



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

October 22, 2002

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Mr. A. Joseph Nardi
Environment, Health, and Safety
Westinghouse Electric Company LLC
P.O. Box 355
Pittsburgh, PA 15230-0355

SUBJECT: WESTINGHOUSE ELECTRIC COMPANY, LLC
HEMATITE AMENDMENT 43 (TAC NO. W90088)

Dear Mr. Nardi:

Enclosed is amendment No. 43 to NRC License No. SNM-00033, issued in accordance with your requests contained in letters dated August 22, and 28, 2002, and September 4, 2002. The purpose of this amendment is to: (1) delete Emergency Plan; (2) delete License Conditions Numbers SG-2.2 and SG-3.1; (3) change the possession limits and the list of authorized activities; and (4) approve a new Site Manager, and designate a Radiation Safety Officer.

This letter also acknowledges the October 3, 7, and 8, 2002, telephone conversations between you and Mr. McCann, Region III Hematite Project Manager, during which you agreed to provide the NRC Region III Office with an informational copy of the revised Emergency Procedure and any subsequent revisions. It was also discussed that local emergency authorities would be informed regarding the deletion of the Emergency Plan, and implementation of the new Emergency Procedures, and that provisions would be made for periodic tours and briefings on the plant status (at least annually or whenever significant changes occur).

Regarding your August 28, 2002, letter requesting to modify Chapter 2, the Organization Program, we agreed, during the October 3, 2002, telephone conversation, to add Mr. Thomas Dent as Site Manager, and Mr. Cort N. Horton, as Radiation Safety Officer. In accordance with your request on October 10, 2002, we are in the process of establishing a new TAC and amendment action for your request to modify your Organization Program. Additionally, you will note, that references to license conditions SG-2.2, and SG-3.1 have been deleted as requested. Your license possession limits have also been modified.

As explained to you by Mr. McCann during the October 7, 2002, telephone conversation, we have reformatted your license. This change reflects administrative practices in Region III, and is not intended to reduce or modify Westinghouse license authorizations previously granted in License Amendment No.42. The Amendment also does not remove or modify past licensee commitments provided in support of the issuance of License No. SNM-00033.

Enclosed are copies of the revised Materials License SNM-33 and the Safety Evaluation Report, which includes the Categorical Exclusion.

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

If you have any questions regarding this matter, please contact Mike McCann of my staff at (630) 829-9856 or by e-mail at gmm@nrc.gov.

Sincerely,

/RA/

Christopher G. Miller, Chief
Decommissioning Branch
Division of Nuclear Material Safety

Docket No. 07000036
License No. SNM-00033

Enclosures: 1. Amendment 43
2. Safety Evaluation Report

cc w/encs: R. A. Kucera, Director, Intergovernmental Cooperation
Missouri Department of Natural Resources

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LICENSEE: WESTINGHOUSE ELECTRIC COMPANY, LLC
FESTUS, MO

DOCKET: 07000036

LICENSE: SNM-00033

SUBJECT: SAFETY EVALUATION REPORT: WESTINGHOUSE ELECTRIC COMPANY, LLC
AMENDMENT 43 (TAC NO. W90088) TO:
(1) DELETE EMERGENCY PLAN;
(2) DELETE LICENSE CONDITIONS NUMBERS SG-2.2 and SG-3.1;
(3) CHANGE THE LICENSE POSSESSION LIMITS AND THE LIST OF
AUTHORIZED ACTIVITIES; AND
(4) APPROVE NEW SITE MANAGER, AND DESIGNATE RADIATION SAFETY
OFFICER.

BACKGROUND

By application dated September 11, 2001, Westinghouse Electric Company notified the Nuclear Regulatory Commission (NRC) that all principal activities, specifically those related to the manufacture of nuclear reactor fuel utilizing low-enriched uranium, at the Hematite, Missouri site have ceased. Westinghouse requested an amendment to Special Nuclear Material License SNM-00033 to change the scope of licensed activities to those associated with decommissioning. This amendment incorporates a number of subsequent requests (letters dated August 22, and 28, 2002, and September 4, 2002) to further clarify and modify the license as decommissioning progresses.

DISCUSSION

Change in Scope of Licensed Activities

The licensee has notified the NRC that all production of nuclear reactor fuel for nuclear power plants has ceased at the Hematite site. Current activities are directed toward decontaminating equipment and facilities in order to meet NRC unrestricted radiological release criteria. Westinghouse proposed revised wording for Section 1.4, "Possession Limits" and Section 1.5, "Authorized Activities" to reflect the material possessed and the scope of activities being conducted at the site.

