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U. S. Nuclear Regulatory Commission
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August 24, 2007

70-1151

SUBJECT: WESTINGHOUSE EVENT 30 DAY FOLLOW UP REPORT

The following information is being provided by Westinghouse Electric Company, LLC (WEC) in accordance with 10CFR70.50(c)(2). The first attachment is a copy of the initial notification and provides the applicable information required by 10CFR70.50(c)(1). The second attachment documents the additional information required in accordance with 10CFR70.50(c)(2).

If you have any questions regarding this information, please contact me at (803) 647-2045.

Sincerely,


Gerard F. Couture, Manager
Licensing & Regulatory Programs

Attachments

cc: U. S. Nuclear Regulatory Commission
Attn. Mr. Richard Gibson Region II
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NRC Notification
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July 27, 2007

Fire in the Pelleting Area

Facility

Westinghouse Electric Company LLC, Commercial Fuel Fabrication Facility (CFFF), Columbia SC, low enriched (≤ 5.0 wt.% U-235) PWR fuel fabricator for commercial light water reactors. License: SNM-1107.

Time and Date of Event

July 26, 2007, approximately 1630.

Reason for Notification

On 7/26/07, an attempt to extinguish a small grease fire with water was observed by a Westinghouse engineer. This is a violation of IROFS-PELFIRE-902 (also identified as IROFS-BWR-107), which restricts the use of water for fire suppression in pellet/rod areas. The fire observed was located beneath the Line 4 polypak lift. The fire was estimated to be approximately three feet by three feet in area and approximately 2 inches in height. Three polypaks with an unknown quantity of material were observed on the lift at the time the fire occurred.

The fire was believed to have been started by weld sparks originating from overhead work being performed by construction workers. The water used to extinguish the fire was delivered to the fire in hardhats and welding masks that the construction personnel had at their immediate disposal from a nearby hand-wash basin. The total quantity of water involved was estimated to be a maximum of one gallon.

Notification is being made based on the potential for "Any natural phenomenon or other external event, including fires internal and external to the facility, that has affected or may have affected the intended safety function or availability or reliability of one or more items relied on for safety", reference Appendix A, Section (b)(4) to Part 70 of 10CFR70.

Safety Basis

At no time was the integrity of nearby special nuclear material (SNM) containers challenged. No SNM was involved with the fire. None of the water involved in putting out the fire came into contact with SNM. Even if fissile material had been present during the fire, and that water had contacted and mixed with the fissile material, the quantity of water was limited to approximately one gallon. The minimum quantity of water necessary to challenge the normal case conditions involving homogenous SNM is 3.8 gallons. It should also be pointed out that the quantity of water was limited by the ability of the construction personnel to apply the water using their improvised method and further limited by the source of the water. (The intention of PELFIRE-902 is to prevent the large, uncontrolled addition of water as with firefighters wielding fire hoses attached to an effectively infinite source.)



As Found Condition

See Reason for Notification.

Summary of Activity

- All construction work has been halted pending a stand-down meeting with personnel.
- The event was documented in the plant Corrective Action Process (CAPs #07-208-C007).

Conclusions

- Problem was self identified by Westinghouse Operations personnel. The fire was put out immediately and there was no challenge to the integrity of nearby special nuclear material containers.
- At no time was the health or safety to any employee or member of the public in jeopardy. No exposure to hazardous material was involved.
- A causal analysis will be performed.



(2) Written report. Each licensee that makes a report required by paragraph (a) or (b) of this section, or by § 70.74 and Appendix A of this part, if applicable, shall submit a written follow-up report within 30 days of the initial report. Written reports prepared pursuant to other regulations may be submitted to fulfill this requirement if the report contains all the necessary information, and the appropriate distribution is made. These written reports must be sent to the NRC's Document Control Desk, using an appropriate method listed in § 70.5(a), with a copy to the appropriate NRC regional office listed in appendix D to part 20 of this chapter. The reports must include the following:

(i) Complete applicable information required by § 70.50(c)(1);

This information has been provided in Attachment 1.

(ii) The probable cause of the event, including all factors that contributed to the event and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;

The root cause analysis team who investigated this event identified two root causes. Root Cause #1 is the lack of a program interface to share "hidden combustible" information between Maintenance and Greg's Construction personnel who perform the same types of hot work activities. Root Cause #2 is that the potential for fire watch personnel to violate IROFS PELFIRE-902 was unrecognized. While Emergency Brigade and Pellet Area operations personnel were trained on the water restriction control, the potential for fire watch activities to challenge this IROFS was not recognized. Fire watch training focused on what could be used to fight a fire, i.e., proper fire extinguisher – not on what you could NOT use.

(iii) Corrective actions taken or planned to prevent occurrence of similar or identical events in the future and the results of any evaluations or assessments; and

Key corrective actions to prevent recurrence of this event and to address the extent of condition and extent of cause include the following actions:

- revising the hot work permit/fire watch program and associated training to explicitly cover the potential for hidden combustibles and lessons learned from previous events
- revising the fire watch procedure and associated training to incorporate the restriction for using water to fight fires in the chemical area (i.e., IROFS PELFIRE-902)
- changing the configuration of the polypak lift enclosure on Pellet Lines 1-4 so that housekeeping can be performed to prevent the accumulation of combustible debris
- evaluating whether there are other identical activities where different practices/standards are followed by Westinghouse Maintenance and Greg's Construction personnel, and
- evaluating other IROFS associated with emergency response and fire safety activities to ensure they are properly implemented.

(iv) For licensees subject to Subpart H of this part, whether the event was identified and evaluated in the Integrated Safety Analysis.

The Columbia Fuel Fabrication Facility is subject to Subpart H. The Event involved a small fire in the Pelleting Area. A fire is an identified and evaluated event in the Pelleting Integrated Safety Analysis.