

May 3, 2007

Mr. Cary Alstadt, Plant Manager
Westinghouse Electric Company
Commercial Nuclear Fuel Division
P.O. Drawer R
Columbia, SC 29250

SUBJECT: INSPECTION REPORT NO. 70-1151/2007-201 AND NOTICE OF VIOLATION

Dear Mr. Alstadt:

The U.S. Nuclear Regulatory Commission (NRC) conducted a routine and announced criticality safety inspection at your facility in Columbia, South Carolina, from April 9 - 13, 2007. The purpose of the inspection was to determine whether activities involving licensed material were conducted safely and in accordance with NRC requirements. Observations and findings were discussed with your staff throughout the inspection and during an exit meeting held on April 13, 2007, and during a telephonic re-exit meeting held on April 19, 2007.

The inspection, which is described in the enclosure, focused on the most hazardous activities and plant conditions; the most important controls relied on for safety and their analytical basis; and the principal management measures for ensuring controls are capable, available, and reliable to perform their functions relied on for safety. The inspection consisted of analytical basis review, selective review of related procedures and records, examinations of relevant nuclear criticality safety (NCS)-related equipment, interviews with NCS engineers and plant personnel, and facility walkdowns to observe plant conditions and activities related to safety basis assumptions and related NCS controls.

Based on the results of this inspection, the NRC has determined that one Severity Level IV violation of NRC requirements occurred. The violation was evaluated in accordance with the NRC Enforcement Policy included on the NRC's web site at www.nrc.gov; select What We Do, Enforcement, then Enforcement Policy. The violation is being cited in the enclosed Notice of Violation (Notice), and the circumstances surrounding it are described in detail in the subject inspection report. The violation is being cited in the Notice because it was identified as a result of NRC inspection. The violation being cited as a Severity Level IV violation is the failure to implement a replacement component in accordance with the approved configuration management procedure. The above violation is related to an NRC concern identified in a previous violation (VIO-70-1151/2004-202-01) regarding the adequacy of NCS controls on floor storage. Your corrective actions for that violation were not completed as planned because a different corrective action was adopted which is pending. NRC is concerned that your corrective actions for the previous violation are not consistent with the corrective actions committed to in your letter dated November 15, 2004. NRC expects sufficient notification of commitment changes to support regulatory oversight of corrective action effectiveness.

C. Alstadt

-2-

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice of Violation 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 NRC's "Rules of Practice," a copy of this letter and the enclosure will be made publicly available in the public electronic reading room of the 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>.

If you have any questions concerning this report, please contact Dennis Morey, of my staff, at (301) 415-6107.

Sincerely,

/RA/

Melanie A. Galloway, Chief
Technical Support Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

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

Enclosure: Inspection Report 70-1151/2007-201

cc w/enclosure: Mr. Marc Rosser
Westinghouse Electric Company

cc w/o enclosure: T. Pearce O'Kelley
Bureau of Radiological Health
South Carolina Department of Health
and Environmental Control

C. Alstadt

-2-

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NOTICE OF VIOLATION

Westinghouse Electric Company
Columbia, South Carolina

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

During an NRC inspection from April 9 - 13, 2007, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Section 3.4 of the License Application states, in part, that operations to assure safe, compliant activities involving nuclear material will be conducted in accordance with approved procedures.

Licensee procedure TA-500, "Columbia Manufacturing Plant Configuration Control," Revision 19, requires in Section 3.13 that components proposed for replacement of approved equipment must be authorized on Form TAF-500-1 and placed on the approved supplemental replacement list.

Contrary to the above, on and before April 11, 2007, the licensee allowed the use of mop buckets in the chemical area which were different from the approved mop buckets and which had not been authorized on Form TAF-500-1 or placed on the approved supplemental replacement list.

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

Pursuant to the provisions of 10 CFR 2.201, Westinghouse Electric Company is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with copies to the Chief, Technical Support Branch, Division of Fuel Cycle Safety and Safeguards, NMSS, and Regional Administrator, Region II, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include: (1) the reason for the violation, or, if contested, the basis for disputing the violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken to avoid further violations; and (4) the date when full compliance will be achieved. Your response may reference or include previously 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 Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other actions as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001.

