Duane Arnold
3Q/2005 Plant Inspection Findings

Initiating Events

Significance: G Aug 25, 2005
Identified By: Self-Revealing
Item Type: FIN Finding
FAILURE TO ADEQUATELY VERIFY A VALVE LINEUP IN THE FIRE PROTECTION SYSTEM.
A finding of very low safety significance was identified through a self revealing event when an operator failed to adequately verify a valve lineup in the fire protection system. The valve that was inadvertently left open caused partial flooding and contamination of the first floor of the reactor building. The primary cause of this finding was related to the cross-cutting area of Human Performance (Personnel). The licensee entered this issue into their corrective action program and decontaminated the associated floor areas.

Inspection Report# : 2005004*(pdf)*

Significance: G Jun 03, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Identify Transient Combustibles
Green. A finding of very low safety significance was identified by the inspectors for failure to identify unapproved transient combustibles in the reactor building. The transient combustibles consisted of wood planking on scaffolding in the motor-generator set room of the reactor building. The primary cause of this finding was related to the cross-cutting area of Human Performance. Despite a license condition to perform periodic inspections to minimize transient combustibles, licensee personnel failed to identify that scaffolding contained unapproved combustibles for 231 days.
Inspection Report# : 2005009*(pdf)*

Significance: G Jun 01, 2005
Identified By: NRC
Item Type: FIN Finding
FAILURE TO CONTROL MATERIALS IN THE AREAS ADJACENT TO THE MAIN, STARTUP, AND STANDBY TRANSFORMERS AND THE SWITCHYARD.
A finding of very low safety significance was identified by the inspectors regarding the failure to control materials in the areas adjacent to the main, startup, and standby transformers and the switchyard. The licensee entered this issue into their corrective action program.

The finding was more than minor because it adversely impacted the initiating events cornerstone attribute for protection against external factors designed to limit the likelihood of events that upset plant stability. This finding was determined to be of very low safety significance since it did not impact any mitigating systems capability. No 10 CFR 50, Appendix B components were impacted by this finding, therefore, no violations of NRC requirements occurred.

Inspection Report# : 2005003*(pdf)*

Significance: G May 06, 2005
Identified By: NRC
Item Type: FIN Finding
FAILURE TO HAVE ALL SUPPORT HARDWARE ATTACHED TO THE DBD-3 DRAIN LINE FROM THE 6A & 6B FEEDWATER HEATERS.
A finding of very low safety significance was identified by the inspectors for the failure to have all supporting hardware attached to the DBD-3 Drain Line from the 6A & 6B Feedwater Heaters. The licensee installed the appropriate supporting hardware.

Inspection Report# : 2005003*(pdf)*

Significance: G Apr 14, 2005
Identified By: NRC
Item Type: NCV NonCited Violation

FAILURE TO PROPERLY PREPLAN MAINTENANCE INSTRUCTIONS RESULTING IN AN INADVERTENT GROUP SEVEN ISOLATION.
A finding of very low safety significance was identified through a self-revealing event regarding the failure to have adequate maintenance procedures while working on the Drywell to Reactor Building Closed Cooling Water Loop Return Header Isolation. The inadequate procedure resulted in an inadvertent Group Seven Isolation. The licensee restored the inadvertent Group Seven Isolation and informed all site personnel of the issue through a yellow announcement sheet.

The finding was more than minor because this event had an adverse impact on the initiating events cornerstone attribute of procedural quality. The inadequate procedure resulted in an actual Group Seven isolation. This finding was determined to be of very low safety significance since the finding did not increase the likelihood of a loss of reactor coolant system (RCS) inventory, or degrade the ability to terminate a leak path, or degrade the ability to recover decay heat removal (DHR). An NCV of Technical Specification (TS) 5.4.1, "Procedures," was identified for the failure to have adequate maintenance procedures. (Section 1R19)

Inspection Report# : 2005003*(pdf)*

Significance: G Apr 14, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PROPERLY PERFORM MAINTENANCE INSTRUCTIONS RESULTING IN AN INADVERTENT GROUP THREE ISOLATION.
A finding of very low safety significance was identified through a self-revealing event for the failure to properly perform a maintenance procedure while working on the Reactor Protection System Trip Channel A1, "High Drywell Pressure." The improperly performed procedure resulted in an inadvertent Group Three Isolation. The licensee restored the inadvertent Group Three Isolation and informed all site personnel of the issue through a yellow announcement sheet.

