

Harris 1

3Q/2009 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Sep 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain an Adequate Quality Assurance Training Program

The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion II, "Quality Assurance Program," for the licensee's failure to maintain an adequate training program for personnel performing activities affecting quality as necessary to assure that suitable proficiency is achieved and maintained. The licensee's training program was inadequate because the means to maintain QC inspector proficiency and the QC continuing training program failed to ensure that QC inspectors employed appropriate inspection techniques. This failure was manifested in three separate quality control electrical verification errors during plant modifications made in April and May 2009. The licensee entered this issue into their CAP as action request (AR) #341355. As corrective action, the licensee correctly reinstalled and verified the modifications to be in accordance with plant design. Additionally, the licensee committed to revise and/or create procedures to institutionalize QC training in an initial training and certification program, as well as a continuing training program.

This violation was more than minor because if left uncorrected the performance deficiency would have the potential to lead to a more significant safety concern. This finding is associated with the Design Control attribute of the Mitigating Systems cornerstone, and it affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Using Attachment 4 of IMC 0609, the significance of this finding was determined to be of very low safety significance (Green) because it was a design or qualification deficiency confirmed not to result in loss of operability or functionality, did not represent a loss of system safety function, did not represent actual loss of safety function of a single train for longer than its Technical Specification (TS) Allowed Outage Time, did not represent an actual loss of safety function of one or more non-TS Trains of equipment designated as risk-significant, and did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. This finding has a crosscutting aspect of Supervisory and Management Oversight, as described in the Work Practices component of the Human Performance cross-cutting area because the lack of oversight and engagement by management resulted in the inadequate QC training program (H.4(c)).

Inspection Report# : [2009004](#) (*pdf*)

Significance:  Nov 07, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Sprinkler System in Cable Spreading Room A Does Not Meet Licensee's Fire Protection Program Requirements

The team identified a non-cited violation of Shearon Harris Unit 1 operating license condition 2.F, for the licensee's failure to install the sprinkler system in Cable Spreading Room A (CSRA) in accordance with the approved fire protection program (FPP). Specifically, the installed system would not have been able to deliver the sprinkler system design density of 0.3 gallons per minute/square foot in CSRA, as stated in the FPP in Updated Final Safety Analysis Report Section 9.5.1.2.3. The licensee entered this issue in the corrective action program and established a continuous fire watch in CSRA as a compensatory measure in accordance with the Shearon Harris FPP.

Inspection Report# : [2008008](#) (*pdf*)

Barrier Integrity

Significance:  Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Provide Procedures to Control and Adjust the Manipulator Crane Gear Limit Setpoints

A self-revealing Green NCV of Technical Specification (TS) 6.8.1, Procedures, was identified when the licensee failed to follow Attachment 4, Manipulator Crane and Auxiliary Hoist Checkout, of Fuel Handling Procedure 20 (FHP-020), Refueling Operations, resulting in damaged grid straps on two fuel assemblies on April 23, 2009.

Specifically, the value of the manipulator crane gear limit setpoints for the lower core slow zone exceeded the values allowed by the checkout procedure. This resulted in the fuel handlers damaging the grid straps on two successive fuel assembly moves. The licensee entered this issue into their corrective action program (CAP) as action request (AR) #332368. As corrective actions, the licensee suspended the core offload, reset the lower core slow zone within tolerance, and permanently discharged the affected fuel assemblies. Additionally, the licensee committed to revise FHP-020 prior to the next refueling outage in order to prevent recurrence.

The violation was more than minor because it is associated with the human performance attribute of the Barrier Integrity cornerstone, and it affected the cornerstone objective of providing reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. The finding was determined to be of very low safety significance because it was a deficiency associated with fuel handling errors that did not cause damage to fuel clad integrity or a dropped fuel assembly. The finding has a crosscutting aspect of Procedural Compliance, as described in the Work Practices component of the Human Performance cross-cutting area because the licensee accepted the out of tolerance values that were outside the acceptance criteria of the procedure.

Inspection Report# : [2009003](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to monitor effluent releases from SFP filter backwash

The inspectors identified a non-cited (NCV) of 10 CFR 20.1302 (a) for failure to make adequate surveys of radioactive materials in effluents released to unrestricted areas. The licensee altered the configuration of the vent stack effluent radiation monitors without determining the impact the change would make on the capability of the monitors to detect and measure radioactive materials in the effluent stream from the main plant vent stack and thus demonstrate compliance with the dose limits for individual members of the public as defined in 10 CFR 20.1301. This condition existed from approximately July 2000 to approximately September 2008. The change resulted in the licensee failing to monitor and attribute potential doses to the public from particulate material originating in the SFP filter backwash system, which resulted in underestimating the dose to a member of the public by up to 40%. The licensee provided a reasonable basis for the determination that in a bounding case neither the limits in 10 CFR 20.1301, 10 CFR 50

Appendix I nor 40 CFR 190 were exceeded. Licensee corrective actions included collection of in-plant samples to bound releases until the monitors are restored to the as designed configuration.

The issue was more than minor because it was associated with the Program/Process attribute of the Public Radiation Safety Cornerstone and potentially affected the cornerstone objective to ensure adequate protection of public health and safety from exposure to radioactive materials released into the public domain as a result of routine civilian nuclear reactor operation. By removing the isokinetic sampling skids from service, the licensee could not be assured that the samples were representative of the effluents being released, and therefore the magnitude of the releases was unknown.

Inspection Report# : [2008005](#) (*pdf*)

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

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