



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

July 31, 2001

Westinghouse Electric Corporation
ATTN: Mr. R. Monley, Manager
Columbia Plant
Commercial Nuclear Fuel Division
P. O. Box R
Columbia, SC 29250

SUBJECT: NRC INSPECTION REPORT NO. 70-1151/2001-06 AND NOTICE OF VIOLATION

Dear Mr. Monley:

This letter refers to the inspection conducted on July 9-13, 2001, at the Westinghouse facility. The enclosed report presents the results of this inspection.

Based on the results of this inspection, the NRC has determined that a violation of NRC requirements occurred. The violation is cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding it are described in detail in the subject inspection report.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence is already adequately addressed in this Inspection Report (70-1151/2001-06). Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice. Also, subsequent to this inspection, the NRC received your response dated July 15, 2001, to Violation 70-1151/2001-03-01. We have evaluated your response and determined that it meets the requirements of 10 CFR 2.201. Implementation of your corrective actions will be examined during a future inspection.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response (if you choose to provide one will be available electronically for public inspection in the NRC Public Document Room (PDR) or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR and PARS without redaction. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRCC/ADAMS/index.html> (the Public Electronic Reading Room).

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

Sincerely,

/RA/

Edward J. McAlpine, Chief
Fuel Facilities Branch
Division of Nuclear Materials Safety

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

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

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, 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

NOTICE OF VIOLATION

Westinghouse Electric Corporation
Columbia, South Carolina

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

During an NRC inspection conducted July 9 -13, 2001, 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:

License Condition 10 of Special Nuclear Materials (SNM) License No. 1107 requires the licensee to comply with all Safety and Safeguards Conditions listed in the license.

Safety Condition S-3 states that the licensee shall maintain and execute the response measures in the Site Emergency Plan, dated April 30, 1992, or as further revised by the licensee consistent with 10 CFR 70.32(i).

Section 7.5 of the Site Emergency Plan (SEP) requires the Site Emergency Plan will be formally reviewed and updated on an annual basis by the Radiation Protection Component. This review and updating will incorporate changes that are desirable as a result of personnel training sessions, drills, exercises, critiques or facility modifications to processes, kinds of material at risk or plant organization.

Contrary to the above, between November 6, 1997 and July 13, 2001 changes were made to the site physical layout, the organization (including titles and reporting chain), and the concept of operations during an emergency, but the SEP was not updated.

This is a severity Level IV violation (Supplement VIII).

The NRC has concluded that information regarding the reason for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence and the date when full compliance will be achieved is already adequately addressed in this Inspection Report (70-1151/2001-06). However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," and send it 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).

If you choose to respond, your response will be made publicly available. Therefore, to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can 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/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Enclosure 1

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

Dated at Atlanta, Georgia
this 31st day of July 2001

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 70-1151

License No.: SNM-1107

Report No.: 70-1151/2001-06

Licensee: Westinghouse Electric Corporation

Facility: Commercial Nuclear Fuel Division

Location: Columbia, South Carolina

Dates: July 9 -13, 2001

Inspector: A. Gooden, Health Physicist

Approved By: E. McAlpine, Chief
Fuel Facilities Branch
Division of Nuclear Materials Safety

EXECUTIVE SUMMARY

Commercial Nuclear Fuel Division NRC Inspection Report 70-1151/2001-06

This routine announced inspection, was conducted in the area of emergency preparedness and included an observation of work activities, a review of selected records, and interviews with plant personnel. The inspection disclosed the following:

- The Site Emergency Plan (SEP) did not reflect the current state of emergency preparedness at the facility and required major changes and updates. A violation was identified for failure to review and maintain the Plan in accordance with Section 7.5 of the SEP (Paragraph 2.a).
- The independent audit did not provide a candid assessment of the maintenance of key programmatic areas of the emergency preparedness program and management committed to take corrective action (Paragraph 2.a).
- Four examples were found where control documents were not maintained current and up-to-date. A formal procedure delineating the responsibility and required actions governing the formal review and approval of changes to the SEP and Emergency Procedures (EPs) did not exist (Paragraph 2.b).
- Classroom training to fully qualify Emergency Brigade members in accordance with Section 7.2 of the SEP was not being effectively implemented as evidenced by the number of individuals assigned to back-shifts as brigade members who were not fully qualified. The performance based training was considered a program strength; however, fully qualifying Emergency Brigade personnel on all shifts was a training program weakness requiring prompt corrective actions to ensure that appropriate staffing levels were maintained (Paragraph 2.c).
- The offsite interface was properly maintained (Paragraph 2.d).
- The drill and exercise program was considered a program strength in light of the kinds of scenarios postulated and the frequency at which drills were being conducted (Paragraph 2.e).
- Two program enhancements were the installation of the wind measuring system on a tower, and the dedicated Emergency Brigade facility. The provision of backup power to the Emergency Operations Center (EOC) via the uninterruptible power supply (UPS) circuitry was considered a facility program strength (Paragraph 2.f).

REPORT DETAILS

1. Summary of Plant Status

During the week of July 9-13, 2001, there were no unusual plant occurrences. Routine plant operations and construction of the Erbium facility were observed.

2. Emergency Preparedness (88050) (F3)

a. Review of Program Changes (F3.01)

(1) Inspection Scope

Changes to the licensee's Site Emergency Plan (SEP), procedures, 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 Section 7.8 of the SEP was also evaluated.

(2) Observations and Findings

Key management changes were made since the last inspection resulting in the assignment of newly appointed individuals to the Emergency Staff as alternate Emergency Directors. The changes did not appear to reduce the effectiveness of the emergency organization in that personnel were provided position specific training in addition to participating in drills and tabletop exercises which provided familiarity with other emergency organization positions. The inspector determined that the licensee had not made changes to the SEP since November 6, 1997, in spite of the numerous changes associated with the facility layout, the Incident Command System (ICS) concept of operations during an emergency, and organizational changes. Section 7.5 of the SEP required that a formal review and update be performed annually. The review was to include changes based on lessons learned during events, drills/exercises, facility changes, organizational changes, etc. In response to the finding, the licensee indicated that a lack of administrative oversight, and competing plant priorities resulted in the failure to properly update the SEP and distribute to control copy holders. The licensee indicated that a complete rewrite of the SEP incorporating the ICS concept and other changes to reflect the current state of emergency preparedness would be completed and the revised SEP distributed to copy holders by July 31, 2001. As corrective actions to prevent a recurrence, the licensee included the formal review and updating of the SEP as an action item in the Electronic Training and Process System (ETAPS) used for tracking purposes. Based on the licensee's corrective actions taken and planned, the inspector considered the corrective actions appropriate and adequate for preventing a recurrence. Consequently, the inspector informed the licensee that the failure to properly maintain the Plan in accordance with Section 7.5 of the SEP was a violation of license condition S-3 (Violation (VIO) 70-1151/2001-06-01).

The independent audit report had not been issued. The inspector conducted a telephonic interview with the audit team leader regarding the independent audit. Based on interviews, the annual independent audit was not done in calendar year 2000, but met the licensee's definition for annual as defined in Section 1.4 of the license application in that the audit was conducted (February 19-20, 2001) within 15 months

from the previous audit (December 1999). Based on interviews and issues identified in this report (e.g., periodic review and updating of plan/procedures, emergency brigade training, and outdated control documents), the inspector determined that the independent audit lacked appropriate depth and did not provide a candid assessment regarding the status of emergency preparedness. The licensee was informed that this was an area requiring corrective actions to demonstrate an effective program was in place for the identification of problems to ensure the appropriate level of preparedness was being maintained. In response to the inspector's comments, the licensee discussed during the exit meeting as corrective actions to explore the execution of a long term contract with a reputable audit group. The licensee's corrective actions for the independent audit are being tracked as an inspector follow up item (IFI 70-1151/2001-06-02).

(3) Conclusions

Organizational changes since the last inspection did not reduce program effectiveness. Based on the review of records and interviews, the inspector determined that the licensee's SEP did not reflect the current state of emergency preparedness at the facility and required major changes and updates. A violation was identified for failure to review and maintain the Plan in accordance with Section 7.5 of the SEP. The independent audit did not appear to provide a candid assessment of the maintenance of key programmatic areas of the emergency preparedness program.

b. Implementing Procedures (F3.02)

(1) Inspection Scope

Changes to the SEP implementing procedures (referred to as Emergency Procedures (EPs)) were reviewed to assess the impact on the effectiveness of the program and verify that the revised procedures continued to implement the SEP. The administrative system for review, approval, and distribution of EP changes was also assessed for program effectiveness.

