

R2/E50

Mr. Robert A. Williams
Licensing Project Manager
Westinghouse Electric Company, LLC
Commercial Nuclear Fuel Division
Drawer R
Columbia, SC 29250

July 18, 2001

**SUBJECT: (TAC NO. L31509) - WESTINGHOUSE ELECTRIC COMPANY, LLC.,
AMENDMENT 29 - LICENSE APPLICATION REVISION NO. 19 - NUCLEAR
ABSORBER MIXING/ERBIA BLENDING**

Dear Mr. Williams:

In accordance with your license dated April 30, 1990, and application dated April 30, 2001, (Westinghouse Electric Company (WEC) Document No. NRC-01-18) along with supplements dated January 12, March 27, and April 30, 2001, (WEC Document No. NRC-01-17) and pursuant to Part 70 to Title 10 of the Code of Federal Regulations, Materials License SNM-1107 is hereby amended to approve Revision 19 of WEC's License Application for mixing nuclear absorber. Accordingly, Safety Condition S-1 has been revised to include the dates January 12, March 27, and April 30, 2001. In addition, three new Safety Conditions S-6 through S-8 have been added and read as follows:

- S-6. For Amendment - 29, any "additional safety margin" information that the licensee provided to the NRC (see Table XII) to demonstrate an adequate safety basis, shall be identified and have sufficient management measures to ensure that the margin being relied upon is maintained.
- S-7 In accordance with the information provided to the NRC, the licensee shall maintain the following "additional safety margin" for Moderation control in the mixer by: (1) maintaining a low amount of moisture during the normal process; (2) having a low amount of poreformer added (i.e., only need up to 1 kg poreformer) to the mixer during the normal process; (3) allowing only 45% of the NCS k-effective poreformer limit available to the operator at any one time; and (4) allowing only one polypak of poreformer to be scanned/dumped into one mix of the blender.
- S-8. Prior to the introduction of Special Nuclear Material into the nuclear absorber mixer or erbia blender,
 - A. the licensee shall demonstrate to the NRC that the NCS computer code functions correctly at low H/X ratios, specifically, that the k-effective limits described in the submittal for the mixer are accurate.

(1) ChAMPS shall be fully tested (i.e., verification and validation) and (2) the Auto Dump Interlock shall be fully tested for erbia/uranium powder blending (i.e., similar to the functional verification and testing being performed for the current ADU Auto Dump Interlock).

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

I-13

- C. the licensee shall verify; (1) the availability and reliability of necessary administrative and engineered fire protection controls identified as safety significant controls (SSC's) or items relied on for safety (IROFS), and, (2) fire protection design features and controls important for defense-in-depth for fire protection and the acceptable risks for operations.

All other conditions of this license shall remain the same.

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

If you have any questions regarding this matter, please contact Don Stout of my staff at (301) 415-5269 or by e-mail at DES1@NRC.GOV.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Sincerely,

/RA/MLeach

Melvyn N. Leach, Acting Chief
Fuel Cycle Licensing Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards

Docket 70-1151
License SNM-1107
Amendment 29

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

- C. the licensee shall verify; (1) the availability and reliability of necessary administrative and engineered fire protection controls identified as safety significant controls (SSC's) or items relied on for safety (IROFS), and, (2) fire protection design features and controls important for defense-in-depth for fire protection and the acceptable risks for operations.

All other conditions of this license shall remain the same.

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

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Sincerely,

/RA/MLeach

Melvyn N. Leach, Acting Chief
 Fuel Cycle Licensing Branch
 Division of Fuel Cycle Safety and Safeguards
 Office of Nuclear Material Safety and Safeguards

Docket 70-1151
 License SNM-1107
 Amendment 29

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OFC	FCLB		FCLB		SPB		FCLB		FCLB	
NAME	DStout *		PShea *		HFelsher		JOlivier		MLamastra *	
DATE	07/03/01		07/03/01		07/17/01		07/10/01		07/03/01	

OFC	FCLB		OGC		FCLB		FCLB	
NAME	PLee		STreby		LRoché		MLeach	
DATE	07/17/01		07/16/01		07/17/01		07/18/01	

OFFICIAL RECORD COPY

*see previous concurrence

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.

