

August 25, 2005

EA-05-104

Mr. Hank A. Sepp  
Project Director, Decommissioning  
Westinghouse Electric Company, LLC  
Hematite Fuel Manufacturing Facility  
3300 State Road P  
Festus, MO 63028

SUBJECT: NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY -  
\$16,250 [NRC TEAM INSPECTION REPORT 07000036/2005-001(DNMS)],  
WESTINGHOUSE ELECTRIC COMPANY, LLC (HEMATITE)

Dear Mr. Sepp:

This refers to an NRC team inspection completed on April 27, 2005, at the Westinghouse Electric Company's Hematite Fuel Manufacturing Facility, located in Festus, Missouri. The purpose of the inspection was to determine whether decommissioning activities were conducted safely and in accordance with NRC requirements. Specifically, the inspection focused on the implementation of nuclear criticality safety controls during decommissioning and decontamination activities. An inspection report, which documented the results of the NRC's inspection efforts, was transmitted to you on June 8, 2005. The report included a discussion of three apparent violations associated with your staff's failure to fully implement nuclear criticality safety controls.

On June 22, 2005, a pre-decisional enforcement conference was conducted in the Region III Office with Mr. Michael Saunders, Senior Vice President, Nuclear Fuels, you, and other representatives of the Westinghouse Hematite Fuel Manufacturing Facility to discuss the apparent violations, their significance, the root causes, and your corrective actions.

Based on the information developed during the inspection and the information that you provided during the conference, the NRC has determined that three violations of NRC requirements occurred. These violations are cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty and the circumstances surrounding them are described in detail in the subject inspection report. The first violation involved your staff's failure to incorporate a significant number of nuclear criticality safety evaluation controls into plant procedures prior to conducting operations involving fissile materials. The second violation involved your staff's failure to determine the mass of fissile material in objects prior to placing the objects into nuclear criticality safety fissile material storage arrays. Fissile operations associated with these violations began in November 2004, and continued through the first week of January 2005. The root causes for the violations were inadequate management oversight of nuclear criticality safety program activities and a perception that production was more important than procedural adherence.

An adequate level of nuclear criticality safety requires that licensees: (1) identify potential “upset conditions” for activities involving fissile materials; (2) develop and implement appropriate engineering and administrative controls to ensure that at least two unlikely events must occur before a criticality accident is possible; and (3) provide sufficient management involvement and oversight to ensure that the nuclear criticality safety program is properly implemented. Although the potential for an inadvertent nuclear criticality remained very low, your failure to ensure that the nuclear criticality safety controls were incorporated in plant procedures and that the quantity of fissile materials included in objects was known, prior to conducting fissile material operations, was a significant safety concern. As a direct result of these failures, your decommissioning activities concentrated the previously dispersed fissile materials and decreased the number of engineering or administrative controls available to ensure nuclear criticality safety during fissile material operations. Therefore, these two violations are classified in the aggregate in accordance with the Enforcement Policy as a Severity Level III problem. The current Enforcement Policy is included on the NRC’s Web site at [www.nrc.gov](http://www.nrc.gov); select **What We Do, Enforcement**, then **Enforcement Policy**.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$16,250 is considered for a Severity Level III problem. Because your facility was the subject of escalated enforcement action within the last 2 years,<sup>1</sup> the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section VI.B.2 of the Enforcement Policy. Credit was warranted for the *Identification* factor because your staff identified during a January 2005 internal audit that nuclear criticality safety controls had not been incorporated into plant procedures and that the mass of fissile material contained in objects had not been determined prior to placing those objects in storage arrays. Credit was not warranted for the *Corrective Action* factor due to the significant NRC involvement required to ensure that comprehensive corrective actions were implemented to address the deficiencies identified as a result of your staff’s January 2005 audit. Specifically, the NRC inspectors identified that your staff failed to incorporate into procedures and postings more than one half of the nuclear criticality safety controls specified for fissile material operations. At the time of the NRC finding, your staff indicated to the NRC inspectors that all immediate corrective actions necessary to support your resumption of fissile materials operations had been completed.

Therefore, to emphasize the importance of nuclear criticality safety and prompt, comprehensive corrective actions for violations, and in recognition of your previous escalated enforcement action, 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 (Notice) in the base amount of \$16,250 for the Severity Level III problem. In addition, issuance of this Notice constitutes escalated enforcement action, that may subject you to increased inspection effort.

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1 A Severity Level III violation, without civil penalty, was issued on December 22, 2003, for the failure to follow enhanced work plans for decommissioning activities specific to the preparation of contaminated materials for shipping to a metal recycling facility (EA-03-182).

In addition to the violations associated with the Severity Level III problem discussed above, the NRC also determined that one Severity Level IV violation of NRC requirements occurred. The violation was associated with the improper spacing of two filter housings that contained some, but less than a minimum critical mass of, fissile material. The violation was evaluated in accordance with the Enforcement Policy, is cited in the enclosed Notice, and is described in detail in the subject inspection report.

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, its enclosures, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document 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 [www.nrc.gov](http://www.nrc.gov); select **What We Do, Enforcement**, then **Significant Enforcement Actions**.