(2) Observations and Findings

No procedure changes were made since the last inspection. The licensee discussed during the inspection intentions to completely rewrite the procedures after Plan changes were approved. Control copies of procedures were checked at several different locations and four examples were noted where a procedure may have been revised, but had not been replaced. The licensee took immediate action to replace any superceded copy with the current version. Regarding the administrative system for the review and approval of changes to the SEP and EPs, the inspector was informed that a procedure delineating responsibility and required actions governing the formal review and approval of the SEP and EP's did not exist. The licensee acknowledged the need for such procedure and committed to the development and implementation of a procedure governing the review and approval of changes to the SEP and EPs.

(3) Conclusions

Four examples were found where control documents were not maintained current and up-to-date. A formal procedure delineating the responsibility and required actions governing the formal review and approval of changes to the SEP and EPs did not exist.

c. Training and Staffing of Emergency Organization (F3.03)(1) Inspection Scope

Determine if emergency response training was provided to key emergency response organization (ERO) personnel in accordance with Section 7.2 of the SEP.

(2) Observations and Findings

The inspector reviewed training documentation for personnel assigned as members of the Emergency Operations Center (EOC) staff, and personnel assigned to the Emergency Brigade. The inspector determined from interviews and a review of records that both the quantity and quality of the hands-on emergency response training were significantly improved. However, classroom training to fully qualify Emergency Brigade members in accordance with Section 7.2 of the SEP was not being effectively implemented as evidenced by the number of individuals assigned to back-shifts as brigade members who were not fully qualified. The requirement that a minimum of six fully qualified brigade members be available on all shifts was minimally satisfied on each of two back-shifts. The inspector informed the licensee that the performance based training was considered a program strength; however, fully qualifying Emergency Brigade personnel on all shifts was a training program weakness requiring prompt corrective actions to ensure the appropriate staffing levels were maintained. In response to the inspector's comments, the licensee committed to having 50 percent of the brigade members on each shift fully qualified by August 17, 2001, with the long range goal to fully qualify all personnel regardless of shift assignment. The licensee's corrective actions to fully qualify and maintain 50 percent of the Emergency Brigade members on each shift as fully qualified will be tracked as IFI 70-1151/2001-06-03.

The Emergency Director training was position specific with the focus on the responsibilities of the Emergency Director, but familiarity with other roles were also reinforced. The effectiveness of the training was evaluated via an exam and performance demonstration during table-top drills. Two key members of the emergency organization with responsibility as an alternate Emergency Director and Incident Commander were interviewed and demonstrated good familiarity with their roles and responsibility.

(3) Conclusions

Classroom training to fully qualify Emergency Brigade members in accordance with Section 7.2 of the SEP was not being effectively implemented as evidenced by the number of individuals assigned to back-shifts as brigade members who were not fully qualified. The performance based training was considered a program strength;

however, fully qualifying Emergency Brigade personnel on all shifts was a training program weakness requiring prompt corrective actions to ensure that appropriate staffing levels were maintained.

d. Offsite Support (F3.04)

(1) Inspection Scope

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

(2) Observations and Findings

The inspector reviewed documentation and discussed with the licensee drills conducted with the offsite fire and medical support groups. Drill critiques appeared to be candid and open discussions of ways to improve the response. On April 24, 2001, a site tour was provided to members of the offsite fire support groups. According to the licensee, offsite groups are being invited to participate in the biennial exercise scheduled for October 2001.

(3) Conclusions

Based on the interview and records reviewed, the inspector determined that the offsite interface was properly maintained.

e. Drills and Exercises (F3.05)

(1) Inspection Scope

Section 7.4 of the SEP required a biennial exercise be performed involving the onsite emergency response organization and many of the offsite support agencies. This area was reviewed for adequacy in testing both onsite and offsite emergency response capability.