Enclosure 1

Because your response will be made available electronically for public inspection in the NRC Public Document Room (PDR), or from the NRC's document system (ADAMS), accessible from the NRC web site at <http://www.nrc.gov/reading-rm/adams.html>, 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. 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 2.790(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 3rd day of May 2007

**U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS**

Docket No.: 70-1151

License No.: SNM-1107

Report No.: 70-1151/2007-201

Licensee: Westinghouse Electric Company

Location: Columbia, South Carolina

Inspection Dates: April 9 - 13, 2007

Inspectors: Dennis Morey, Senior Criticality Safety Inspector
Thomas Marenchin, Criticality Safety Inspector

Approved by: Melanie A. Galloway, Chief
Technical Support Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

Enclosure 2

EXECUTIVE SUMMARY

Westinghouse Electric Company NRC Inspection Report 70-1151/2007-201

Introduction

Staff of the U.S. Nuclear Regulatory Commission (NRC) performed a routine and announced nuclear criticality safety (NCS) inspection of the Westinghouse Electric Company, Columbia, South Carolina, facility from April 9 - 13, 2007. The inspection included an on-site review of the licensee NCS program, NCS evaluations, recent NCS events, and open items. The inspection focused on risk-significant fissile material processing activities and areas including uranium recycle and recovery including solvent extraction and the incinerator, ammonium diuranate (ADU) conversion, pelleting, and integrated fuel burnable absorber (IFBA) and Erbia process areas.

Results

- A Severity Level IV violation was identified regarding the licensee's failure to implement a replacement component in accordance with the approved configuration management procedure.
- A concern was identified regarding corrective actions for a previous violation not being consistent with corrective actions committed to in a reply to a notice of violation.
- No safety concerns were identified during review of new and changed criticality safety evaluations.
- No safety concerns were identified regarding demonstration of performance requirements for analytical changes.
- No safety concerns were identified regarding licensee NCS audits.
- No safety concerns were identified regarding licensee reporting, investigation and correction of internal NCS-related events.
- No safety concerns were identified regarding the revised licensee criticality alarm audibility test procedure.

REPORT DETAILS

1.0 Summary of Plant Status

Westinghouse Electric Company (WEC) manufactures light water reactor fuel at its Columbia, SC, facility. During the inspection, the plant was operating at full capacity in all manufacturing areas.

2.0 Nuclear Criticality Safety Program (IP 88015, IP 88016)

a. Inspection Scope

The inspectors reviewed selected NCS evaluations to determine that criticality safety of risk-significant operations was assured through engineered and administrative controls with adequate safety margin and preparation and review by qualified staff. The inspectors reviewed selected aspects of the following documents:

- CN-SB-07-03, "URRS [uranium recycle and recovery system] Sifting/Cleaning Hood Criticality Accident Potential," Revision 0, dated March 21, 2007
- CN-SB-07-04, "Uranium Storage System Polypak Storage Racks Criticality Accident Potential," Revision 0, dated March 29, 2007
- CN-SB-07-05, "IFBA Dry Ventilation System Criticality Accident Potential," Revision 0, dated March 29, 2007
- CSE [Criticality Safety Evaluations]-1-B, "CSE for the 800 CFM Portable Ventilation Unit for Use on Dry Uranium Hoods," Revision 0, dated April 18, 2006
- RA-104, "Regulatory Review of Configuration Change Authorization," Revision 22, dated April 12, 2007
- RA-301, "Floor Storage of Special Nuclear Material," Revision 18, dated September 15, 2005
- RA-314, "Implementation of Criticality Safety Evaluations," Revision 6, dated April 12, 2007
- TA-500, "Columbia Manufacturing Plant Configuration Control," Revision 19, dated December 14, 2006

b. Observations and Findings

Within the selected aspects reviewed, the inspectors determined that the evaluations were prepared by qualified NCS engineers, that independent reviews of the evaluations were completed by other qualified NCS engineers, and that appropriate limits on controlled parameters were established and maintained. The inspectors determined that NCS controls for equipment and processes assured the safety of the operations.

c. Conclusions

No safety concerns were identified during review of new and changed criticality safety evaluations.

