EA-09-084 NMED 080232 NMED 080802

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

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL

PENALTY - \$16.250; NRC INSPECTION REPORT 070-00036/2008002(DNMS) -

WESTINGHOUSE ELECTRIC COMPANY (HEMATITE)

Dear Mr. Hackmann:

This refers to the inspection conducted between November 17, 2008, and June 24, 2009, at the Westinghouse Electric Company Hematite Decommissioning Project (Hematite) facility in Festus, Missouri. The purpose of the inspection was to determine whether decommissioning activities were conducted safely and in accordance with U.S. Nuclear Regulatory Commission (NRC) requirements. Specifically, the inspection focused on management organization and controls, radiation protection, quality assurance, corrective action, effluent control, and environmental protection. The results of the inspection were discussed with you in a telephone exit meeting on June 24, 2009, and were documented in Inspection Report 070-00036/2008002, dated July 23, 2009.

On September 2, 2009, a Predecisional Enforcement Conference was conducted in the NRC Region III office in Lisle, Illinois, with Mr. Joseph Belechak, Senior Vice President for Westinghouse Nuclear Fuels, yourself, and members of your staff, to discuss the apparent violations, their significance, their root causes, and Hematite's corrective actions.

Based on the information developed during the inspection and the information that you provided during and following the conference, the NRC has determined that violations of NRC requirements occurred. These violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the subject inspection report.

Violation I in the enclosed Notice involved the deactivation of the nuclear criticality accident monitoring system sometime between February 21 and March 22, 2006, prior to Hematite receiving NRC approval to deactivate the system; the approval was given in June 2006. The second violation, Violation II.A in the Notice, involved the submittal, on March 17, 2006, of inaccurate information about the amount of uranium-235 remaining in the process building. The NRC used this information, in part, as the basis for granting License Amendment 52 on

June 30, 2006. The NRC noted that on November 11, 2008, during routine surveys, your staff determined that the amount of uranium-235 remaining in the process building piping significantly exceeded the amounts provided in your March 17, 2006, letter to the NRC. The third violation, Violation II.B, involves the failure to provide adequate training to a health physics technician.

The first two violations are of particular concern to the NRC because they indicate a lack of sensitivity to the role that the NRC performs in ensuring public health and safety. The NRC determined that without nuclear criticality alarm capability, you did not have the ability to detect and take mitigating actions in response to a nuclear criticality accident, which could have led to a significant overexposure, especially given the inadequate surveys that were used to determine the amount of uranium-235 remaining in the building. The NRC has concluded that the inaccurate information submitted to the NRC on March 17, 2006, was material to the NRC because the amount of uranium-235 remaining in the process building formed part of the basis for NRC granting the license amendment in June 2006. Therefore, the NRC categorized both violations, in accordance with the NRC Enforcement Policy, at Severity Level III.

The NRC determined that the likely root causes of these violations were: (1) inadequate radiation surveys in 2005 and 2006 leading you to believe that there were less than 250 grams of uranium-235; (2) lack of rigor in defining what actions required prior NRC approval; and (3) inadequate review of information in submittals to ensure accuracy and completeness.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$16,250 is considered for each Severity Level III violation. Because your facility has not been the subject of escalated enforcement actions within the last two years, the NRC considered whether credit was warranted for *Corrective Action* in accordance with the civil penalty assessment process in Section VI.C.2 of the Enforcement Policy. The NRC determined that your corrective actions included, among others, actions improving: (1) work planning and processes, including revising work control procedures, establishing a work package review committee, training of employees, and improving safety and regulatory reviews; (2) surveys, including increasing staffing with knowledgeable individuals, revising procedures and increasing management monitoring; (3) licensing, including increasing staffing in this area, strengthening human performance tools and revising procedures to address the need for ensuring accurate information; (4) oversight, including restructuring the organization with onsite personnel to address evolving issues; and (5) safety culture through use of improved human performance tools.

Notwithstanding your corrective actions for the above violations, the NRC is exercising discretion, in accordance with Section VII.A.1.c. of the Enforcement Policy, to propose imposition of a civil penalty of the base amount for the first violation. Specifically, the NRC determined that a civil penalty was warranted for Hematite's particularly poor performance in 2006 when it: (1) failed to demonstrate a clear and safety-focused understanding of the importance of maintaining the criticality accident alarms in an operable status during decommissioning efforts, thus ensuring both worker and public health and safety; and (2) undermined the NRC's regulatory function by removing the criticality accident alarms which were required by NRC regulations without obtaining prior NRC approval.