Sincerely,

**/RA/ Geoffrey E. Grant for**

James L. Caldwell  
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

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DATE	08/25/05		08/24/05		08/24/05		08/25/05	
OFFICE	NMSS		OGC		OE		RIII	
NAME	Morell <sup>1</sup>		Duffy <sup>1</sup>		Nolan <sup>1</sup>		Grant for Caldwell	
DATE	08/19/05		08/19/05		08/19/05		08/25/05	

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<sup>1</sup> Concurrence received in e-mail 8/22/05 from Audrey Hayes, OE

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State of Missouri

NOTICE OF VIOLATION  
AND  
PROPOSED IMPOSITION OF CIVIL PENALTY

Westinghouse Electric Company, LLC  
Festus, Missouri

Docket No. 070-00036  
License No. SNM-33  
EA-05-104

During an NRC inspection conducted between January 10 and April 27, 2005, 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.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

A. Violations Assessed a Civil Penalty

License Condition 17 of License No. SNM-33 requires, in part, that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the License Application (Chapters 1 through 8), dated October 29, 1993, including supplements.

License Condition 17.A referenced Chapter 4 of the License Application, "Nuclear Criticality Safety," Revision 7, dated August 2, 2001.

Chapter 4, Section 4.1.3 of the license application requires, in part, that the criticality safety evaluations consider potential scenarios which could lead to criticality and barriers erected against criticality in establishing applicable criticality safety limits and controls. These limits and controls shall be incorporated into written procedures and/or postings.

Chapter 4, Section 4.1.4 of the license application requires, in part, that operations involving the handling and storage of special nuclear material (SNM) be performed according to approved written procedures and/or postings.

1. Contrary to the above, between November 2004 and January 2005, the licensee conducted operations involving the handling and storage of special nuclear materials without incorporating applicable nuclear criticality safety limits and controls into written procedures. Specifically, in November 2004, the licensee initiated interference-removal decommissioning activities that involved the handling and storage of approximately 34 kilograms of fissile material, without incorporating 63 individual nuclear criticality safety controls described in Nuclear Criticality Safety (NCS) Evaluations NISYS-NCS-1180-TR001, NISYS-NCS-1180-TR003, and NISYS-NCS-1180-TR010 into procedures PR-NC-005, PR-HP-015, PR-EHS-012, PR-DO-021, PR-DO-020, MCP-HE-OP-205, MCP-HE-OP-202, and LVI-HP-50.

2. Contrary to the above, between November 2004 and January 2005, the licensee placed numerous objects, containing special nuclear material, into fissile material storage arrays without determining the mass of special nuclear material contained within the objects and without implementing the barrier against criticality of, and the criticality safety limit associated with fissile mass control as described in the NCS Evaluations.

These violations represent a Severity Level III problem (Supplement VI)  
Civil Penalty - \$ 16,250. (EA-05-104)

B. Violation Not Assessed a Civil Penalty

License Condition 17 of License No. SNM-33 requires, in part, that the licensee conduct its program in accordance with the statements, representations, and procedures contained in the License Application (Chapters 1 through 8), dated October 29, 1993, including supplements.

License Condition 17.A referenced Chapter 4 of the License Application, "Nuclear Criticality Safety, Revision 7, dated August 2, 2001."

Chapter 4, Section 4.1.3 of the license application requires, in part, that the criticality safety evaluations consider potential scenarios which could lead to criticality and barriers erected against criticality in establishing applicable criticality safety limits and controls. These limits and controls shall be incorporated into written procedures and/or postings.

Chapter 4, Section 4.1.4 of the license application requires, in part, that operations involving the handling and storage of special nuclear material (SNM) be performed according to approved written procedures and/or postings.

Contrary to the above, as of January 6, 2005, the licensee stored two high efficiency particulate air filter housings, containing less than a minimum critical mass of special nuclear material, with a separation of less than the 12 feet specified on a posting in the area. The postings were affixed by the licensee in accordance with the requirements of a nuclear criticality safety evaluation. Specifically, the licensee stored the high efficiency particulate air filter housings in Buildings 254 and 256-1 with a separation of 8 feet.

This is a Severity Level IV violation (Supplement VI)

Pursuant to the provisions of 10 CFR 2.201, Westinghouse Electric Company, LLC (licensee) is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, 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-05-104" and should include for each alleged violation: (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted, and if denied, the reasons why; (3) the corrective steps that have been taken and the

results achieved; (4) the corrective steps that will be taken to avoid further violations; 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, an Order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. 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 as provided for the response required above under 10 CFR 2.201, the licensee may pay the civil penalty proposed above, in accordance with NUREG/BR-0254 and by submitting to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555, a statement indicating when and by what method payment was made, or may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the licensee fail to answer within the time specified, an Order imposing the civil penalty will be issued. Should the licensee 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 violations 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 factors addressed in Section VI.C.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply 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 due which subsequently has been determined in accordance with the applicable provisions of 10 CFR 2.205, 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 234(c) of the Act, 42 U.S.C. 2282c.

The response noted above (Reply to Notice of Violation, statement as to payment of civil penalty, and Answer to a Notice of Violation) should be addressed to: Mr. Michael Johnson, 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.

Notice of Violation and Proposed  
Imposition of Civil Penalty

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Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. The NRC's document system is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. If personal privacy or proprietary information is necessary to provide an acceptable response, then 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 material, 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). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

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

Dated this 25<sup>th</sup> day of August 2005