Westinghouse has requested modifications to items 6, 7, and 8 of their license as follows:

- License Item A - reduce the possession limit amount of low-enriched uranium (up to 5.0 weight percent in the ^{235}U isotope) to be possessed at the site from 2,000 kilograms ^{235}U to 1,250 kilograms ^{235}U ;

- License Item C - reduce the amount of source material from 25,000 kilograms to 2,000 kilograms; and
- License Item F - increase byproduct material, including americium-241 from 200 microcuries to 400 microcuries.

Possession of these reduced amounts is limited to those activities necessary to process and package the materials into forms suitable for transfer to other licensed operations. Receipt of any additional materials in these categories is limited to that necessary to complete the decommissioning of the site and facilities. Examples of such receipts would be calibration sources and residual contamination on shipping containers and packages. Westinghouse also requested to delete Item G, californium-252 sealed calibration sources which were transferred to Westinghouse's Columbia Fuel Fabrication Facility. Items C, F, and Item G were modified to clarify authorized materials, i.e., Item C was changed to specify natural and depleted uranium, and deleted the specific reference to thorium. The licensee believes that if thorium is present it would exist as a residual contaminant, and would be covered under the provisions of Item G. Item F was changed to account for possession of increased amounts of residual contamination associated with shipping containers to be reused by Hemalite for future shipments.

Possession limits for other radioactive materials are not changed. These other materials are the following:

- Uranium to any enrichment in the ^{235}U isotope, 350 grams ^{235}U , limited to those activities necessary to process and package the materials into forms suitable for transfer to other licensed operations;
- Cobalt-60, 40 millicuries total, for instrument calibration and testing; and
- Cesium-137, 500 millicuries total, for possession only pending transfer to other licensed operations.

The NRC staff have reviewed Westinghouse's request to reduce the possession limits and have determined that they are acceptable since they are either lower than the possession limits in the current license, or the possession limits do not impact the remediation activities or diminish the safety aspects of the decommissioning being conducted at the Hematite Facility.

Deletion of Emergency Plan

Westinghouse requested to revise its license application regarding its Emergency Plan which had been established pursuant to 10 CFR Part 70.22. In accordance with the provisions of 10 CFR 70.22(i)(1)(i), an emergency plan is not required if the licensee can provide "an evaluation showing that the maximum exposure to a member of the public due to a release of radioactive material would not exceed 1 rem effective dose or an intake of 2 milligrams of soluble uranium." Westinghouse's August 22, 2002, letter contained an Evaluation which indicated that an Emergency Plan Pursuant to 10 CFR 70.22 was no longer required. Westinghouse referenced its current Emergency Plan which provided an analysis of the probable accident scenarios. The scenarios included bounding cases for a criticality accident, a UO_2 release and a UF_6 release. The licensee's bases for deleting the current Emergency Plan are as follows:

- UF₆ has been removed from the site, and the current authorized activities under the license would not permit future receipt of this material.
- The licensee had previously evaluated the possibility of a criticality accident as part of its original Emergency Plan submittal and determined that the radiation dose would not exceed 1 effective rem. With the continuing reduction in the uranium inventory on the site, the possibility of a criticality accident becomes even more unlikely.
- A UO₂ accident is no longer considered possible since the equipment in the sintering and dewaxing furnace area where UO₂ was processed is no longer being used, and the licensee is no longer authorized to perform such manufacturing operations.
- The licensee is required to develop emergency procedures, consistent with NRC NUREG 1556, Volume 11, "Consolidated Guidance about Materials License Programs, Specific Guidance about Licenses of Broad Scope" Appendix R "General Topics for Safe Use of Radioisotope and Model Emergency Procedures." Westinghouse has committed to providing copies of the Hematite emergency procedures and subsequent revisions to the NRC Region III Office. Westinghouse also agreed to notify and brief local emergency authorities regarding the revised emergency procedures initially, and annually thereafter.

The NRC staff has reviewed the licensee's request to delete its Emergency Plan from the NRC license, and has determined that the deletion is acceptable. The action is acceptable since, (1) the license no longer authorizes production activities resulting in a significant reduction of its licensed materials inventory, and which will continue to diminish, as decommissioning progresses; (2) the assessments by both the licensee and NRC staff estimated that off-site radiological projections as being less than the regulatory requirements for an Emergency Plan; (3) the licensee agreed to create and maintain site-specific emergency procedures; and (4) the licensee has agreed to keep the NRC and local emergency organizations informed regarding the Hematite emergency procedures.