Therefore, to emphasize the importance of safety-focused and conservative decision-making during the conduct of decommissioning activities, especially those involving the maintenance and use of equipment required by NRC regulations, compliance with NRC regulations and

prompt identification and comprehensive correction of violations, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty in the base amount of \$16,250. In addition, issuance of this Notice constitutes escalated enforcement action that may subject you to increased inspection effort.

In addition, the NRC has evaluated the third violation (Violation II.B in the enclosed Notice) in accordance with the NRC Enforcement Policy and has determined that violation is appropriately categorized at Severity Level IV. The circumstances surrounding the violation were described in detail in the subject inspection report. The violation is being cited in the Notice because the NRC identified the violation.

Finally, the NRC determined that a minor violation of NRC requirements occurred. This violation, which related to calibration of radiation detection instrumentation, is not being cited due to its minor safety significance and the fact that it has been corrected. The NRC has also determined that, while radiological survey deficiencies contributed to Violations I and II.A, they did not constitute an additional violation.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, Enclosure 1, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such information, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information

required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). The NRC also includes significant enforcement actions on its Web site at http://www.nrc.gov/reading-rm/doc-collections/enforcement/actions/.

Sincerely,

/RA by Cynthia D. Pederson Acting for/

Mark A. Satorius Regional Administrator

Docket No. 070-00036 License No. SNM-33

Enclosures:

- (1) Notice of Violation and Proposed Imposition of Civil Penalty
- (2) NUREG/BR-0254 Payment Methods (Licensee only)

cc w/encl: D. Childers, Director, Missouri Department of Natural Resources

A. Kucera, Director, Intergovernmental Cooperation Missouri Department of Natural Resources

E. Gilstrap, Missouri Department of Natural Resource

Letter to E. Kurt Hackmann from Mark A. Satorius dated October 23, 2009

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY

\$16,250; NRC INSPECTION REPORT 070-00036/2008002(DNMS) -

WESTINGHOUSE ELECTRIC COMPANY (HEMATITE)

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EA-09-084 File

NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY

Hematite Decommissioning Project Westinghouse Electric Company Nuclear Fuels Festus, MO Docket No. 070-00036 License No. SNM-33 EA-09-084

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted between November 17, 2008, and June 24, 2009, violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the NRC proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S. Code (U.S.C.) 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

I. <u>Violation Assessed a Civil Penalty</u>

10 CFR 70.24 (a) requires, in part, that each licensee authorized to possess special nuclear material in a quantity exceeding 700 grams of contained uranium-235 maintain in each area in which such licensed special nuclear material is handled, used, or stored, a monitoring system meeting the requirements of either paragraph (a)(1) or (a)(2), as appropriate, and using gamma- or neutron-sensitive radiation detectors which will energize clearly audible alarm signals if accidental criticality occurs.

Contrary to the above, between March 22 and June 30, 2006, the licensee was authorized to possess special nuclear material in a quantity exceeding 700 grams of contained uranium-235 (U-235) and failed to maintain gamma- or neutron-sensitive radiation detectors which energized clearly audible alarm signals. Specifically, the licensee was authorized to possess uranium enriched to a maximum of 5.0 weight percent in the U-235 isotope, with up to 1,250 kilograms of U-235 at any one time yet removed the criticality alarms from the process buildings sometime prior to March 22, 2006. Subsequently, on June 30, 2006, the NRC issued a license amendment that reduced the amount of material authorized on the license to below the 10 CFR 70.24 limits.

This is a Severity Level III violation (Supplement VI). Civil Penalty - \$ 16,250

II. <u>Violations Not Assessed a Civil Penalty</u>

A. 10 CFR 70.9 (a) requires, in part, that, information provided to the Commission by a licensee shall be complete and accurate in all material respects.

Contrary to the above, on March 17, 2006, the licensee provided information to the Commission that was not complete and accurate in all material respects. Specifically, in response to an NRC Request for Information, the licensee stated

that, based on surveys performed and results measured, it estimated that the residual contamination remaining on the surfaces within the buildings was approximately 5 kilograms of uranium dioxide at less than 5 percent enrichment (250 grams of U-235). In addition, the licensee stated that there were zero grams of inventoried special nuclear material (U-235) mass for the process buildings. This information was not complete and accurate because, between November 11 and 14, 2008, the licensee conducted radiological surveys and identified process piping containing an estimated mass of 2,638 grams U-235. The information regarding the quantity of U-235 was material to the NRC because it formed part of the basis for the NRC granting License Amendment 52 on June 30, 2006.

