

Harris 1

4Q/2006 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Nov 03, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Control to Assure UFSAR Requirement to Detect and Isolate an RHR leak of 50 GPM in 30 minutes

The team identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control, for inadequate design control measures to assure the capability to identify and isolate a residual heat removal (RHR) system leak of 50 gpm in 30 minutes as stated in the Updated Final Safety Analysis Report (UFSAR). Specifically, the Reactor Auxiliary Building (RAB) safeguards' sump level instrumentation and area radiation monitors were not capable of assuring detection and control room indication of a 50 gpm RHR leak within 30 minutes of leak initiation.

This finding was more than minor based on its association with the mitigation cornerstone aspect of design control. It impacted the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events in that the purpose of 50 gpm/30 minute criteria was to assure the reliability of the RHR system to accomplish the safety function of long term recirculation cooling. This finding was of very low safety significance (Green) because the RHR leak detection indication available would detect and allow termination of inventory loss prior to significantly impacting the capability of the emergency core cooling system (ECCS) long term recirculation cooling function. The licensee entered this finding in the corrective action program for resolution. (Section 1R21.2.16)

Inspection Report# : [2006007](#) (*pdf*)

Significance:  Nov 03, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Control for RCS Standpipe Low Level Setpoint

The team identified a non-cited violation of 10 CFR 50, Appendix B, Criterion III, Design Control for a non-conservative setpoint related to the low Reactor Coolant System (RCS) Standpipe level for mid-loop operations. Specifically, the licensee failed to incorporate instrument uncertainty resulting in an inadequate margin for the onset of vortex conditions to the RHR pumps. The team identified that the alarm setpoint appeared to be inadequate to protect the Residual Heat Removal pumps with respect to air entrainment under vortex conditions.

The finding was more than minor because it affected the design control attribute associated with the mitigating systems cornerstone as related to the availability, reliability, and capability of the RHR system. This finding was of very low safety significance (Green), because it was a design deficiency confirmed not to have resulted in the loss of safety function. This determination was based on the following factors: operators are trained to identify pump cavitation/loss of suction using diverse indications, standpipe levels are closely monitored during mid-loop operations, and low pressure, single stage centrifugal pumps such as the RHR pumps can sustain short periods of air entrainment or cavitation without loss of safety function. The licensee entered this finding into their corrective action program for resolution. (Section 1R21.2.17)

Inspection Report# : [2006007](#) (*pdf*)

G**Significance:** Jun 30, 2006

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Follow Procedure During Service Water Control Valve Preventive Maintenance

A Green self-revealing NCV of Technical Specification (TS) 6.8.1 was identified for the failure to follow procedures while performing maintenance on a service water valve which supports the train "A" essential services chilled water (ESCW) system chiller. This deficiency led to the valve actuator disconnecting from the valve, and rendered the train "A" ESCW system chiller inoperable. The licensee entered this failure to follow procedure into the Corrective Action Program (CAP).

This finding is more than minor because it affected the reliability objective of the equipment performance attribute under the Mitigating Systems Cornerstone in that it affected the mitigating availability of the train "A" ESCW chiller. This finding was determined to be of very low safety significance (Green) because it did not represent a loss of system safety function, the single train of the ESCW system affected did not lose functionality for greater than the TS allowed outage time, and the finding was not potentially risk-significant due to external events. This finding is associated with the cross-cutting area of human performance because maintenance personnel improperly executed plant procedures. (Section 1R15)

Inspection Report# : [2006003](#) (*pdf*)**G****Significance:** Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Adequate Procedures Such That a Required Torque Was Not Provided for a Threaded Fastener on an ESCW System Chiller

A self-revealing NCV was identified for the failure to maintain adequate procedures for the performance of maintenance on the ESCW system chillers. Specifically, procedures lacked sufficient details to perform maintenance on the chiller's pre-rotational vane actuator. This deficiency led to the train "A" ESCW system chiller being incapable of starting and inoperable for a period of time greater than allowed by the TS.

This issue is more than minor because it affected the reliability objective of the equipment performance attribute under the Mitigating Systems Cornerstone in that it affected the mitigating availability of the train "A" ESCW chiller. Based upon the additional input provided by the licensee at the Regulatory Conference, the NRC has concluded that the final significance of the finding is appropriately characterized as Green (i.e., a finding of very low safety significance), in the Mitigating System cornerstone. A contributing cause of this issue is associated with the cross-cutting area of human performance, in that the maintenance organization did not generate specific, written procedures to perform ESCW maintenance. (Section 1R15)

Subsequently, NRC issued a Choice Letter with preliminary White finding on September 11, 2006. Significance Determination Process (SDP) Phase 3 analysis results were enclosed in the Choice Letter.

A Regulatory Conference meeting was held on October 13, 2006, in Region II office. A final SDP letter (Inspection Report No. 05000400/2006009) was issued on November 14, 2006, with a Green Non-Cited Violation finding. Accordingly, apparent violation (AV) 05000400/2006003-01 and Licensee Event Report 05000400/2006-002-00, ESCW Inoperable for a Period Longer than Allowed by Technical Specifications Due to Inadequate Procedure, are closed.

Inspection Report# : [2006003](#) (*pdf*)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Last modified : March 01, 2007