Inspection Report# : 2005003*(pdf)*

Significance: G Oct 30, 2004
Identified By: NRC
Item Type: FIN Finding
FAILURE TO CORRECT THE EXCESSIVE VIBRATIONS ON THE 'A' FRV POSITIONER.
A finding of very low safety significance was identified through a self-revealing event when the licensee failed to ensure that the excessive vibration problems associated with the ‘A' Feedwater Regulating Valve (FRV) Positioner was properly addressed after the initial failure. Since the vibration problems were not properly addressed, a subsequent failure occurred, which resulted in severe feed water oscillations.

The finding was more than minor, since the excessive vibrations resulted in a valve Positioner failure that caused severe feed water oscillations, thereby affecting plant stability. This finding was determined to be of very low safety significance, since it would not have impacted any mitigating systems availability or functions during a reactor trip. The licensee replaced the ‘A' FRV Positioner and addressed the vibration problems by modifying the mounting bracket. No violation of NRC requirements occurred.
Inspection Report# : 2004005*(pdf)*

Mitigating Systems

Significance: G Aug 05, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO MEET TRAVEL DISTANCE REQUIREMENTS FOR FIRE EXTINGUISHERS IN THE REACTOR BUILDING.
A finding of very low safety significance was identified by the inspectors for a violation of the fire protection license condition. The licensee failed to ensure that travel distance requirements were met for fire extinguishers in the reactor building. Once this issue was identified, the licensee entered the issue into their corrective action program and initiated work requests to provide additional fire extinguishers. The primary cause of this violation was related to the Identification subcategory of the Problem Identification and Resolution cross-cutting area. Licensee fire protection personnel failed to identify that the placement of fire extinguishers did not satisfy fire protection code requirements during a self-assessment of code compliance for fire extinguishers performed in April 2004.

Inspection Report# : 2005004*(pdf)*

Significance: G Jun 07, 2005
Identified By: NRC

Item Type: VIO Violation
Failure to Demonstrate Adequacy of Design Assumption for Torus Attached Piping
A violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control" having very low safety significance was identified by the inspector. Specifically, the licensee failed to demonstrate that a 1996 high pressure coolant injection (HPCI) modification was subjected to design control measures commensurate with those applied to the original design. The licensee also failed to apply design control measures to verify the adequacy of the design in order to assure that the design basis for torus attached piping was correctly translated into the modification's specifications, drawings, procedures and instructions.

The finding was more than minor because the finding was associated with the cornerstone attribute of design control in the mitigating system cornerstone and the finding was determined to affect the associated cornerstone objective of ensuring the availability of the HPCI system when called upon. Under the worst case scenario, movement of the torus with the additional valve weight on the HPCI turbine exhaust line would result in crimping of the line. Crimping of the line would create additional backpressure in the HPCI turbine and would result in a decrease in the amount of water being injected into the reactor vessel. The finding was determined to be of very low safety significance based upon a Phase 2 analysis of those transients which would involve movement of the torus.

The finding was cited since the licensee did not enter the issue into its corrective action program and did not take actions to correct the noncompliance.
Inspection Report# : 2005010*(pdf)*

Significance: G Jun 07, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Properly Vent HPCI Pump Discharge Piping
A non-cited violation of Technical Specification 3.5.1 having very low safety significance was identified. Specifically, the licensee failed to ensure that the HPCI discharge line was filled with water from the pump discharge valve to the injection valve as required by Technical Specification surveillance 3.5.1.1. The issue is considered NRC identified because the licensee vented the system in response to an NRC unresolved item from the safety system design and performance capability inspection and had not otherwise planned to vent the system. As corrective action, the licensee planned to vent the system on a periodic basis.

