



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

October 11, 2005

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

SUBJECT: NRC INSPECTION REPORT NO. 70-1151/2005-008 AND NOTICE OF VIOLATION

Dear Mr. Fecteau:

The U.S. Nuclear Regulatory Commission (NRC) conducted an announced routine inspection in the area of emergency preparedness. The inspection was conducted at your facility in Columbia, South Carolina, from September 12-16, 2005. The purpose of the inspection was to determine whether activities involving licensed materials were conducted safely and in accordance with regulatory requirements. An exit meeting was held on September 16, 2005, during which time observations from the inspection were discussed with you and members of your staff.

The inspection consisted of facility walk downs; selective examinations of relevant procedures and records; examinations of safety-related structures, systems, equipment and components; interviews with plant personnel; and observations of plant conditions and activities in progress. Throughout the inspection, observations were discussed with your managers and staff.

Based on the results of this inspection, the NRC has determined that a Severity Level IV violation of regulatory requirements occurred. The violation involved the failure to perform weekly operational inspection and tests of the safety showers and eyewash stations. The circumstances surrounding the violation are described in detail in the subject inspection report.

The violation was evaluated in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, which is included on the NRC's web site at <http://www.nrc.gov/what-we-do/regulatory/enforcement.html>. The violation is cited in the enclosed Notice of Violation (Notice). 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 NRC's "Rules of Practice," this document may be accessed through the NRC's public electronic reading room, Agency-Wide Document Access and Management System (ADAMS) on the Internet at <http://www.nrc.gov/reading-rm/adams.html>.

Should you have any questions concerning this letter, please contact us.

Sincerely,

/RA/

Jay L. Henson, Chief
Fuel Facility Inspection Branch 2
Division of Fuel Facility Inspection

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

Enclosures: 1. Notice of Violation
2. NRC Inspection Report

cc w/encls:
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
Div. of Radioactive Waste Mgmt.
Dept. of Health and Environmental
Control
Electronic Mail Distribution

R. Mike Gandy
Division of Radioactive Waste Mgmt.
S. C. Department of Health and
Environmental Control
Electronic Mail Distribution

Distribution w/encls: (See page 3)

Distribution w/encls:

J. Henson, RII
 D. Seymour, RII
 J. Lubinski, NMSS
 M. Galloway, NMSS
 G. Janosko, NMSS
 M. Adams, NMSS
 P. Silvia, NMSS
 PUBLIC

X SISP REVIEW COMPLETE: Initials: ____JLH____ ☐ SISP REVIEW PENDING*: Initials: _____ *Non-Public until the review is complete

X PUBLICLY AVAILABLE ☐ NON-PUBLICLY AVAILABLE ☐ SENSITIVE X NON-SENSITIVE

ADAMS: ☐ YES ☐ NO ACCESSION NUMBER: _____

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI			
SIGNATURE	RG 10/7/05	DAS 10/8/05					
NAME	RGibson	DSeymour					
DATE							
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

NOTICE OF VIOLATION

Westinghouse Electric Company, LLC
Columbia, SC

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

During an NRC inspection conducted on September 12 - 16, 2005, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

Safety Condition No. S-1 of Special Nuclear Material License No. 1107, requires that material be used in accordance with statements, representations, and conditions in the License Application dated April 30, 1995, and supplements thereto.

Section 3.3.1 of the License Application requires, in part, that operations to assure safe, compliant activities involving nuclear material will be conducted in accordance with approved procedures.

Procedure SYP-215, Emergency Shower and Eyewash Inspection, Operation, Revision 4, dated November 21, 2002, Section 6.5.1, states, in part, that in order to assure operational status of safety showers and eyewash stations the following items and tasks must be performed weekly, (ensure access is unobstructed, verify protective eyewash covers are properly positioned, clean, and intact, check that the bowl and spouts are clean and free of trash, place a pan or bucket under non-plumbed drainpipes to collect water during flushing, and check that flow is effective and continuous by activating the unit).

Contrary to the above, for calendar year 2005 to September 16, 2005, the licensee did not perform weekly the operational inspection and tests of the safety showers and eyewash stations. Specifically, safety showers and eyewash stations located throughout the plant (e.g., IFBA and the conversion areas) had not been inspected and tested for operational readiness.

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 a copy to the 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 or severity level, (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 a Demand for Information may be issued as to why the license not be modified, suspended, or revoked, or why such other action as may be proper should be taken. Where good cause is shown, consideration will be given to extending the response time.

