



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

March 24, 2010

Mr. Cary Alstadt
Manager, Columbia Plant
Westinghouse Electric Company
Commercial Nuclear Fuel Division
5801 Bluff Road, Drawer R
Columbia, SC 29250

SUBJECT: NUCLEAR REGULATORY COMMISSION INSPECTION REPORT
NO. 70-1151/2010-002

Dear Mr. Alstadt:

This letter refers to the inspection conducted at your Columbia, SC facility on February 22-25, 2010. The purpose of the inspection was to determine whether activities authorized by the license were conducted safely and in accordance with Nuclear Regulatory Commission (NRC) requirements. On February 25, 2010, the inspector discussed the findings with you and members of your staff.

The results of the inspection are documented on the enclosed NRC Form 591FF, "SAFETY INSPECTION REPORT." No violations were identified during the inspection of your licensed activities. Please retain the original form for your files.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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>.

If you have any questions, please call me at (404) 562-4721.

Sincerely,

/RA/

Daniel W. Rich, Chief
Fuel Facility Inspection Branch 3
Division of Fuel Facility Inspection

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

Enclosure: NRC Form 591FF Parts 1 and 3

cc w/encl:
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 Manager
 Environment, Health and Safety
 Commercial Nuclear Fuel Division
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Susan E. Jenkins
 Assistant Director, Division of Waste Management
 Bureau of Land and Waste Management
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ADAMS: ☒ Yes ACCESSION NUMBER: _____

☒ SUNSI COMPLETE

OFFICE	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI	RII:DFFI
SIGNATURE	/RA/					
NAME	R Gibson					
DATE	03/24/2010				3/ /2010	3/ /2010
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\FFBI\REPORTS\FINAL INSPECTION REPORT
 FOLDER\WESTINGHOUSE\WEC 591 IR 2010-02.DOC

INSPECTION REPORT

1. LICENSEE OR CERTIFICATE HOLDER/LOCATION INSPECTED:

Westinghouse Electric Corporation
Commercial Nuclear Fuel Division
Columbia, SC 29250

REPORT NO:

2010-002

2. NRC/REGIONAL OFFICE:

U.S. Nuclear Regulatory Commission
Region II
61 Forsyth Street, Suite 23T85
Atlanta, GA 30303-8931

3. DOCKET NUMBER:

70-1151

4. LICENSE OR CERTIFICATE NUMBER:

SNM-1107

5. DATE(S) OF INSPECTION:

February 22 – 25, 2010

LICENSEE OR CERTIFICATE HOLDER:

The inspection was an examination of the activities conducted under your license or certificate as they relate to safety and/or safeguards and to compliance with the Nuclear Regulatory Commission (NRC) rules and regulations and the conditions of your license or certificate. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector. The inspection findings are as follows:

- ☒ 1. Based on the inspection findings, no violations were identified.
- ☒ 2. Previous violation(s) closed.
- ☐ 3. Reported events reviewed
- ☐ 4. The violation(s), specifically described to you by the inspector as non-cited violations, are not being cited because they were self-identified, non-repetitive, and corrective action was or is being taken, and the remaining criteria in the NRC Enforcement Policy, to exercise discretion, were satisfied.
Non-Cited Violation(s) was/were discussed involving the following requirement(s) and Corrective Action(s):

- ☐ 5. During this inspection, certain of your activities, as described below and/or attached, were in violation of NRC requirements and are being cited. This form is a NOTICE OF VIOLATION, which may be subject to posting in accordance with 10 CFR 19.11.
(Violations and Corrective Actions)

LICENSEE OR CERTIFICATE HOLDER STATEMENT OF CORRECTIVE ACTIONS FOR ITEM 5, ABOVE

I hereby state that, within 30 days, the actions described by me to the inspector will be taken to correct the violation(s) identified. This statement of corrective actions is made in accordance with the requirements of 10 CFR 2.201 (corrective steps already taken, corrective steps which will be taken, date when full compliance will be achieved). I understand that no further written response to the NRC will be required, unless specifically requested.

