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United States Nuclear Regulatory Commission

Protecting People and the Environment

Westinghouse Electric Company

Pre-Decisional Enforcement Conference

January 21, 2011
NRC Region II Office
Atlanta, GA

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This is a category 1 meeting in which the public is invited to observe and will have one or more opportunities to communicate with the NRC after the business portion of the meeting, but before the meeting is adjourned.

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Agenda

I. Opening Remarks, Introductions, and Statement of Concerns

Leonard Wert, Deputy Regional Administrator

II. NRC Enforcement Policy

Carolyn Evans, Regional Counsel/Enforcement Officer

III. Summary of Issues and Synopsis of the Apparent Violations

Tony Gody, Director, Division of Fuel Facility Inspection

IV. Licensee Presentation

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V. Break/NRC Caucus

VI. NRC Follow-up Questions

VII. Closing Remarks

Leonard Wert, Deputy Regional Administrator

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Apparent Violation 1

Safety Condition S-1 of Special Nuclear Material License (SNM) No. 1107 requires that material be used in accordance with the statements, representations, and conditions in the license application dated June 27, 2007, and supplements thereto.

License Section 6.1.1 states, in part, the Double Contingency Principle of ANSI/ANS- 8.1(1998) is the basis for design and operation of processes using SNM within the Columbia Fuel Fabrication Facility (CFFF). Double Contingency Protection means that all process designs incorporate sufficient margins of safety to require at least two unlikely, independent, and concurrent changes in process conditions before a criticality accident is possible.

Contrary to the above, on and before July 23, 2010, the licensee failed to establish Double Contingency for the filter press to protect against an inadvertent criticality. Specifically, the Integral Fuel Burnable Absorber (IFBA) filter press relied solely on the peg and hole design to prevent the introduction of additional filter plates, which could have led to an inadvertent criticality.

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Apparent Violation 2

10 CFR 70.61(b) states that the risk of each credible high consequence event must be limited. Engineered controls, administrative controls, or both, shall be applied to the extent needed to reduce the likelihood of occurrence of the event so that, upon implementation of such controls, the event is highly unlikely or its consequences are less severe than those in paragraphs (b)(1)-(4) of this section.

10 CFR 70.61(e) states, in part, that each engineered or administrative control or control system necessary to comply with paragraphs (b), (c), or (d) of this section shall be designated as an item relied on for safety.

Contrary to the above, on and before July 23, 2010, the licensee failed to establish items relied on for safety to reduce the likelihood of a credible high consequence event to highly unlikely. Specifically, the licensee failed to implement items relied on for safety for the IFBA filter press to prevent an inadvertent nuclear criticality, which is a high consequence event.

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Apparent Violation 3

Safety Condition S-1 of SNM License No. 1107 requires that material be used in accordance with the statements, representations, and conditions in the license application dated June 27, 2007, and supplements thereto.

Section 4.1.2 of the License Application states, in part, that the ISA "is developed in accordance with methods acceptable to the CFFF management, as approved by the Handbook [titled "Baseline ISA and ISA Summary Handbook"]…Subsection 7.2 activities are specific commitments to the NRC and must be executed, as described, for each ISA."

Section 7.2.3, Accident Sequence Likelihood Scoring, states in part "For those sequences in which this conclusion (incredible) is based on inherently safe Passive Design Feature, then the passive engineered Safety Significant Controls (SSC) will be designated as an IROFS, with an additional administrative IROFS established to provide for EH&S regulatory review of all work packages issued within the IROFS Boundary."

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Apparent Violation 3

Contrary to the above, on and before July 23, 2010, the licensee performed Criticality Safety Evaluations in which a criticality accident scenario was classified as incredible based on the dependence on SSCs, which were not designated as IROFS. Specifically, the licensee failed to designate the peg and hole design of the filter press as an IROFS when the conclusion for the accident scenario was determined to be incredible based on the peg and hole design feature.

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Apparent Violation 4

Safety Condition S-1 of SNM License No. 1107 requires that material be used in accordance with the statements, representations, and conditions in the license application dated June 27, 2007, and supplements thereto.

Section 3.4 of the License Application states, in part, that operations to assure safe, compliant activities involving nuclear material will be conducted in accordance with approved procedures.

Contrary to the above, on and before July 23, 2010, the licensee failed to establish an adequate operating procedure for the IFBA filter press.

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Apparent Violation 5

Safety Condition S-1 of SNM License No. 1107 requires that material be used in accordance with the statements, representations, and conditions in the license application dated June 27, 2007, and supplements thereto.

Section 3.4 of the License Application states, in part, that operations to assure safe, compliant activities involving nuclear material will be conducted in accordance with approved procedures.

Contrary to the above, on and before July 23, 2010, the licensee failed to make a change to facility equipment in accordance with procedure TA-500. Specifically, the peg holes for the failed IFBA filter press were 0.508 inches, which deviated from the system design drawing requiring that the holes be 0.500 inches in diameter, which subsequently led to the pegs not fitting properly into the peg holes.

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Apparent Violation 6

Safety Condition S-1 of SNM License No. 1107 requires that material be used in accordance with the statements, representations, and conditions in the license application dated June 27, 2007, and supplements thereto.

Section 3.4 of the License Application states, in part, that operations to assure safe, compliant activities involving nuclear material will be conducted in accordance with approved procedures.

Contrary to the above, on and before July 23, 2010, the licensee failed to make a change to facility equipment in accordance with procedure TA-500. Specifically, the pegs in the IFBA filter press plate were replaced without glue, which deviated from the system design drawing requiring the pegs to be glued into the peg holes with PVC glue.

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Closing Remarks