3.0 Administrative and Operating Procedures [88015]

a. Inspection Scope

The inspectors reviewed NCS administrative procedures to determine whether the procedures adequately implement the NCS program described in the license. The inspectors reviewed selected aspects of the following documents:

- Form RAF-125-5, "General NCS Engineer Qualification," Revision 3, dated January 19, 2006
- Procedure RA-301, "Floor Storage of SNM," Revision 18, dated September 15, 2005
- Procedure RA-302, "Criticality Signs," Revision 13, dated December 22, 2005
- Procedure RA-303, "Control of Moderating Materials for NCS," Revision 16, dated August 3, 2006
- Procedure RA-305, "NCS Computer Code Validation," Revision 7, dated October 5, 2006
- Procedure RA-306, "Movable Nonfavorable Geometry Containers in the Chemical Area," Revision 9, dated May 5, 2006
- Procedure RA-310, "NCS Independent Technical Reviews," Revision 10, dated December 22, 2005
- Procedure RA-312, "NCS Calculation Note Generation, Format, and Content Requirements," Revision 2, dated March 3, 2006
- Procedure RA-313, "Criticality Safety Evaluations," Revision 5, dated April 4, 2007
- Procedure RA-314, "Implementation of Criticality Safety Evaluations," Revision 5, dated April 4, 2007
- Procedure RA-315, "Reviewing Fuel Assembly Design Engineering Change Notices for NCS Impacts," Revision 0, dated January 18, 2007

b. Observations and Findings

The inspectors reviewed licensee administrative procedures, a selection of changes affecting NCS analysis, and selected NCS controls. The inspectors interviewed licensee managers, NCS engineers, system engineers, and facility operators during document reviews and facility walkdowns. The inspectors determined that the licensee NCS program was conducted in accordance with written administrative procedures that reflected the program described in the license.

c. Conclusions

No safety concerns were identified regarding licensee NCS administrative and operating procedures.

4.0 Integrated Safety Analysis and Items Relied on for Safety (IP 88015, IP 88016)

a. Inspection Scope

The inspectors reviewed selected change control data packages, CSEs, integrated safety analysis (ISA) procedures, and ISA documentation to determine how the CSEs and change control packages demonstrated that the performance requirements of §70.61(b) were met prior to implementing new or changed CSEs. The inspectors reviewed selected aspects of the following documents:

- Procedure RA-104, "Regulatory Review of Configuration Control Changes," Revision 22, dated April 12, 2007
- Procedure RA-314, "Implementation of Criticality Safety Evaluations," Revision 6, dated April 12, 2007

b. Observations and Findings

The inspectors noted that procedures RA-104 and RA-314 were updated to give guidance that before a CSE is implemented a Calculation Note must be completed. The inspectors reviewed completed Calculation Notes for changes implemented to date and determined that the demonstration of the performance requirements was adequate.

c. Conclusions

No safety concerns were identified regarding demonstration of performance requirements for analytical changes.

5.0 Nuclear Criticality Safety Inspections, Audits, and Investigations (IP 88015)

a. Inspection Scope

The inspectors reviewed results of the most recent NCS quarterly audits to assure that appropriate issues were identified and resolved. The inspectors reviewed selected aspects of the following documents:

- RA-102, "Environment, Health, and Safety Informal Compliance Audits," Revision 20, dated March 29, 2007
- RA-107, "Corrective Action Process for Regulatory Events," Revision 16, dated April 12, 2007
- ICI [Informal Compliance Inspection] #1213, "URRS Inside - Incinerator," dated January 19, 2007
- ICI #1224, "URRS Outside - Stills," dated January 25, 2007
- ICI #1268, "Conversion - UF6 Bay," dated February 12, 2007
- ICI #1280, "Conversion - Lines 1-5," dated February 15, 2007
- ICI #1319, "Fuel Rod - IFBA," dated March 5, 2007
- ICI #1326, "Support - Tool Room," dated March 12, 2007
- ICI #1331, "Fuel Rod - IFBA," dated March 13, 2007
- ICI #1337, "URRS Inside - SOLX [solvent extraction]," dated March 13, 2007

