

December 9, 2009

Mr. E. Kurt Hackmann
Director, Hematite Decommissioning Project
Westinghouse Electric Company
3300 State Road P
Festus, MO 63028

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION REQUESTS FOR ADDITIONAL
INFORMATION INVOLVING WESTINGHOUSE HEMATITE FUNDAMENTAL
NUCLEAR MATERIAL CONTROL PLAN, REVISION 9, MARCH 2009

Dear Mr. Hackmann:

By your letter dated March 10, 2009, you submitted Revision 9 to the Westinghouse Hematite Fundamental Nuclear Material Control Plan. The staff has reviewed your revision. As a result of that review the staff has identified areas where additional information is required in order to complete its review. Enclosed are a number of requests for additional information (RAI).

In accordance with 10 CFR 2.390 of the U.S. Nuclear Regulatory Commission's (NRC's) "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Please provide your response to the RAIs within 30 days of the date of this letter. If you have any further questions, please contact me at (301) 415-5928 or via email at john.hayes@nrc.gov.

Sincerely,

/RAI/

John J. Hayes, Senior Project Manager
Materials Decommissioning Branch
Decommissioning and Uranium Recovery
Licensing Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

Enclosure:
Request for Additional Information

cc: See next page

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Request for Additional Information
Fundamental Nuclear Material Control Plan, Revision 9
Westinghouse Electric Company LLC, Hematite Decommissioning Project
Application Dated March 2009
Docket No. 70-036

General Comments

Title 10 of the *Code of Federal Regulations* (10 CFR) Part 70.22(b) states, in part, that the application must contain a full description of the applicant's program for control and accounting of special nuclear material (SNM) that will be in the applicant's possession under the license to show compliance with the requirements of 10 CFR 74.31, 74.41, or 74.51, as applicable.

1. Revise pages i and ii, which specify the changes made under each revision of the Fundamental Nuclear Material Control Plan (FNMCP) to provide a more detailed list of the changes made in Revision 9. For example, clarifications involving changes to the majority of a sentence or the addition of new paragraphs to the FNMCP should be listed separately.

Specific Comments

2. Title 10 CFR 74.31(d)(2) states that the licensee shall maintain adequate safeguards against tampering with and loss of records for special nuclear material of low strategic significance.

Section 2.3.2, Confirming the Presence or Absence of SNM: This section discusses the computer database of items on hand. Verify that the database will be password-protected and describe the minimum requirements for the passwords, including how often they are to be changed.

3. Title 10 CFR 74.33(c)(1)(i) states that the licensee shall establish, document, and maintain a management structure that ensures clear overall responsibility for Material Control and Accountability (MC&A) functions.

Section 3.3.2.4, Management Control: This section discusses the MC&A training conducted annually by the MC&A Engineer. Describe the training requirements for the MC&A Engineer position.

4. Title 10 CFR 74.33(c)(1)(iv) states that the licensee shall ensure the use of approved written MC&A procedures and periodic review of those procedures.

Section 1.3.2 of NUREG-1065, Revision 2, states that all critical procedures should be identified in the body of the FNMC plan. This section also lists a set of topics critical MC&A procedures should address.

Table 3.1 does not adequately include procedures for the following aspects of the MC&A program: U.S. Department of Energy (DOE)/U.S. Nuclear Regulatory Commission (NRC) Form 742, NRC Form 327, measurement methods, shipper-receiver difference evaluation,

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recordkeeping, independent assessment, tamper-indicating devices program, or other topics listed in Section 1.3.2 of NUREG-1065. Indicate which procedures cover these aspects of the MC&A program.

5. Title 10 CFR 74.31(c)(3) and (4) state that the licensee shall follow a measurement control program which assures measurement bias is estimated and eliminated and measurement uncertainty is controlled.

Section 3.1 of NUREG-1065, Revision 2, states that the licensee's measurement control program should be properly managed to ensure adequate calibration frequencies, sufficient control of biases, and sufficient measurement precision to achieve the capabilities required by 10 CFR 74.31(c)(3) and (4).

Section 4.3.2, Measurement Control for Key Measurement Systems: This section discusses the measurement control program. Where within this section does it specify how each key measurement system will be monitored daily when in use.

In the first full paragraph on page 19, the documented analyses of the control standard and replicate data are said to be performed at intervals not to exceed four months. In the next sentence, it is stated that these analyses may be performed annually. Clarify whether these analyses will be performed annually or at intervals of four months or less.

6. Title 10 CFR 74.31(a)(1) and (2) state that the licensee shall maintain a Commission-approved material control and accounting system that will confirm the presence of special nuclear material and resolve indications of missing material.

Section 5.3.5, Data Collection: This section discusses verification of inventory items. This section states that any sealed item discovered with a broken seal is re-weighed or otherwise verified. The MC&A Engineer then determines if prior measurements can be accepted or if re-measurement is required. Explain how weighing a sealed item with a broken seal will provide adequate protection against material substitution threats.

7. Title 10 CFR 74.13, 74.15 & 74.17 state the requirements for use of DOE/NRC Forms 741, Form 742, and NRC Form 327.

Section 5.3.9: This section discusses material balance and physical inventory reports. Specify whether NRC Form 327 will be used. Revision 7 of NUREG/BR-0006 and Revision 6 of NUREG/BR-0007 may be utilized in lieu of the July 18, 2002, memorandum from the NRC to NMMSS referenced in this Section.

8. Title 10 CFR 74.4 states that an item means any discrete quantity or container of special nuclear material or source material not undergoing processing, having a unique identity, and also having an assigned element and isotope quantity.

Section 6.3.1, Item Control Record System: This section discusses the Item Control System. The first paragraph of this section states that material in process for less than 14 days is not an item. Clarify whether this means material in process for 14 days or more is considered an item.

9. Title 10 CFR 74.31(c) describes the general performance objectives of the material control and accounting system.

Section 6.3.2, Exempt Items: This section discusses which items are not included in the item control record system. Describe how material not officially included in the item control record system will be controlled and tracked.

10. Title 10 CFR 74.31(c)(6) states that items are to be stored and handled in a manner so that unauthorized removal of material (as individual items or as uranium contained in items) will be detected.

Section 6.3.3, Handling and Storage of Items: This section discusses how items are stored in Controlled Access Areas and how access to these areas is limited. Specify both the revision and section of the Westinghouse Hematite's Physical Security Plan that contains the information on access to the Controlled Access Area.