Licensee	
1. Westinghouse Electric Company LLC	3. License Number SNM-1107, Amendment 29
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

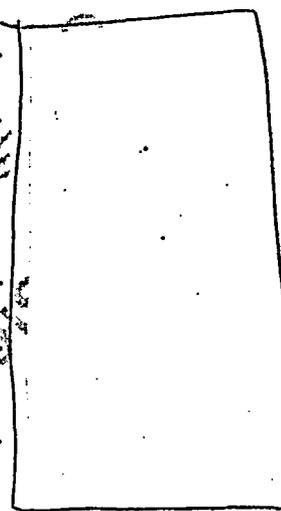
- A. U-235
- B. U-235
- C. U-233
- D. Pu-238, Pu-239
- E. Plutonium

7. Chemical and/or Physical Form

- A. Any
- B. Any, except metal enriched to not more than 5.0 w/o
- C. Any
- D. Sealed sources
- E. Feedstock with transuranics and fission products

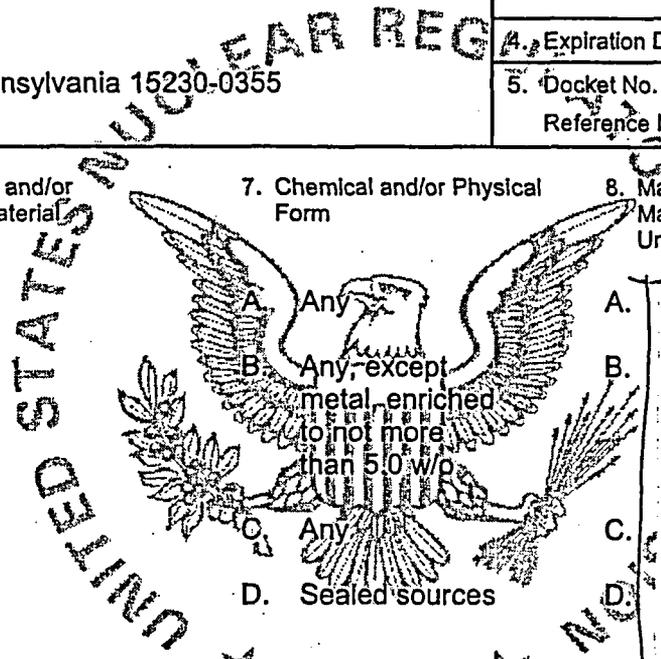
8. Maximum amount that Licensee May Possess at Any One Time Under This License

- A.
- B.
- C.
- D.
- E.



Ex. 2

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



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License Number
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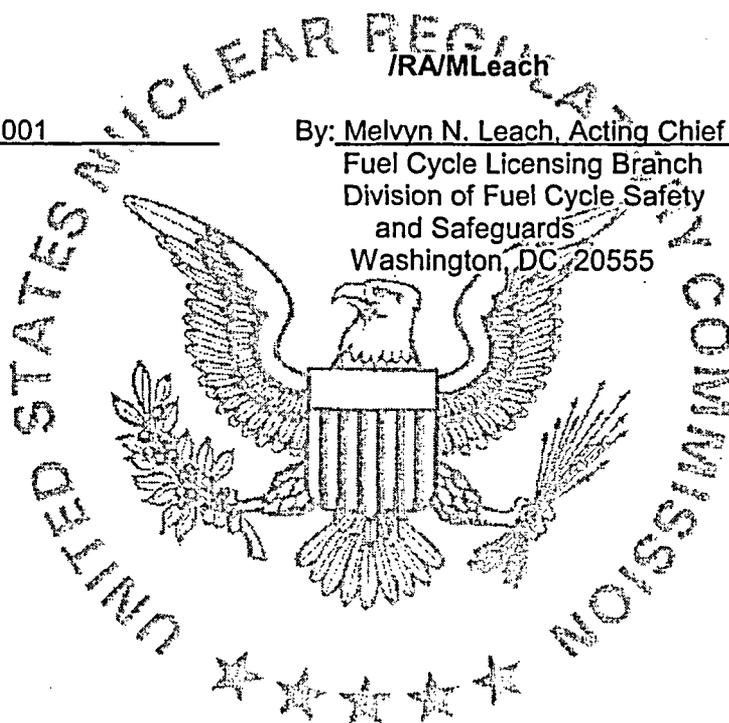
- 10. This license shall be deemed to contain two sections: Safety Conditions and Safeguards Conditions. These sections are part of the license and the licensee is subject to compliance with all listed conditions in each section.
- 11. Deleted by Amendment 20, dated November 1999.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/MLeach