- ICI #1348, "Fuel Rod - Erbia," dated March 15, 2007
- ICI #1367, "Conversion - Lines 1-5," dated March 22, 2007
- ICI #1369, "URRS Inside - Cylinder Wash," dated March 9, 2007
- ICI #1390, "EH & S - HP Lab," dated March 29, 2007
- ICI #1395, "Pelleting," dated April 10, 2007
- ICI #1397, "Conversion Lines 1-5," dated April 9, 2007

b. Observations and Findings

The inspectors reviewed licensee ICI cards and interviewed NCS staff. The inspectors reviewed procedures and discussed the audit findings with the licensee's NCS staff. The inspectors determined that the licensee NCS audits were conducted in accordance with written procedures. The inspectors noted that the audits were performed by NCS engineers who: (1) reviewed open NCS issues from previous audits; (2) reviewed the adequacy of control implementation; (3) reviewed plant operations for compliance with license requirements, procedures, and postings; and (4) examined equipment and operations to determine that past evaluations remained adequate.

c. Conclusions

No safety concerns were identified regarding licensee NCS audits.

6.0 Nuclear Criticality Safety Event Review and Follow-Up (IP 88015, IP 88016, IP 88017)

a. Inspection Scope

The inspectors reviewed the licensee response to internally-reported events. The inspectors reviewed the progress of investigations and interviewed licensee staff regarding immediate and long-term corrective actions. The inspectors reviewed selected aspects of the following documents:

- LTR-EHS-04-78, "Uranium in Incinerator Off-Gas System," dated March 9, 2004
- LTR-EHS-04-202, "Material Accumulation in Cylinder Recert 55 Gallon Drum," dated June 4, 2004
- LTR-EHS-04-222, "Canvas Cart in Chemical Area," dated July 8, 2004
- LTR-EHS-05-92, "Infrared Sensor Misaligned Polypack Dump Hood," dated February 24, 2005
- LTR-EHS-05-93, "Unanalyzed Change of Sponge Blast Media," dated February 24, 2005
- LTR-EHS-05-94, "Improper Sampling of Power for Moisture Content," dated February 24, 2005
- LTR-EHS-05-191, "Material Buildup in the IFBA HVAC Recirculation Filter Housing," dated June 10, 2005
- LTR-EHS-05-288, "Stacking of Rod Transfer Caskets," dated August 24, 2005

b. Observations and Findings

The inspectors reviewed selected licensee internally-reported events. The inspectors observed that internal events were investigated in accordance with written procedures and that appropriate corrective actions were assigned.

c. Conclusions

No safety concerns were identified regarding licensee reporting, investigation and correction of internal NCS-related events.

7.0 Plant Operations (IP 88015, IP 88016, IP 88017)

a. Inspection Scope

The inspectors performed plant walkdowns to review activities in progress and to determine whether risk-significant fissile material operations were being conducted safely and in accordance with regulatory requirements. The inspectors reviewed selected aspects of the following documents:

- LTR-RAC-04-145, "Additional Information for a Reply to a Notice of Violation," dated November 15, 2004
- Drawing 360F28EQ01, "Mop Bucket," dated September 29, 2004
- CSE-08-D, "CSE for the Pellet Grinder Line," Revision 2, dated February 2007
- Procedure COP-843005, "800 CFM Portable Ventilation System," Revision 2, dated February 19, 2004
- CSE-1-B, "800 CFM Portable Ventilation Unit for Use on Dry Uranium Hoods," Revision 0, dated April 18, 2006
- Criticality Safety Evaluation of 800 CFM Portable Ventilation Units, dated September 27, 1999

b. Observations and Findings

The inspectors interviewed operators, NCS engineers, and process engineers both before and during walkdowns. The inspectors performed walkdowns of all areas, including Erbia, ADU, and IFBA fuel fabrication, uranium recovery, and rod and assembly loading. The inspectors verified that controls identified in CSEs were installed or implemented and were adequate to ensure safety. The inspectors observed the replacement of grinder sludge centrifuges with new centrifuges containing a smaller bowl which improves the subcritical margin for the operation.

