates drawing, and documents the annual review of their security plan.

Accordingly, the following license condition has been modified as stated:

SG-2.1 The licensee shall follow the physical protection plan entitled "Physical Security Plan" Revision 27 dated September 1, 1999 (letter dated September 1, 1999); and as it may be further revised in accordance with the provisions of 10 CFR 73.32(e).

In addition, by letter dated March 30, 1999, and correction letter dated May 18, 1999, the licensee met the requirements of Safety Condition 11. Accordingly, Safety Condition 11 has been modified as stated:

11. Deleted by Amendment 20, dated November 1999.

Also, by letter dated March 23, 1999, the licensee met the requirements of the asterisk and paragraph on page 2 of the Materials License. Accordingly, the asterisk and paragraph have been deleted.

The Region has no objections to this licensing action.

CATEGORICAL EXCLUSION

The staff has determined that the proposed activities involve safeguards plans and material accountability, which are categorically excluded from the requirements to prepare a specific environmental assessment. Therefore, in accordance with 10 CFR 51.22(c)(12), neither an environmental assessment nor an environmental impact statement is warranted for this action.

CONCLUSION/RECOMMENDATION

Based on the discussion, the staff concludes that the proposed changes will have no adverse affect on the public health and safety or the environment. Therefore, approval of the amendment application is recommended.

PRINCIPAL CONTRIBUTORS

Andrew D. Rayland
Harry D. Felsner

NRC FORM 374

U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE

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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.

Licensee	
1. Westinghouse Electric Company LLC (WELCO)	3. License Number SNM-1107, Amendment 20
2. P.O. Box 355 Pittsburgh, Pennsylvania 15230-0355	4. Expiration Date November 30, 2005
	5. Docket No. 70-1151 Reference No.

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. U-235

A. Any

A. []

B. U-235

B. Any, except metal, enriched to not more than 5.0 w/o

B. []

Ex. 2

C. U-233

C. Any

C. []

D. Pu-238, Pu-239

D. Sealed sources

D. []

E. Plutonium

E. Feedstock with transuranics and fission products

E. []

9. Authorized place of use: The licensee's existing facilities at Columbia, South Carolina.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

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Docket or Reference Number

70-1151

Amendment No. 20

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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.
11. Deleted by Amendment 20, dated November 1999.

FOR THE NUCLEAR REGULATORY COMMISSION

Date: _____

By: Theodore S. Sherr, Chief
Division of Fuel Cycle Safety
and Safeguards
Washington, DC 20555

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SAFETY CONDITIONS

S-1. Authorized use: For use in accordance with statements, representations, and conditions in the license application dated April 30, 1995, and supplements dated August 4 and 25, and September 25, 1995; November 8, and August 30, 1996; July 14 and 25, November 17, 1997; and name change amendment December 22, 1997; and April 3, June 30, July 13, July 23, October 21, and October 30, 1998; and February 12, 1999; and name change amendment September 28, 1998; January 18, and February 22, 1999.

S-2 Criticality Safety Evaluations (CSEs) and Criticality Safety Analyses (CSAs) will define the interim criticality safety bases utilized throughout the CFFF. All CSEs/CSAs will be upgraded and/or completed in accordance with all applicable commitments in Chapter 6.0 of the License Application and all other regulatory requirements. Summaries of the CSEs/CSAs (in the format of License Annexes) will be submitted to NRC for review and approval. Proprietary versions containing Sections 1 and 5 of the CSEs/CSAs for UN Tanks, ADU Conversion, URRS Dissolver, and Powder Blending (ADU) will also be provided at the same time as the License Annexes for those systems. All completed CSEs/CSAs will be independently peer-reviewed in accordance with all applicable regulatory requirements and related procedures. Configuration control data packages for ongoing changes to facility structures, systems and components, and controls will be filed with their respective CSEs/CSAs to provide a substantially complete "living" framework for system Integrated Safety Assessments (ISAs) that will ultimately become the Final CFFF Design Safety Basis described in Chapter 4.0 of the License Application. CFFF will provide the License Annexes to the NRC using the following schedule:

<u>COMPLETION DATE (Calendar Year)</u>	<u>PROCESS SYSTEM</u>
2Q98	UN Tanks*
3Q98	ADU Conversion* Rods (ADU & IFBA) UF6 Cylinder Washing
4Q98	ADU Pelleting URRS Dissolver* Powder Blending (ADU)*
1Q99	Low-Level Waste Processing Hoods & Containment
2Q99	URRS Scrap Processing Solvent Extraction URRS Waste Treatment
3Q99	Final Assembly Storage IFBA (Excluding Rods) Laboratories

* Will be done as ISAs ("Final Design Safety Basis")

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- S-3. The licensee shall maintain and execute the response measures in the Site Emergency Plan, dated April 30, 1990, and revisions dated March 31, and September 30, 1992; March 25, August 15, and September 30, 1994; January 9, February 17, August 17, and October 23, 1995; or as further revised by the licensee consistent with 10 CFR 70.32(i).
- S-4. Deleted by Amendment 12, April 1998.

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CORRECTED COPY**SAFEGUARDS CONDITIONS****SECTION 1.0 -- MATERIAL CONTROL AND ACCOUNTING**

- SG-1.1 The licensee shall follow pages i through xviii and Chapters 1.0 through 9.0 of its "Fundamental Nuclear Material Control Plan for the Columbia Fuel Fabrication Facility," which has been partially revised as indicated by Revision 29 (dated December 01, 1998). Any further revision to this Plan shall be made only in accordance with, and pursuant to, either 10 CFR 70.32(c) or 70.34.
- SG-1.2 Operations involving special nuclear material which are not referenced in the Plan identified in Condition SG-1.1 shall not be initiated until an appropriate safeguards plan has been approved by the Nuclear Regulatory Commission.
- SG-1.3 In lieu of the requirements contained in 10 CFR 74.13(a)(1) and (a)(2) to use the Forms DOE/NRC-742 and 742C, the licensee may use computer generated forms provided all information required by the latest printed instructions for completing the particular form is included.
- SG-1.4 In lieu of the requirements contained in CFR 70.54 and 74.15 to use the DOE/NRC Form-741, the licensee may use computer generated forms provided all information required by the latest printed instructions for completing the particular form is included.
- SG-1.5 Deleted Per Amendment 3, August 1996 Commitment now contained in licensee's Fundamental Nuclear Material Control Plan.
- SG-1.6 Notwithstanding the requirements of the FNMC Plan identified in License Condition SG-1.1, the licensee may use (1) a single standard for measurement control (including daily control limit monitoring and bias corrections) for any linear-response tube or rod scales, in any initially demonstrated to be linear over its range of use within the discrimination of the scale by calculating a bias at four levels across the range of use and demonstrating that the four results are not statistically different, and (2) that the continued linearity of response of the scales is verified by monthly calibration against at least four traceable standards covering the range of use.
- SG-1.7 Notwithstanding the requirements contained in Sections 5.2.2 and 5.2.3 of the licensee's Fundamental Nuclear Material Control Plan, the licensee is exempted from physical inventory requirements relative to the material identified in Condition S-4; provided the conditions and commitments contained in the licensee's November 30, 1993, letter (identification # NRC-93-036) are satisfied.
- SG-1.8 Notwithstanding the requirement of Section 6.2.1(a).5 of the licensee's Fundamental Nuclear Material Control Plan to unpackage and perform an item count upon receipt of special nuclear material, the licensee is exempted from such requirement relative to the material identified in Condition S-4; provided the conditions and commitments contained in the licensee's November 30, 1993, letter (identification # NRC-93-036) are satisfied.