Enclosure 1

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

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), 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 2.390(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 11th day of October 2005

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 70-1151

License No.: SNM-1107

Report No.: 70-1151/2005-008

Licensee: Westinghouse Electric Company

Location: Columbia, SC

Inspection Dates: September 12-16, 2005

Inspectors: Richard Gibson, Jr.
Fuel Cycle Safety Inspector

Approved: Jay Henson, Chief
Fuel Facility Inspection Branch 2, DFFI
Region II

EXECUTIVE SUMMARY

Commercial Nuclear Fuel Division
NRC Inspection Report 70-1151/2005-08

This routine, announced inspection was conducted in the area of emergency preparedness at the Westinghouse Columbia facility. The inspection involved observation of work activities, a review of selected records, and interviews with plant personnel. The inspection identified the following aspects of the licensee's program as outlined below:

Emergency Preparedness

- Some program changes by the licensee since the last inspection that positively impacted the effectiveness of the emergency preparedness program were: increased training requirements for the emergency response personnel; strategically positioned qualified and experienced incident commanders, team leaders and brigade members on all shifts; and the purchase of new and improved equipment. The independent audit was a compliance-based assessment (Paragraph 1.a).
- The revised emergency procedures continued to implement the Site Emergency Plan (Paragraph 1.b).
- Based on interviews and training documentation, emergency response training was adequate. Personnel selected for review were trained in accordance with procedures (Paragraph 1.c).
- Based on interviews and records reviewed, the licensee's interface with offsite support groups was properly maintained (Paragraph 1.d).
- The licensee conducted exercises in accordance with the requirements of the Site Emergency Plan and procedures. The performance of table top and hands-on-drills using realistic scenarios provided sufficient challenges to maintain the proficiency of the response organization (Paragraph 1.e).
- Based on the equipment operability checks and documentation for maintenance and calibration, the inspector determined that the reliability of selected equipment was good and the equipment was maintained in a state of operational readiness. However, one violation was identified regarding failure to perform weekly operational inspection and tests of the safety showers and eyewash stations. Additionally, one inspector followup item was identified regarding the inability to clearly hear the Voice Communications System in the conversion area in the event of an emergency (Paragraph 1.f).

Attachment:

Partial Listing of Persons Contacted
List of Items Opened, Closed and Discussed
Inspection Procedures Used
List of Acronyms

REPORT DETAILS

1.0 Emergency Preparedness (Inspection Procedure - 88050) (F3)

a. Review of Program Changes (F3.01)

(1) Scope and Observations

Changes to the Site Emergency Plan (SEP), organization, facilities, and equipment were reviewed to assess the impact on the effectiveness of the program. The adequacy of the emergency preparedness audit required by the SEP was also evaluated.

Some program changes by the licensee since the last inspection were increasing the training requirements for the emergency response personnel, in particular, the brigade members; strategically positioning qualified and experienced incident commanders, team leaders and brigade members on each shift so they could be readily available in the event of an emergency; and the purchasing of new and improved equipment for the hazardous material (hazmat) vehicle. There were no other significant organization or facility changes since the last inspection in July 2004.

An independent audit and quarterly management review summaries were reviewed for the emergency preparedness program for 2005. The audit and summaries were compliance oriented and provided a detailed assessment of the emergency preparedness program. During the tour of the facilities, the inspector reviewed emergency preparedness control documents to assess the effectiveness of the emergency preparedness program and determined that it was adequate. In addition, the inspector reviewed the licensee's emergency call list and determined it to be current.

(2) Conclusions

The inspector determined that the increase in training requirements for the emergency response personnel, strategically positioning response personnel on each shift, and the purchase of new and improved equipment were program changes that positively impacted the effectiveness of the emergency preparedness program. The independent audit was a compliance-based assessment, and the emergency call list was current.

b. Implementing Procedures (F3.02)

(1) Scope and Observations

Emergency Preparedness Implementing Procedures were reviewed to determine if procedures were adequate and to ensure that revised procedures continued to implement the SEP. From the review of procedures, the inspector determined that there were no significant procedure changes since the last inspection. However, the inspector reviewed randomly selected procedure changes and concluded that the changes were procedure updates or enhancements and that the procedures continue to implement the SEP requirements. All changes were developed, reviewed, and approved.

(2) Conclusions

The inspector determined from a review of records and interviews with licensee representatives that the emergency procedures continued to adequately implement the SEP.

c. Training and Staffing of Emergency Organization (F3.03)

(1) Scope and Observations

Emergency response training was reviewed to determine if the licensee had provided adequate training to personnel designated as the primary and/or alternate Emergency Director (ED), to other key personnel assigned to the emergency command staff (ECS), and to members of the on-scene command staff.