During a walkdown of the chemical process area, the inspectors observed a mop bucket which did not contain an NCS posting that the licensee requires to be affixed to mop buckets in the area. The inspectors also observed that the mop bucket had smaller holes near the 5-gallon level than the licensee requires to be in mop buckets in the area. The inspectors noted that the posting was not an NCS control. The inspectors noted that several different types of mop buckets were in use in the area and that one of the buckets

was described as an as-built condition by configuration controlled drawing 360F28EQ01 which required that 1-inch holes be drilled at the 5-gallon level.

The inspectors noted that the previous licensee EH&S manager had directed, in an e-mail dated September 30, 2004, that only the configuration controlled mop bucket be issued for use in the chemical area. The e-mail stated:

Please note that the ISA storeroom should be issuing only one type of mop bucket to the chemical area going forward. The authorized mop bucket is defined by Westinghouse drawing 360F28EQ01. Please note that it is the "blue bucket" currently found on the chemical side and has two holes drilled in the side that limits the volume to 5 gallons or less. Let me know if you have any questions.

The inspectors noted that the configuration controlled "blue" mop bucket was the only bucket being issued from ISA stores and that no approved replacements were listed.

The inspectors noted that the "blue" mop bucket had been placed under configuration control in response to a violation, VIO-70-1151/2004-202-01, which had, *inter alia*, addressed a mop bucket which contained more than 5-gallons of water in violation of the area operating limit. The licensee commitment to configuration control of mop buckets is contained in a letter dated November 15, 2004, which states:

2) Holes were drilled in all mop buckets as a passive engineered control to limit the volume to less than 5 gallons. In addition, a new plant drawing and a specification for mop buckets were developed and instituted into the configuration control and maintenance systems to prevent recurrence.

The inspectors determined that the licensee configuration management program is described in procedure TA-500, "Columbia Manufacturing Plant Configuration Control," Revision 19, which requires in Section 3.13 that components proposed for replacement of approved equipment must be authorized on Form TAF-500-1 and placed on the approved supplemental replacement list in the MAPCON [supply database] system. The inspectors determined that the licensee had not followed the configuration management procedure while completing the corrective action above resulting in the continued presence of unauthorized mop buckets in the chemical area. The failure to implement a replacement component in accordance with the approved configuration management procedure is **Violation (VIO) 70-1151/2007-201-01**.

The mop bucket corrective action discussed above was developed in response to a violation regarding the adequacy of NCS controls on floor storage. The corrective actions for the violation were described in a letter dated November 15, 2004, but were not completed as planned and the commitment to NRC was not modified. The inspectors determined that the corrective action was not completed because a different corrective action, development of a separate cleaning and decontamination NCS analysis, was adopted which is pending and is being tracked as **IFI 70-1151/2006-202-03**. The inspectors did not identify any other inadequate corrective actions.

c. Conclusions

A Severity Level IV violation was identified regarding the licensee's failure to implement a replacement component in accordance with the approved configuration management procedure.

A concern was identified regarding corrective actions for a previous violation not being consistent with corrective actions committed to in a reply to a notice of violation.

8.0 Criticality Alarm Systems (IP 88017)

a. Inspection Scope

The inspectors reviewed documentation of the criticality accident alarm test procedures to determine the adequacy of the licensee criticality alarm system. The inspectors reviewed selected aspects of the following document:

- Procedure RA-304, "Criticality Accident Alarm System," Revision 11, dated February 2, 2007

b. Observations and Findings

The inspectors noted that the criticality alarm test procedure had been revised. The inspectors reviewed the revised alarm test procedure and interviewed criticality safety staff regarding implementation of the revised alarm audibility test procedure. The inspectors did not identify any safety concerns regarding the revised licensee criticality alarm test procedure.

c. Conclusions

No safety concerns were identified regarding the revised licensee criticality alarm audibility test procedure.

