



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931**

March 18, 2005

Westinghouse Electric Company
ATTN: Mr. M. Fecteau, Manager
Columbia Plant
Commercial Nuclear Fuel Division
Drawer R
Columbia, SC 29250

**SUBJECT: LICENSEE PERFORMANCE REVIEW (LPR) OF LICENSED ACTIVITIES
FOR WESTINGHOUSE ELECTRIC COMPANY, DOCKET NUMBER 70-1151**

Dear Mr. Fecteau:

Managers and staff in our Region II office in Atlanta, Georgia, and the Office of Nuclear Material Safety and Safeguards (ONMSS) in Rockville, Maryland, completed a review of your performance in conducting NRC licensed activities. The review evaluated your performance during the period beginning December 7, 2003, and ending January 22, 2005. Westinghouse's Columbia facility's performance was evaluated in four major areas: Safety Operations, Radiological Controls, Facility Support, and Special Topics. This letter provides to you the results of our review, and will be used as a basis for establishing the NRC oversight program for your conduct of licensed activities during the next 12 months.

Our review concluded that Westinghouse's Columbia facility continued to conduct its activities safely during the review period and is currently engaged in significant upgrades to your human performance and criticality safety programs. However, the corrective actions you implemented in response to numerous human performance and criticality safety events and violations have not been fully effective.

The results of our review will be discussed with you during a meeting open to the public on April 12, 2005. We understand that certain information you plan to discuss is proprietary, and this information will be discussed in a closed meeting on the same date. Areas needing improvement are summarized in the enclosure to this letter. During the meetings, we expect you to discuss your view of your performance in the same major areas as the NRC evaluated. We are interested in hearing your perspectives on the effectiveness of your corrective actions designed to improve nuclear criticality safety analyses, human performance, and supervisory and management oversight, and what additional measures you will implement to improve performance. We would like you to discuss why your efforts have yet to be fully effective. We also request that you discuss the status of your plan to review and update existing criticality safety analyses and the status of your efforts to assure that changes to the plant or procedures maintain the license-required design bases and controls in related safety analyses.

Westinghouse's Columbia facility's performance warrants enhancing NRC's oversight of your operations beyond the core inspection program with additional inspection effort in the areas of nuclear criticality safety analyses, plant operations, and management controls. The additional NRC inspection effort will focus on Nuclear Criticality Safety (NCS) program improvements, safety bases revisions, adequacy of controls, adherence to procedures, corrective actions, improvements in the ability of your supervisors in overseeing licensed activities, and an increased NRC management review of your corrective actions. In addition, the NRC plans to conduct the next LPR in 12 months rather than the normal 24-month LPR frequency.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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/reading-rm/adams.html> (the Public Electronic Reading Room).

Questions and comments about NRC's review of Westinghouse's Columbia facility's performance should be referred to Mr. Jay Henson, who can be reached by telephone at 404-562-4731.

Sincerely,

/RA/

William D. Travers
Regional Administrator

Docket No. 70-1151
License No. SNM-1107

Enclosure: Licensee Performance Review
- Summary Outline

cc w/encl:
Sam McDonald, Manager
Environment, Health and Safety
Commercial Nuclear Fuel Division
Westinghouse Electric Corporation
P. O. Box R
Columbia, SC 29250

Henry J. Porter, Assistant Director
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Dept. of Health and Environmental
Control
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cc w/encl: (Cont'd on page 3)

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 PUBLIC

***see previous concurrence**

X SISP REVIEW COMPLETE: Initials: DMC SISP REVIEW PENDING*: Initials: _____ *Non-Public until the review is complete
 X PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE X NON-SENSITIVE
 ADAMS: X Yes ACCESSION NUMBER: _____

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI	RII:ORA			
SIGNATURE	DAS 3/17/05	DMC 3/17/05	DMC 3/17/05	N/A			
NAME	DASeymour*	JLHenson*	DMCollins*	LRPlisco			
DATE	3/ /2005	3/ /2005	3/ /2005	3/ /2005	3/ /2005	3/ /2005	3/ /2005
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

LICENSEE PERFORMANCE REVIEW FOR WESTINGHOUSE'S COLUMBIA FACILITY
(Part 1)
ASSESSMENT PERIOD: December 7, 2003 to January 22, 2005

The following is a summary of the performance of Westinghouse's Columbia facility in the conduct of NRC licensed activities.

