

**INSPECTION REPORT**

1. LICENSEE OR CERTIFICATE HOLDER/LOCATION INSPECTED: Westinghouse Electric Corporation Commercial Nuclear Fuel Division Columbia, SC 29250		2. NRC/REGIONAL OFFICE: U.S. Nuclear Regulatory Commission Region II 61 Forsyth Street, Suite 23T85 Atlanta, GA 30303-8931	
REPORT NO: 2009-008			
3. DOCKET NUMBER: 70-1151	4. LICENSE OR CERTIFICATE NUMBER: SNM-1107	5. DATE(S) OF INSPECTION: 12/14-17/2009 and 8/24-28/2009	

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	Robert Prince, Jennifer Foster	/RA by RGibson for BPrince/ /RA/	1/6/2010

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6. INSPECTOR(S): Robert Prince, Jennifer Foster			
7. INSPECTION PROCEDURES USED: 88070, 88045			

### 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 evaluation of the permanent plant modifications program. The inspection involved observations of work activities, a review of selected records, and interviews with plant personnel. The inspection identified the following aspects of the licensee programs as outlined below:

#### Permanent Plant Modifications (88070)

- The inspectors reviewed several configuration change packages that had been implemented by the licensee since the last permanent plant modification inspection was performed. Project engineers walked down the configuration changes with the inspectors in the field. Project engineers reviewed and discussed with the inspectors any necessary changes to procedures, piping and instrument drawings (P&ID), or training programs that may have resulted from these configuration changes. The inspectors reviewed selected configuration changes as summarized below. No issues of safety significance were identified.
- The inspectors reviewed configuration change 07643 that installed a 3-way valve in a process line. The inspectors verified that P&IDs were updated to reflect the as built configuration. The inspectors noted that this change did not impact the performance or operation of any item relied on for safety (IROFS). The inspectors interviewed control room operators and found that operators were knowledgeable of the changes and demonstrated the function and purpose of the 3-way valve utilizing computer displays in the control room.
- The inspectors reviewed configuration changes 07506 through 07509 that modified chutes on bucket elevators. The inspectors noted that the changes had no impact on nuclear criticality safety (NCS) or IROFS since the change did not impact the handling or amount of material being processed. The configuration changes were implemented to improve equipment reliability. The inspectors verified that P&IDs were updated to reflect the as built detail of the chutes which involved a change in the wall thickness of the chutes.
- The inspectors reviewed configuration change 08429 that involved changes to a sintering furnace. The inspectors noted that these changes were made to improve the effectiveness of cooling water supplied to the furnace. Based on discussions with project engineers and field walk downs the inspectors determined that these changes did not involve or impact any IROFS. The inspectors verified that P&IDs were updated to reflect the as built configuration.

## EXECUTIVE SUMMARY (Continued)

- The inspectors reviewed configuration change 08032 that involved changes to the Erbium furnace. The inspectors noted that these changes were made to improve the reproducibility of temperature readings obtained from inside the furnace. Based on discussions with project engineers and field walk downs the inspectors determined that these changes did not involve or impact any IROFS. The inspectors verified that P&IDs were updated to reflect the as built configuration.
- The inspectors reviewed configuration change 07280 that removed pump interlocks on ammonium diuranate conversion process lines. Based on interviews with licensee personnel the inspectors noted that interlocks were previously installed on selected pumps exposed to ammonium nitrate. Based on further evaluation the licensee subsequently determined that interlocks that had been installed on some pumps that were only exposed to ammonium nitrate for short periods of time could inadvertently cause overflow situations involving hazardous process fluids. The inspectors noted that these pumps were equipped with temperature alarms that would warn operators of a potential over-temperature condition. Under these circumstances manual actions could be taken to secure the affected pump. The pumps in question are operated on an intermittent short-term basis requiring direct involvement of operators. The inspectors reviewed the layer of protection analysis that the licensee performed to support removal of the automatic interlocks on pumps that were infrequently exposed to ammonium nitrate. Based on the low probability of an upset condition involving ammonium nitrate with these pumps and the elimination of potential spills that the automatic interlocks could cause, no issues of safety significance were identified. The inspectors noted that no NCS issues were associated with this configuration change. The original purpose of the interlocks was based on industrial safety considerations. Implementation of this configuration change had a net positive result on industrial safety. Based on discussions with project engineers and review of supporting documentation the inspectors noted that interlocks were not removed from those pumps that were exposed to ammonium nitrate on a more frequent basis.

### Effluent Control and Environmental Protection (88045)

- The inspectors reviewed the off-site dose assessment for 2008 and concluded that the off-site dose included all pathways and was well below the 10 CFR 20.1301 limit.

### Exit Meeting Summary

The inspection scope and results were summarized on Thursday, December 17, 2009, with Mr. Cary Alstadt and members of his staff. No dissenting comments were received.

### Key Points of Contact

<u>Name</u>	<u>Title</u>
M. Rosser	Manager, Environment, Health and Safety
G. Couture	Manager, Licensing & Regulatory Program, EH & S
S. Cheung	Project Engineer
L. Woodrow	Project Engineer
D. Graham	Licensing & Regulatory Program
E. Prytherch	Project Engineer
G. Vining	Project Engineer
A. Goldberg	Project Engineer
D. Colwell	Principal Engineer, Environment, Health and Safety