Date: July 18, 2001

By: Melvyn N. Leach, Acting Chief
Fuel Cycle Licensing Branch
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, September 25, 1995; August 30, 1996; July 14, 1997; name change amendment December 22, 1997; June 30, July 23, 1998; name change amendment September 28, 1998; August 16, 1999; and January 28, July 24, September 8, November 21, 2000; and January 12, February 19, March 12, March 20, and March 27, and April 30, 2001.
- 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. 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.
- 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.
- S-5. By December 31, 2000, tables of Environmental/Radiological and Chemical/Fire controls will be added to the blank sections titled "Environmental Protection and Radiation Safety Controls" and "Chemical Safety and Fire Safety Controls" in the Enhanced Criticality Safety Evaluation License Annexes submitted in accordance with Safety Condition S-2.
- S-6. For Amendment - 29, any "additional safety margin" information that the licensee provided to the NRC (see Table XII) to demonstrate an adequate safety basis, shall be identified and have sufficient management measures to ensure that the margin being relied upon is maintained.
- S-7. In accordance with the information provided to the NRC during their site visit, the licensee shall maintain the following "additional safety margin" for Moderation control in the mixer by: (1) maintaining a low amount of moisture during the normal process; (2) having a low amount of poreformer added (i.e., only need up to 1 kg poreformer) to the mixer during the normal process; (3) allowing only 45% of the NCS k-effective poreformer limit available to the operator at any one time; and (4) allowing only one polpak of poreformer to be scanned/dumped into one mix of the blender.
- S-8. Prior to the introduction of Special Nuclear Material into the nuclear absorber mixer / erbia blender,

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- A. the licensee shall demonstrate to the NRC that the NCS computer code functions correctly at low H/X ratios, specifically, that the k-effective limits described in the submittal for the mixer are accurate.
- B. (1) ChAMPS shall be fully tested (i.e., verification and validation) and (2) the Auto Dump Interlock shall be fully tested for erbia/uranium powder blending (i.e., similar to the functional verification and testing being performed for the current ADU Auto Dump Interlock).
- C. the licensee shall verify; (1) the availability and reliability of necessary administrative and engineered fire protection controls identified as safety significant controls (SSC's) or items relied on for safety (IROFS), and, (2) fire protection design features and controls important for defense-in-depth for fire protection and the acceptable risks for operations.



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

- SG-1.1 The licensee shall follow pages i through xx and Chapters 1.0 through 9.0 of its "Fundamental Nuclear Material Control Plan for the Columbia Fuel Fabrication Facility," which has been revised as indicated by Revision 33 (dated March 1, 2001). 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 28 dated April 7, 2000 (letter dated April 7, 2000); 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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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.

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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).

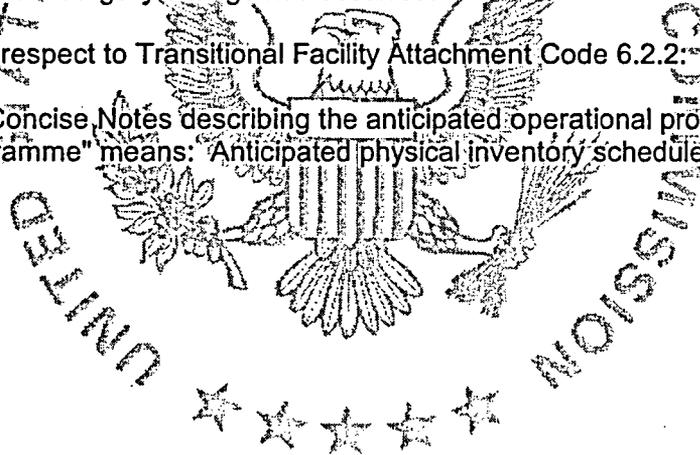
SG-3.1.6 With respect to Transitional Facility Attachment Code 5.1.1:

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.



DOCKET: 70-1151

LICENSEE: SNM-1107

SUBJECT: SAFETY EVALUATION REPORT: AMENDMENT REQUEST TO AUTHORIZE
NUCLEAR ABSORBER MIXING; REVISION 19.0 SNM-1107

BACKGROUND

By letter dated April 30, 2001, the licensee requested an amendment to authorize nuclear absorber mixing in fuel fabrication (i.e., erbia/uranium powder blending) in connection with the facility Burnable Absorber Expansion System (BAES). The amendment request provided information and referenced submitted material dated January 12 and March 27, 2001. In addition, NRC staff visited the site from May 7-11, 2001, to assist in the Nuclear Criticality Safety (NCS) review (i.e., toured areas, reviewed site documents, spoke with site personnel). There was an entrance meeting with licensee personnel and the NCS review was discussed during an exit meeting with the licensee. Also, on May 23-25, 2001, NRC staff visited the site to review supporting technical and process information that was not included in the Westinghouse Electric Company's (WEC's) written submittal. This visit was necessary in understanding WEC's safety basis for fire protection with the BAES facility.