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SG-1.9 Notwithstanding the requirement of Section II.A.7, block U, of NUREG/BR-0006, which is incorporated via 10 CFR 74.15, to complete receiver's measurements of scrap receipts (following recovery processing) within 60 days of receipt, the licensee shall not be subject to any time limit relative to recovering and measuring received UF₆ heels when the block U action code (of DOE/NRC Form 741) is used to book such receipts.

SG-1.10 With respect to Section 5.1.4 (b) of the Plan identified by Condition SG-1.1, "*allowed number*" within the phrase "*allowed number of defects*" is hereby specified as being:

(i) up to two defects when each item within a batch of items has an assigned value equal to or less than 50 grams U-235;

(ii) no more than one defect when each item within a batch of items has an assigned value of less than 500 grams U-235, but one or more items has an assigned value in excess of 50 grams U-235; and

(iii) zero defect when any item within a batch of items contains 500 or more grams U-235.

SG-1.11 Notwithstanding the first paragraph of Section 7.1 of the Plan identified by Condition SG-1.1, the licensee shall conduct shipper-receiver comparisons on all SNM materials received (regardless of whether booked on the basis of receiver's or shipper's values), except for those materials identified in Section 7.1 of NUREG-1065 (Rev. 2) as being exempted from shipper-receiver comparisons.

SECTION 2.0 -- PHYSICAL PROTECTION OF SNM OF LOW STRATEGIC SIGNIFICANCE

SG-2.1 The licensee shall follow the physical protection plan entitled, "Physical Security Plan," Revision 27 dated September 1, 1999 (letter dated September 1, 1999); and as it may be further revised in accordance with the provisions of 10 CFR 73.32(e).

SECTION 3.0 -- INTERNATIONAL SAFEGUARDS

SG-3.1 The licensee shall follow Codes 1 through 6 of Transitional Facility Attachment No. 5A dated August 31, 1988, to the US/IAEA Safeguards Agreement. Such Transitional Facility Attachment shall be interpreted in accordance with Conditions SG-3.1.1 through SG-3.1.7.

SG-3.1.1 With respect to Transitional Facility Attachment Code 2:

The reference design information is that dated by the licensee on October 14, 1985. "Information on the Facility" also includes other facility information submitted via Concise Notes in accordance with 10 CFR 75.11(c).

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CORRECTED COPY**SG-3.1.2 With respect to Transitional Facility Attachment Code 2.2:**

Substantive changes to the information provided in the Columbia Plant Design Information Questionnaire (DIQ) means those changes requiring amendment of the Transitional Facility Attachment. Such changes shall be provided by letter to the NRC Office of Nuclear Material Safety and Safeguards at least 70-days in advance of implementation.

Non-substantive changes to the information in the DIQ means those changes not requiring amendment of the Transitional Facility Attachment. Such changes shall be provided by Concise Note (From DOE/NRC-740M) within 30 days of receiving notification from the NRC that the facility has been identified under Article 39(b) of the US/IAEA Safeguards Agreement.

The types of modifications with respect to which information is required under 10 CFR 75.11, (to be submitted in advance), are those items stated in Code 2.2, specifically:

- (a) "Any change in the purpose of type of facility" means:

Any deviation from the described activities involving special nuclear material and any change to the maximum enrichment and/or quantities of U-235 currently authorized by License No. SNM-1107, and/or as described in Paragraph 5 of the Design Information Questionnaire (DIQ) dated October 14, 1985, or as modified in accordance with 10 CFR 75.11(c). Included also is any deviation from the described special nuclear material (SNM) production activities described in paragraph 6 of the DIQ dated October 14, 1985, or as modified in accordance with 10 CFR 75.11(c).

- (b) "Any changes in the layout of the facility which affects safeguards implementation of the provisions of the Protocol" means:

Any change in the existing facility and/or site layout or new addition affecting any activity involving SNM as described in Paragraphs 10 and 11 (per the referenced attachments of the DIQ dated October 14, 1985, or as modified in accordance with 10 CFR 75.11(c). Included also is any modification to, or deviation from, the data provided in Paragraphs 13 and 14 (per the referenced attachments) of the DIQ dated October 14, 1985, or as modified in accordance with 10 CFR 75.11(c).