Change Site Manager and add Radiation Safety Officer

Westinghouse submitted an amendment request to revise the organization requirements of the license. The amendment was to reflect the continuing transition of the site organization to that required for the current decommissioning status. The licensee submitted a revised Chapter 2 "Organization and Administration" that replaced the current Chapter 2 in its entirety which is specified in its license. Westinghouse has an effort underway to rewrite the entire license application and to submit it for approval. Westinghouse submitted the revised Chapter in advance of the rewrite because of pending personnel changes that required license approval.

Due to the extensive nature of the proposed rewrite, the NRC staff informed the licensee that the revision would be treated as a separate license amendment. However, in order to ensure continuity of management over-sight, the licensee was requested to submit a resume for the person who would assume the position of Site Manager and for the person who would be approved as Radiation Safety Officer.

The current license requires that the Site manager have five years of operational fuel manufacturing experience. However, since the licensee is no longer manufacturing nuclear fuel

and is currently decommissioning its facility, the licensee requested that the NRC approve an individual with extensive nuclear decommissioning experience. Additionally, since the position of Radiation Safety Officer (RSO) is not specifically discussed in the license, the licensee requested that the license be modified to require that radiation safety duties described in Chapter 2 for the Manager Environment, Health and Safety be relegated to the RSO by license condition.

The NRC staff reviewed Westinghouse's request to replace its Site Manager with a person with decommissioning experience, rather than one with fuel manufacturing experience. The licensee's request was also discussed with the NRC Region III Fuel Facilities inspection staff. Based on staff review and discussion, it was determined that the licensee's requests were acceptable.

The licensee also requested that the position of Radiation Safety Officer be added specifically to its license. The request is acceptable since: (1) the person who will assume the position of RSO must have extensive radiation protection and nuclear decommissioning experience, and (2) the licensee agreed to modify the license to incorporate by license condition, specific duties for the RSO. The following condition will be added to the license:

11. A. The Radiation Safety Officer (RSO) responsible for the oversight and implementation of the licensee's Radiation Protection Program is Cort Horton. The duties described in Section 2.1.3. "Manager Environment, Health and Safety" relating to radiation safety shall be relegated to the RSO.
- B. The Site Manager for the Hematite Facility is Thomas Dent.

Deletion of License Conditions

The licensee requested that License Conditions Number SG-2.2, and SG-3.1 be deleted. License Condition SG-2.2 required that surveillance tours be conducted of the UF₆ outdoor storage area, and License Condition SG- 3.1 required that, as a Transitional Facility, Westinghouse utilize the material codes specified in the US/IAEA Agreement. Westinghouse indicated that License Condition SG-2.2 is not necessary since the licensee no longer possesses UF₆ at the Hematite Facility, and that SG-3.1 is not necessary since the Westinghouse Hematite license no longer authorizes manufacture and distribution.

The NRC staff reviewed Westinghouse's requests to delete the above license conditions and has determined that the requests are acceptable since the licensee no longer possesses the material or performs activities which originally necessitated them.

As appropriate, the above activities will either be conducted in accordance with current license authorizations or will be authorized by specific NRC approval such as a license amendment or an approved Decommissioning Plan.

No other licensee safety programs will be reduced; the licensee will continue to meet license commitments in the areas of nuclear criticality safety, fire safety, chemical safety, radiation safety, environmental protection, material control and accounting, and physical protection.

ENVIRONMENTAL REVIEW

Categorical Exclusion

No new activities are authorized by this amendment. The decommissioning activities for which Westinghouse will continue to be authorized are operations for which they have been authorized in the past. The environmental impacts of the activities for which Westinghouse will continue to be authorized by this amendment were evaluated during the license renewal issued on July 28, 1994, supported by an Environmental Assessment dated March 17, 1994, and a Finding of No Significant Impact published in the Federal Register on March 28, 1994 (59 FR 14428-14429).

The staff has determined that the proposed changes constitute a reduction in process operations at the Hematite site, and that (i) there is no significant change in the types or significant increase in the amounts of any effluents that may be released off site; (ii) there is no significant increase in individual or cumulative occupational exposure; (iii) there is no significant construction impact; and (iv) there is no significant increase in the potential for or consequences from radiological accidents. Therefore, in accordance with 10 CFR 51.22(c)(11), neither an Environmental Assessment nor an Environmental Impact Statement is required for this action.

CONCLUSION

The NRC staff has reviewed the proposed amendment and has determined that the proposed changes will have no adverse effect on the public health and safety or the environment. Therefore, approval of the amendment application is recommended.

The NRC Headquarters Office of Nuclear Materials Safety and Safeguards has no objection to this proposed amendment.

PRINCIPAL CONTRIBUTORS:

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M. LaMastra, FCFB
A. Kouhestani, DCB