Safety documents submitted by Westinghouse in the form of Integrated Safety Assessment License Annexes dated January 12, April 30, 2001, and an Integrated Safety Plan dated March 27, 2001, did not provide sufficient information to allow NRC staff to independently determine that safety and health for the workers and the public and protection of the environment had been adequately evaluated. Consequently, license safety reviewers for nuclear criticality safety and fire safety visited the Columbia, SC facility to review safety documentation that was maintained onsite and develop their own findings of safety.

For clarification, note that two supplements were provided on April 30, 2001. In the WEC Document No. NRC-01-17, dated April 30, 2001, WEC requested withdrawal of their license amendment request and supplements dated October 1, 2000 and January 12, 2001 (NRC TAC No. L31409). Also, on April 30, 2001, in Document No. NRC-01-18, WEC submitted a revised license amendment request for the mixing of nuclear absorber. During subsequent on-site reviews conducted by the NRC, portions of the January 12, March 27, and April 30, 2001, submittals were used to demonstrate the safety basis and were included in Materials License SNM-1107, Safety Condition S-1.

To avoid any potential misunderstanding, the criticality reviewer did not address the following items during the review of this amendment request because they were not germane. These items were:

- (1) The definition that "meeting the double contingency principle" was equivalent to meeting the "highly unlikely" requirement of 10 CFR 70.61(b);
- (2) The Integrated Safety Analysis Plan dated March 27, 2001; and

- (3) Any part of the Burnable Absorber Expansion System, other than nuclear absorber mixing (i.e., erbia/uranium powder blending).

DISCUSSION



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(pgs 3 through 24)

22 pages withheld
in entirety

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CHEMICAL PROCESS SAFETY

Based on the information provided by the licensee, no new hazardous chemicals are being introduced into the nuclear absorber mixing/erbia blending process. The greatest hazard is from soluble uranium or chemical oxidation of uranium dioxide powder which is addressed respectively by radiation safety and fire safety functions.

The staff concludes that the requested changes will have no adverse effect on public health and safety or the environment. Therefore, approval of the amendment application is recommended

ENVIRONMENTAL REVIEW

Authorization of the nuclear absorber mixing constitutes a change in process operations and equipment and meets the following requirements:

- (i) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite,
- (ii) there is no significant increase in individual or cumulative occupational radiation exposure,
- (iii) there is no significant construction impact, and there is no significant increase in the potential for or consequences from radiological accidents.

Operation of the nuclear absorber mixing will not cause a change in the types or significant increase in the amounts of any effluents that may be released offsite. The materials used in the system have similar radiological characteristics as currently authorized at the site. The small amounts of liquid effluent generated by the system will be treated by unit operations, and managed to assure all applicable discharge limits are met. Gaseous effluents discharged by the system will be controlled by HEPA filtered ventilation systems capable of removing greater than 99 percent of entrained particulates. Any solid combustible waste will be processed through the incinerator for volume reduction.

Since the nuclear absorber mixing process has similar radiological characteristics as the current fuel process system currently authorized at the site, the authorization of this process will not result in any significant increase in individual or cumulative occupation radiation exposure.

There will be no significant construction impact since the system is being installed in an existing facility. Construction activities in the existing facility are limited to slight modifications and equipment installation.

There will be no significant increase in the potential for or consequences from radiological accidents. The licensee performed a Process Hazards Analysis which identified the accidents that could occur due to nuclear absorber mixing operation. NRC staff has determined that the mitigative and preventive measures associated with the mixing process will reduce the frequency and consequences from the postulated accidents to acceptable levels.

Accordingly, NRC staff has determined that the criteria from 10 CFR 51.22(c)(11) for a categorical exclusion has been met. Therefore, neither an environmental assessment nor an environmental impact statement is warranted for this action.

RADIATION SAFETY

The licensee as part of its renewal application submitted on October 30, 1990, described its procedures for meeting the requirements of 10 CFR Part 20 and described its radiation safety program. By letter dated November 3, 1995, the NRC found the licensee radiation safety program acceptable. Since the Burnable Absorber Expansion System has similar Radiological characteristics as the current fuel process system currently authorized at the site, the

authorization of this process will not result in any significant increase in the types or amounts of any effluents that may be released offsite or any significant increase in individual or cumulative occupation radiation exposure. Accordingly, the staff concludes that the current radiation protection procedures currently in place are acceptable.

CONCLUSION

Based on the preceding discussion and adherence to the license safety conditions described above, the staff concludes that the proposed changes will have no adverse effect on worker and public health and safety or the environment. Therefore, approval of the amendment application is recommended.

Region II staff and Safety and Safeguards Support Branch inspection staff have no objection to this proposed action.

PRINCIPAL CONTRIBUTORS

Harry Felsher
Julie Olivier
Michael Lamastra
Peter Lee
Donald Stout