9.0 Open Item Review

IFI 70-1151/2005-202-02

This item tracks long-term improvement of the criticality alarm system, including correction of current audibility problems. During a previous inspection, the licensee had proactively implemented a compensatory measure to address the audibility problem consisting of announcing criticality alarms on the public address system. During this inspection, the inspectors noted that the criticality alarm test procedure was updated, and the licensee expects the criticality alarm system audibility upgrade survey to be completed by March 2008. This item remains open.

IFI 70-1151/2005-202-03

This item tracks revision of the criticality alarm system audibility test procedure. During a previous inspection, the licensee had committed to update the criticality alarm test procedures to include a means to test the operability of individual horns on a regular basis. During this inspection, the inspectors noted that the criticality alarm test procedure was updated. This item is closed.

IFI 70-1151/2006-201-01

This item tracks analysis and testing of the automated moisture sampler along with incorporation of any required changes to the accident sequence in the ISA. The licensee indicated that an automated sampling system is in place in one ADU line, has been tested, passed quality control, and is approved for use. The licensee is reviewing the installed automated moisture sampler and other methods for automated moisture sampling. The licensee continues to use observers to monitor manual moisture sampling. This item remains open.

IFI 70-1151/2006-202-02

This item tracks completion and implementation of the new floor storage CSE. During a previous inspection, the licensee had committed to draft a new floor storage CSE to clarify the spacing requirements for favorable geometry process containers. During the current inspection, the inspectors noted that the new CSE was complete and was expected to be implemented in July. This item remains open.

IFI 70-1151/2006-202-03

This item tracks completion and implementation of the new clean-up and decontamination CSE. During a previous inspection, the licensee had committed to draft a new cleaning and decontamination CSE to clarify the spacing requirements related to containers such as mop buckets. During this inspection, the inspectors noted that the new CSE was complete and was expected to be implemented in July. This item remains open.

IFI 70-1151/2006-203-01

This item tracks the licensee's corrective actions for the incinerator blower fire. The fire occurred when a pressure increase in the incinerator caused hot off-gas to penetrate the flame blower and ignite the flame blower filter. The licensee attributed the pressure increase to an automatic quench sump discharge high contamination level cut-off. The licensee had completed a root cause analysis of the incinerator blower fire and had entered 21 corrective actions into the corrective action process (CAP) system for tracking. At the time of the inspection, 10 of the 21 corrective actions had been completed. The licensee is continuing efforts to close out the remaining CAP system items and is expected to have the majority of the items closed by September of this year. This item remains open.

VIO 70-1151/2006-205-01

This item tracks the licensee's failure to perform operations in accordance with approved procedures. During a previous inspection, the inspectors identified that during the implementation of Revision 2 of CSE-04-A and Revision 2 of CSE-07-A the licensee failed to perform operations in accordance with procedure RA-314, "Implementation of CSEs." During this inspection, the inspectors reviewed the licensee corrective actions which included retraining of all NCS engineers and updating procedure RA-314. At the time of this inspection, corrective actions were complete. This item is closed.

URI 70-1151/2006-205-02

This item tracks the licensee's ability to demonstrate that the performance requirements are met subsequent to a change affecting NCS-related accident sequences. During a previous inspection, the inspectors reviewed selected CSEs and change control packages and noted that they did not contain an explicit demonstration of the performance requirements. During this inspection, the inspectors noted that procedures RA-104 and RA-314 were updated to implement the requirement that before a CSE is implemented a Calculation Note must be completed to demonstrate that the performance requirements are met. The inspectors reviewed Calculation Notes completed to date under the new requirements and determined that the licensee had demonstrated that the performance requirements were met. This item is closed.