Title	Printed Name	Signature	Date
LICENSEE/CERTIFICATE HOLDER REPRESENTATIVE			
NRC INSPECTOR	R. Gibson	/RA/	3/15/2010

Enclosure

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4. LICENSE OR CERTIFICATE HOLDER NUMBER:

SNM-1107

5. DATE(S) OF INSPECTION:

February 22-25, 2010

6. INSPECTOR(S): R. Gibson

7. INSPECTION PROCEDURES USED: 88020

EXECUTIVE SUMMARY

Summary of Plant Status

The Westinghouse Facility converts uranium hexafluoride into uranium dioxide and fabricates fuel assemblies for use in commercial nuclear power reactors. During the inspection period, normal production activities were ongoing. This routine, announced inspection included plant operations. 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 program as outlined below:

Plant Operations - 88020

- The inspector walked down the vaporization, conversion, pelleting, solvent extraction, incinerator, and Erbium process areas. The inspector noted that items relied on for safety (IROFS) were in place in these areas to perform their intended safety function. No significant issues were identified.
- The inspector reviewed work orders and/or functional test procedures for the following IROFS: ADUFIRE-902, ADUHOS-401, INCIN-107, PELSINT-904, PELSINT-914, PELGRIND-110, PELPREP-904 and WT-910. The functional tests and/or work order were performed in accordance with the licensee's required frequency and adequately tested the safety function of the IROFS.
- During the inspection, the licensee staff performed a functional test of the high heat over-temperature control after the installation of a pyrometer on Sintering furnace 1B (PELSINT-914), and conducted an annual leak test on the hydrogen safety shutoff valves for Sintering furnace 2C (PELSINT-904) in the pelleting area. The licensee staff followed the applicable procedures/work orders, and no issues were identified. The inspector located and discussed IROFS: ADUHOS-401(Hot Oil room integrity inspection); INCIN-107 (Solid waste feed full ram stroke); PELGRID-110 (2" drain on bottom of grinder centrifuge outer housing); PELPREP-904 (Structural integrity of main feed tube to the Bulk container); and WT-910 (Solvent extraction aqueous waste uranium sampling) with operators and managers, and determined that the IROFS and adequate management measures were in place. No significant issues were identified.
- The inspector reviewed the corrective actions that the licensee implemented in response to Violation 70-1151/2009-007-02, which concerned failure to evaluate the need for IROFS related to the hot oil system. The licensee implemented management measures for an annual integrity inspection of the Hot Oil room, IROFS ADUHOS-401. The inspector determined that the licensee performed an adequate analysis of the integrity of the Hot Oil room fire barrier and incorporated adequate management measures. This violation is considered closed.

Enclosure

EXECUTIVE SUMMARY (Continued)

- The inspector reviewed the licensee corrective actions for unresolved item (URI) 70-1151/2009-007-01, related to inspectors' review of the licensee's evaluation of an accident scenario to determine if hydrogen accumulation and subsequent explosion in the acid stripper hood area was credible and if IROFS were required to prevent and/or mitigate the scenario. In discussion with the licensee staff and observation of the hood, the licensee indicated that due to the structural integrity of the hood (e.g., several areas for possible leaks), they have decided to contract with an outside NFPA specialist to evaluate the potential for accumulation of hydrogen air mixtures in the acid stripper hood. The acid stripper hood had not been evaluated at the time of this inspection. This URI is to remain open.

Exit Meeting Summary

The inspection scope and results were summarized on Thursday, February 25, 2010, with Cary Alstadt and members of his staff. The inspector asked the licensee staff whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

Key Points of Contact

<u>Name</u>	<u>Title</u>
C. Alstadt	Manager, Columbia Site
M. Rosser	Manager, Environment, Health and Safety
G. Couture	Manager, Licensing & Regulatory Program, EH&S
D. Precht	Manager, Operations

List of Items Opened, Closed, Discussed

<u>Item Number</u>	<u>Status</u>	<u>Description</u>
NOV 70-1151/2009-007-02	Closed	Failure to evaluate the need for IROFS related to the hot oil system.
URI 70-1151/2009-007-01	Discussed	Inspectors' review of the licensee's evaluation of an accident scenario to determine if hydrogen accumulation and subsequent explosion in the acid stripper area was credible and if IROFS were required to prevent and/or mitigate the scenario.