This is a Severity Level III violation (Supplement VI).

B. 10 CFR 20.1101(a) requires that licensees develop, document and implement a radiation protection program commensurate with the scope and extent of licensed activities and sufficient to ensure compliance with the provisions of this part.

The licensee documented its radiation protection program, in part, in Procedure PR GM 002, "Training of FFCF Hematite Project Personnel." Section 6.5 of this procedure noted that training for health physics technicians was a license requirement and required an in-depth presentation of topics presented to general radiation workers along with job-specific and project specific topics to thoroughly familiarize personnel with project radiation protection requirements, policies and procedures, as well as potential radiological hazards.

Contrary to the above, from April 2007 to January 2009, the licensee failed to implement its radiation protection program in that the licensee failed to provide training for a Health Physics Technician commensurate with the requirements in Procedure PR GM 002. Specifically, the licensee had an individual fulfilling the position of a Health Physics Technician and had not provided the prescribed training to the individual.

This is a Severity Level IV violation (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, Westinghouse Electric Company Hematite Decommissioning Project (Licensee) is hereby required to submit a written statement or explanation to the Director of the Office of Enforcement within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation: (EA-09-084)" and should include for each violation: (1) admission or denial of the violation; (2) the reasons for the violation if admitted, and if denied, the basis for denying the validity of the violation; (3) the corrective steps that have been taken and the results achieved; (4) the corrective steps that will be taken; and (5) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, the NRC may issue an order or a Demand for Information requiring you to explain why your license should not be

modified, suspended, or revoked or why the NRC should not take other action as may be proper. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time provided for the response required under 10 CFR 2.201, you may pay the civil penalty proposed above, in accordance with NUREG/BR-0254 (Enclosure 2) and by submitting to the Director of the Office of Enforcement, U.S. Nuclear Regulatory Commission, a statement indicating when and by what method payment was made, or you may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director of the Office of Enforcement. Should you fail to answer within 30 days of the date of this Notice, the NRC will issue an order imposing the civil penalty. Should you elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violation(s) listed in this Notice, in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the response should address the factors addressed in Section VI.C.2, "Civil Penalty Assessment," of the Enforcement Policy. Any written answer addressing these factors pursuant to 10 CFR 2.205, should be set forth separately from the statement or explanation provided pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the Licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

Upon failure to pay any civil penalty which subsequently has been determined in accordance with the applicable provisions of 10 CFR 2.205 to be due, this matter may be referred to the Attorney General, and the penalty, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282c.

The responses noted above, i.e., Reply to Notice of Violation, Statement as to Payment of Civil Penalty, and Answer to a Notice of Violation, should be addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region III, 2443 Warrenville Road, Lisle IL 60532.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, Enclosure 1, and your response, if any, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html. The NRC also includes significant enforcement actions on its Web site at http://www.nrc.gov/reading-rm/doc-collections/enforcement/actions/. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, please provide a bracketed copy of your response that identifies the information that should be

protected and a redacted copy of your response that deletes such information. If you request withholding of such information, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information).

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated this 23rd day of October 2009

required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). The NRC also includes significant enforcement actions on its Web site at (http://www.nrc.gov/reading-rm/doc-collections/enforcement/actions/).

Sincerely,

/RA by Cynthia D. Pederson Acting for/

Mark A. Satorius Regional Administrator

Docket No. 070-00036 License No. SNM-33

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DATE	10/22/09	10/22/09	10/22/09	10/22/09	10/22/09
OFFICE	D:OE	D:FSME	D:OGC	RIII	RIII
NAME	Summers for Carpenter ¹	White for Miller ²	Clark for Scott ³ (NLO)	Orth	Pederson for Satorius
DATE	10/21/09	10/20/09	10/21/09	10/22/09	10/23/09

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¹ OE concurrence received via e-mail from R. Summers on October 21, 2009.

² FSME concurrence received via e-mail from D. White on October 20, 2009.

³ OGO no legal objection received via e-mail from R. Summers on October 21, 2009.