URI 70-1151/2006-205-03

This item tracks the licensee's determination of when the event reporting time clock starts. During a previous inspection, the inspectors were concerned that the licensee practice of starting the event reporting time clock subsequent to reviews and discussion with multiple staff might conflict with license requirements and result in late event reports. During this inspection, the inspectors reviewed the licensee's reported events over the previous 6 years and determined that only one of 25 events had been reported outside of the required reportability time frame. During this inspection, the inspectors noted that the licensee had updated its event reporting procedure, RA-107, "Regulatory Review of Configuration Control Changes," to coincide with the license application by only requiring one attempt to notify EH&S prior to the emergency coordinator making the reportability determination. The inspectors also noted that the licensee had defined "eyes on assessment" in procedure RA-107. This item is closed.

URI 70-1151/2006-205-04

This item tracks the licensee's practices regarding screening and reporting of previously unanalyzed sequences to the NRC as unanalyzed conditions. During a previous inspection, the inspectors observed that the licensee does not report as an unanalyzed condition previously unanalyzed accident sequences that are identified when revising CSEs. During the current inspection, the inspectors discussed this issue with licensee staff and noted that the licensee threshold for reporting a previously unanalyzed accident sequences is the addition of a new control in order to meet performance requirements. This item remains open.

10.0 Exit Meeting

The inspectors presented the inspection scope and results to members of the licensee's management and staff during an exit meeting on April 13, 2007, and a telephonic re-exit meeting on April 19, 2007. The licensee acknowledged and understood the findings as presented.

SUPPLEMENTARY INFORMATION

1.0 List of Items Opened, Closed, and Discussed

Items Opened

VIO 70-1151/2007-201-01 Failure to implement a replacement component in accordance with the approved configuration management procedure.

Items Closed

IFI 70-1151/2005-202-03 Tracks revision of the criticality alarm system audibility test procedure.

VIO 70-1151/2006-205-01 Tracks the licensee's failure to perform operations in accordance with approved procedures.

URI 70-1151/2006-205-02 Tracks the licensee's ability to demonstrate that the performance requirements are met subsequent to a change affecting NCS-related accident sequences.

URI 70-1151/2006-205-03 Tracks the licensee's determination of when the event reporting time clock starts.

Items Discussed

IFI 70-1151/2005-202-02 Tracks long-term improvement of the criticality alarm system, including correction of current audibility problems.

IFI 70-1151/2006-201-01 Tracks analysis and testing of the automated moisture sampler along with incorporation of any required changes to the accident sequence in the ISA.

IFI 70-1151/2006-202-02 Tracks completion and implementation of the new floor storage CSE.

IFI 70-1151/2006-202-03 Tracks completion and implementation of the new clean-up and decontamination CSE.

IFI 70-1151/2006-203-01 Tracks licensee's corrective actions for the incinerator blower fire.

URI 70-1151/2006-205-04 Tracks the licensee's practices regarding screening and reporting of previously unanalyzed sequences to the NRC as unanalyzed conditions.

2.0 Inspection Procedures Used

IP 88015	Nuclear Criticality Safety Program
IP 88016	Nuclear Criticality Safety Evaluations and Analyses
IP 88017	Criticality Alarm Systems

3.0 Partial List of Persons Contacted

Westinghouse Electric Company

*†R. Winiarski	NCS Manager
*D. Graham	NCS Technician
*M. Corum	NCS Technician
*C. Snyder	NCS Technician
*†M. Rosser	EH&S Manager
*†G. Couture	EH&S Engineer
†N.Parr	EH&S Engineer

NRC

D. Morey	Senior Criticality Safety Inspector, NRC HQ
T. Marenchin	Criticality Safety Inspector, NRC HQ

* Attended the exit meeting on April 13, 2007

† Attended the re-exit meeting on April 19, 2007

4.0 List of Acronyms

ADAMS	Agencywide Documents Access and Management System
ADU	ammonium diuranate
CAP	corrective action process (WEC-wide computer program)
CFR	Code of Federal Regulations
CSE	criticality safety evaluation
EH&S	environment, health, and safety
IFBA	integral fuel burnable absorber
IFI	inspector follow-up item
IP	inspection procedure
ISA	integrated safety analysis
NCS	nuclear criticality safety
PDR	public document room
SOLX	solvent extraction
URI	unresolved item
URRS	uranium recycle and recovery system
VIO	violation
WEC	Westinghouse Electric Company (licensee)