PERFORMANCE AREA: SAFETY OPERATIONS

This area is comprised of chemical safety, nuclear criticality safety (NCS), plant operations, and fire safety.

Program Areas Needing Improvement

- Management oversight of criticality safety to assure adequate implementation of the NCS program, including:
 - development and maintenance of NCS bases and documentation,
 - Failure to recognize an accident sequence leading to a credible criticality scenario in the incinerator off-gas and ash handling systems. This resulted in the failure to implement adequate controls to maintain double contingency protection in the incinerator off-gas and ash handling systems (four violations were identified in Inspection Report (IR) 2004-01).
 - Failure to recognize an accident sequence leading to a credible criticality scenario in nitrogen tanks. Ammonium diuranate powder backed up in Conversion line 3 elevator, dryer, filter housing, and into the non-favorable geometry nitrogen tank (Event Number 40888, July 21, 2005)
 - identification of appropriate criticality safety controls,
 - Failure to identify specific limits and controls for fissile material operations in that the specific limits and controls were not identified in criticality safety analyses for mop buckets, the ash processing furnace, cans used to collect solution when inside a plastic bag, and for a 55-gallon drum (Violation (VIO) 2004-202-04 with four examples).
 - reviews of NCS analyses and NCS event reporting
 - Failure to perform an adequate independent review of the incinerator nuclear criticality safety evaluation (one example of a Severity Level II (SL II) violation, IR 2004-01 and VIO 2004-202-13).
 - Failure to report the 1998 incinerator mass accumulation event (one example of a SL II violation, IR 2004-01 and VIO 2004-02-16).

- Failure of the audit program to identify a credible criticality scenario (IR 2004-01).
- Supervisors and managers consistently ensuring procedural compliance for safety activities
 - Failure to limit a mop bucket size to five gallons, control the draining of process or off-stream material into a mop bucket, limit the stack height of rods in a rod channel, and to maintain the required 12-inch edge-to edge spacing between a mop bucket and process piping (VIO 2004-202-01 with four examples).
 - Failure to follow procedures and perform the required isotopic uranium analysis on environmental samples (Non-Cited Violation (NCV) 2004-04-01).
 - Failure to obtain proper laboratory analysis prior to pump-out to the uranyl nitrate bulk tanks (VIO 2004-04-02).
 - Failure to test a cylinder equipped with a Hunt valve prior to processing (NCV 2004-05-01).

PERFORMANCE AREA: RADIOLOGICAL CONTROLS

This area is comprised of radiation protection, environmental protection, waste management, and transportation.

Program Areas Needing Improvement

- No specific areas needing improvement were identified for radiological controls.

PERFORMANCE AREA: FACILITY SUPPORT

This area is comprised of maintenance and surveillance, training, emergency preparedness, and management controls.

Program Areas Needing Improvement

- Development and implementation of management measures that are sufficient to identify and correct operational and performance challenges.
 - Failure to perform adequate independent review of the incinerator nuclear criticality safety evaluation (one example of a SL II violation, IR 2004-01 and VIO 2004-202-13).
 - Failure to report the 1998 incinerator mass accumulation event (one example of a SL II violation, IR 2004-01 and VIO 2004-202-16).

- Failure of the audit program to identify a credible criticality scenario (IR 2004-01).
- Failure to initially fully review the extent of condition following the incinerator event (IR 2004-01).
- Failure to perform periodic reviews of procedures, caused by an error in the software used to generate the review notice (VIO 2004-005-02).
- Failure to implement adequate management oversight for the preparation and control of environmental samples prior to shipment to the vendor (IR 2004-04).

PERFORMANCE AREA: SPECIAL TOPICS (LICENSING ACTIVITIES)

This area is comprised of safety licensing.

Program Areas Needing Improvement

- No specific areas needing improvement were identified for safety licensing.