(2) Observations and Findings

Since the last inspection, the licensee had conducted numerous drills (both table-top and actual field exercises). Drill documentation and interviews with Emergency Brigade members disclosed numerous unannounced hands-on drills were conducted and provided participants with a sense of confidence in performing their assigned duties that previously did not exist. Non-required drills were held at least once a month and scenario details were not provided to participants in advance of the exercise. Scenarios presented the organization with sufficient challenges to test the adequacy of training. Periodically offsite support groups participated with the licensee.

(3) Conclusions

The drill and exercise program was considered a program strength as determined by the kinds of scenarios postulated and the frequency at which drills were being conducted.

f. Emergency Equipment and Facilities (F3.06)

(1) Inspection Scope

The EOC and equipment were inspected to determine whether the licensee's facilities, emergency response equipment, instrumentation, and supplies were maintained in a state of operational readiness.

(2) Observations and Findings

With the exception of the outdated procedures (discussed in Paragraph 2.b), the license was properly maintaining equipment, supplies, and facilities. Documentation reviewed covering the period January 2000 to present showed that emergency equipment and supplies were being inventoried and operationally checked on a monthly basis.

The inspector observed two program enhancements since the last inspection involving equipment and facilities: the installation of the wind measuring system on a tower to provide more representative data; and construction had been completed for the dedicated Emergency Brigade facility used for storage of equipment, brigade training, and functions as an alternate EOC in the event the primary EOC was uninhabitable. The inspector discussed with the licensee the operability status of the EOC in the event of a power outage. The inspector was informed that the EOC is supplied backup power via uninterruptible power supply (UPS) circuitry and was recently operationally tested as a result of the loss of power incident at a Region II fuel facility site. The UPS circuitry was considered a program strength.

(3) Conclusions

Two program enhancements were the installation of the wind measuring system on a tower, and the dedicated Emergency Brigade facility. The provision of backup power to the EOC via the UPS circuitry was considered a facility program strength.

3. Exit Interview

The inspection scope and results were summarized on July 13, 2001, with those persons indicated in the Attachment. Although proprietary documents and processes were occasionally reviewed during this inspection, the proprietary nature of these documents or processes has been deleted from this report. No dissenting comments were received from the licensee.

ATTACHMENT

LIST OF PERSONS CONTACTED

Licensee

- *C. Aguilar, Engineer, Integrated Safety Engineering
- D. Gadberry, Manager, Site Security
- *M. Goddard, Team Manager, URRS
- *D. Graham, Technician, Environment, Health and Safety
- *H. Green, Technician, Health Physics Operations
- *J. Heath, Manager, Integrated Safety Engineering
- *J. Hooper, Engineer, Integrated Safety Engineering
- *M. Lindler, Team Manager, Conversion
- *S. McDonald, Manager, Environment, Health and Safety
- R. Monley, Plant Manager
- #J. Nardi, Supervisor-Engineer, Corporate Environment, Health and Safety
- R. Pollard, Manager, Chemical Operations
- *T. Shannon, Team Manager, Health Physics Operations
- N. Stevenson, Team Manager, URRS

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

- *Attended exit meeting on July 13, 2001
- #Contacted telephonically on July 12, 2001

INSPECTION PROCEDURES USED

IP 88050 Emergency Preparedness

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Item Number</u>	<u>Status</u>	<u>Description</u>
70-1151/2001-06-01	Open/Closed	VIO - Failure to maintain the Plan in accordance with Section 7.5 of the SEP (Paragraph 2.a).
70-1151/2001-06-02	Open	IFI - Review the adequacy of the licensee's corrective actions for the independent audit (Paragraph 2.a).
70-1151/2001-06-03	Open	IFI - Verify the licensee's corrective actions to fully qualify and maintain 50 percent of Emergency Brigade members on each shift as fully qualified (Paragraph 2.c).

LIST OF ACRONYMS USED

CFR	Code of Federal Regulation
EOC	Emergency Operations Center
EP	Emergency Procedure
ERO	Emergency Response Organization
ETAPS	Electronic Training and Process System
ICS	Incident Command System
IFI	Inspector Follow up Item
SEP	Site Emergency Plan
SNM	Special Nuclear Materials
UPS	Uninterruptible Power Supply
VIO	Violation