The inspector reviewed the training outline and class attendance roster sheets for personnel assigned to the emergency response teams. The inspector determined that personnel training was current and in accordance with procedural requirements governing emergency response training. From review of training records and interviews with cognizant licensees' representatives, the inspector determined that the licensee increased training requirements for the response teams by requiring more hours for hazmat training, industrial rope rescue, and additional brigade firefighting training. The inspector conducted interviews with several members of the emergency response teams including brigade members, team leaders and incident commanders. The response team members were knowledgeable regarding their roles and demonstrated that the radiation safety training provided adequate instructions for performing radiation surveys in the absence of radiation protection personnel. The inspector determined that the interviewees were familiar with the criticality alarms, the evacuation route, and the accountability reporting location. No problems were identified during any of the interviews and walkthroughs. Emergency response training provided adequate information regarding roles, responsibilities, and recent changes to the SEP and the emergency procedures.

(2) Conclusions

Based on interviews and training documentation, emergency response training was adequate. Personnel selected for review were trained in accordance with procedures.

d. Offsite Support (F3.04)

(1) Scope and Observations

Licensee activities in the areas of training, agreements, and exercises were reviewed to determine if the licensee was periodically involving offsite support groups.

The inspector determined that agreements with offsite support groups were maintained current in accordance with the SEP. The inspector reviewed offsite support training records and determined that annual training was provided to offsite support in accordance with the SEP and procedures. The inspector also determined that site familiarization tours were provided to offsite fire support groups and rescue personnel and that the incident

commanders for the licensee were allowed to accompany the Columbia firefighters on fire emergencies. The radiation safety training provided to offsite response personnel was adequate and provided the appropriate level of understanding regarding the potential hazards that may be encountered during an onsite response. Offsite authorities participated in the last biennial exercise conducted in March 2005.

(2) Conclusions

Based on interviews and records reviewed, the licensee's interface with offsite support groups was properly maintained.

e. Drills and Exercises (F3.05)

(1) Scope and Observations

The SEP required that biennially an emergency exercise be conducted. This area was reviewed for adequacy in testing both onsite and offsite emergency response capability. The effectiveness of the licensee's critique to self-identify areas of improvement was also reviewed.

The last biennial exercise was observed by the NRC on March 29, 2005, and included participation by State and local support agencies. In addition to the biennial exercise, the licensee periodically conducted table top and hands-on-drills involving activation of the emergency organization. The licensee's drill and the accident scenarios that were postulated provided sufficient challenges to maintain the proficiency of response personnel.

Critiques of the drills were performed, and comments were placed in the corrective actions in progress system (CAPS) for implementation.

(2) Conclusions

The licensee conducted exercises in accordance with the requirements of the SEP and procedures. The performance of table top and hands on drills using realistic scenarios provided sufficient challenges to maintain the proficiency of the response organization.

f. Emergency Equipment and Facilities (F3.06)

(1) Scope and Observations

Emergency response equipment, instrumentation, vehicles and supplies used to evaluate and assess radiological conditions were examined to determine if they were maintained in a state of operational readiness.

The licensee's emergency equipment and kits were inspected in the Emergency Operations Center (EOC), Conference Room 101, site vehicles, and the brigade facility at the plant. The inspector observed an inventory and operability check of equipment at select locations and noted that survey instruments were operational. The inspector also observed that the respiratory protection equipment, air samplers, etc., and supplies were

checked for shelf-life, reliability and quantity, and found to be maintained in a state of readiness. The inspector noticed that the licensee had purchased additional equipment including air samplers, fire hoses and connections, and a new hazmat vehicle. The inspector determined that emergency response equipment was maintained as described in the emergency procedures.

The inspector toured the plant to determine that emergency equipment, showers and eyewash stations were maintained in a state of operational readiness. The inspector identified, from reviews of records and interviews with cognizant licensee representatives, that the weekly operational inspection and tests of the safety showers and eyewash stations were not conducted as required weekly by the licensee during calendar year 2005 to date. The safety showers and eyewash stations are one of the first lines of defense in an emergency such as a chemical spill or contamination event (for example, a spill of uranyl nitrate).