- (c) "Any change that makes the selected Key Measurement Points (KMPs) (as described in Code 3.1.2) inadequate for the Agency's accounting purpose" means:

Any change to the KMPs as described in Code 3.1.2 of the Westinghouse-Columbia Transitional Facility Attachment to the US/IAEA Safeguards Agreement, or as modified in accordance with 10 CFR 75.11(c), that results in any KMP alteration affecting the purpose of KMPs as stipulated by 10 CFR 75.4(m).

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- (d) "Any change in the physical inventory procedures that would adversely affect the inventory taking for the Agency's accounting purposes" means:

Any change to the description data contained in Paragraph 34 (per the referenced attachments) of the DIQ dated October 14, 1985, or as modified in accordance with 10 CFR 75.11(c), that would not permit the Agency to conclude an SNM material balance for the Westinghouse-Columbia facility.

- (e) "Introduction of a significantly less accurate analytical method for accounting purposes" means:

Any recalculation of the "Relative Errors-Random and Systematic" as listed in Attachment 36.2 referenced in Paragraph 36 of the DIQ dated October 14, 1985, or as modified in accordance with 10 CFR 75.11(c), that results in the estimates of the random and systematic errors being affected by a factor of two or more.

- (f) "Decrease in the frequency of calibrating measuring equipment if it significantly decreases the accuracy of the materials accounting system" means:

Any change that results in the estimates of the systematic error being affected by a factor of two or more.

- (g) "Any change in the statistical procedures used to combine individual measurement error estimates to obtain limits of error for shipper/receiver (S/R) differences and material unaccounted for (MUF)" means:

Any deviation from (or modification of) the equations and/or calculations outlined in Attachments 37.1, 37.2, and 37.3 referenced in Paragraph 37 of the DIQ dated October 14, 1985, or as modified in accordance with 10 CFR 75.11(c).

SG-3.1.3 With respect to Transitional Facility Attachment Code 3.1.2:

KMP* -- This is a KMP in which all shipper receiver differences (SRDs) must be recorded and reported even if numerically zero. SRDs are computed and reported by the Nuclear Materials Management and Safeguards System upon receipt of the receiver's measurement results.

SG-3.1.4 With respect to Transitional Facility Attachment Code 4:

The licensee shall use the material composition codes documented in the DIQ dated October 14, 1985, and as modified by Concise Notes. Further, notwithstanding any other requirements for advance notification and/or reporting, the licensee may add or delete composition codes for nuclear material routinely processed and on inventory at CFFF immediately upon telephone notification to the Office of Nuclear Material Safety and Safeguards. Follow-up documentation, in the form of a Concise Note accompanied by appropriate changes to Table 1 of Attachment 34.8 to the DIQ shall be submitted within three regular workdays of the telephone notification.

SG-3.1.5 With respect to Transitional Facility Attachment Code 4.1:

Measured discards should be reported as an SN (Shipment to non-safeguards facility) when shipped off-site to an authorized burial ground. (The IAEA system will not process measured discards as loss/disposal (LDs) when they are shipped off-site).

SG-3.1.6 With respect to Transitional Facility Attachment Code 5.1.1:

For inventory changes, time of recording, "upon" means: No later than the next regular workday (Monday through Friday).

For those occasions where natural or depleted uranium is inadvertently enriched above 0.711 percent through commingling with residual enriched uranium in process equipment, the resultant product shall be considered as being produced through a blending operation and the material category change shall be recorded upon obtaining measurement confirmation that a material category change has occurred.

SG-3.1.7 With respect to Transitional Facility Attachment Code 6.2.2:

For Concise Notes describing the anticipated operational programme, "anticipated operational programme" means: Anticipated physical inventory schedule.