Specifically, the licensee's procedure, SYP-215, Emergency Shower and Eyewash Inspection, Operation, Revision 4, dated November 21, 2002, Section 6.5.1, requires that in order to assure operational status of safety showers and eye wash stations the following items and tasks must be performed weekly: ensure access is unobstructed; verify protective eyewash covers are properly positioned, clean, and intact; check that the bowl and spouts are clean and free of trash; and place a pan or bucket under non-plumbed drainpipes to collect water during flushing, and check that flow is effective and continuous by activating the unit. Failure to perform the weekly operational inspection and tests of the safety showers and eyewash stations throughout the plant during 2005 was identified as a violation (VIO) of NRC license application requirements (VIO 70-1151/2005-008-01). The licensee initiated an investigation to determine the reasons the safety showers and eyewash stations were not inspected and tested weekly for operational readiness.

The inspector also toured the plant to interview operators in the conversion and pellet areas in order to verify that the Voice Communications System (VCS) and the criticality alarm system were functional and could be heard under normal operations. The inspector noted that fire and criticality alarms were audible in the operations area. However, according to the operators in the conversion area, and verified by the inspector, at times during normal operations, it was difficult to clearly hear the VCS messages. The VCS is used to relay messages to personnel in the facility after an alarm (fire, chemical spill). The inspector concluded that if there was a fire or chemical emergency, it might be difficult to hear the announcement. The inspector noted that the process area operators could call security for the message when the message was unclear. At the time of this inspection, the licensee was reviewing potential fixes for this vulnerability. The inspector noted that one potential fix discussed by the licensee was to have the control room operators rebroadcast VCS messages over the process area public address system. The licensee's actions to ensure VCS messages can be clearly heard by the operators in the conversion area will be tracked as Inspector Followup Item (IFI) 701151/2005-08-02.

(2) Conclusions

Based on the equipment operability checks and documentation for maintenance and calibration, the inspector determined that the reliability of selected equipment was good and the equipment was maintained in a state of operational readiness. However, one violation was identified regarding failure to perform weekly operational inspection and tests of the safety showers and eyewash stations. Additionally, one IFI was identified regarding the inability to clearly hear the Voice Communications System in the conversion area in the event of an emergency.

2.0 Follow-up on Previously Identified Issues:

Closed IFI 70-1151/2004-202-08: Identify and Train Personnel. During an earlier inspection the inspectors noted, during review of training records, that only one person was assigned to all of the emergency response positions and functions. During this inspection, the inspector reviewed the training program, training objectives, lesson plans, and attendance sign-in sheets and determined that the emergency response positions were filled with trained and qualified personnel. This item is closed.

3.0 Exit Meeting

The inspection scope and results were summarized on September 16, 2005, with the licensee. Although proprietary documents and processes were occasionally reviewed during this inspection, the proprietary information is not included in this report. Dissenting comments were not received from the licensee.

ATTACHMENT

1. PERSONS CONTACTED

Partial List of Licensee's Persons Contacted

M. Fecteau, Manager, Columbia Plant
S. McDonald, Manager, Environmental, Health and Safety
D. Graham, Criticality Technician, Environmental, Health and Safety
N. Parr, Manager, Environmental, Health and Safety Licensing
R. Winiarski, Manager, Nuclear Criticality Safety Engineering
M. Rosser, Program Manager, NCS
J. Nickl, Environmental, Health and Safety
J. Heath, Manager, Environmental, Health and Safety Engineering
T. Shannon, Operations Manager, EHS

Other licensee employees contacted included engineers, technicians, production staff, security and office personnel

2. INSPECTION PROCEDURES USED

IP 88050 Emergency Preparedness

3. LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Item Number</u>	<u>Status</u>	<u>Description</u>
IFI 70-1151/2004-202-08	Closed	Identify and Train Emergency Response Personnel (Paragraph 2)
VIO 70-1151/2005-08-01	Open	Failure to Perform Weekly Operational Function Tests on Eye-washes and Showers (Paragraph 1.f)
IFI 70-1151/2005-08-02	Open	Inability to Clearly Hear the VCS in the Conversion Area During Normal Operation (Paragraph 1.f)

4. LIST OF ACRONYMS USED

ADAMS	Agency-Wide Document Access and Management System
CAPS	Corrective Action Process
CFR	Code of Federal Regulations
ECS	Emergency Command Staff
ED	Emergency Director
IFI	Inspector Followup Item
IP	Inspection Procedure
NOV	Notice of Violation
NRC	Nuclear Regulatory Commission
SEP	Site Emergency Plan
VCS	Voice Communications System
VIO	Violation