The finding was more than minor because the finding could reasonably be viewed as a precursor to a significant event, specifically a hydraulic transient of the HPCI system when called upon to inject. The finding was determined to be of very low safety significance based upon a Phase 2 analysis of those transients where HPCI was required to operate.

Inspection Report# : 2005010*(pdf)*

Significance: G Jun 03, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Untimely Corrective Actions for Degraded Fire Barriers
Green. A finding of very low safety significance was identified by the inspectors for failure to take timely corrective actions in addressing three degraded fire barriers. The primary cause of this finding was related to the corss-cutting area of Problem Identification and Resolution, since each of the fire barriers was degraded over 21 months without being repaired or replaced.
Inspection Report# : 2005009*(pdf)*

Significance: G Jun 03, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
Untimely Corrective Actions for Smoke in the Control Room
Green. A finding of very low safety significance was identified by the inspectors for the failure to take prompt corrective actions for identified procedural deficiencies in response to smoke in the control room. The primary cause of this finding was related to the cross-cutting area of Problem Identification and Resolution because the procedural deficiencies were identified by the NRC more than two years prior to this inspection.
Inspection Report# : 2005009*(pdf)*

Significance: G Apr 26, 2005
Identified By: NRC
Item Type: VIO Violation
FAILURE TO COMPLY WITH THE REQUIREMENTS OF TS 3.10.1 DURING THE PERFORMANCE OF THE NON-NUCLEAR HEAT CLASS 1 SYSTEM LEAKAGE PRESSURE TEST
The inspectors identified that the licensee was not in compliance with Technical Specification 3.10.1, "System Leakage and Hydrostatic Testing Operation." The non-compliance occurred when the licensee remained above 212 F to performed SCRAM time testing after

completion of the reactor coolant system hydrostatic testing and required VT- 2 leakage inspections on April 26 and 27, 2005. Therefore, the operating exemptions allowed by TS 3.10.1 for the system leakage tests would not be applicable.

Because the issue was not entered into your corrective action program and you did not restore compliance within a reasonable period of time, a Notice of Violation is being issued. The finding was determined to be of very low safety significance since the procedure was performed at the end of an outage, when the decay heat rate was very low, and multiple trains of emergency core cooling systems were available for accident purposes. This was determined to be a TS 3.10.1 violation associated with a Green finding.
Inspection Report# : 2005011*(pdf)*

Significance: G Apr 23, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO IDENTIFY A BROKEN SPRING HANGER ON A RCIC INSTRUMENT LINE DURING THE DRYWELL CLOSEOUT INSPECTION.
A finding of very low safety significance was identified by the inspectors regarding the failure to identify a broken Spring Hanger, during the drywell closeout, that affected the operability of a Reactor Core Isolation Cooling (RCIC) Instrument line. The licensee repaired the broken Spring Hanger to original design specification.

Inspection Report# : 2005003*(pdf)*

Significance: G Jan 24, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
FAILURE TO PERFORM PROMPT AND ADEQUATE CORRECTIVE ACTIONS FOR EXCESSIVE VIBRATION CONDITIONS ASSOCIATED WITH THE DIESEL FIRE PUMP MECHANICAL OVERSPEED SWITCH.
A finding of very low safety significance was identified through a self-revealing event when the licensee failed to ensure that the excessive vibration problem associated with the diesel fire pump mechanical overspeed switch was properly addressed following the initial failure. Since the vibration problem was not properly addressed, a subsequent failure occurred, which resulted in additional pump unavailability. The licensee replaced the mechanical overspeed switch and placed compensatory actions in place to verify that the mechanical overspeed switch is still properly attached to the mounting bracket following each pump run. In addition, a design modification will be put into place to change the overspeed trip to a magnetic pickup design.
Inspection Report# : 2005002*(pdf)*

Significance: G Dec 28, 2004
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PERFORM PROMPT AND ADEQUATE CORRECTIVE ACTIONS FOR ISSUES ASSOCIATED WITH VT-2 INSPECTIONS.
A finding of very low safety significance was identified by the inspectors when the licensee failed to take prompt and adequate corrective actions for Visual Testing (VT) -2 inspections that were performed by unqualified personnel. The primary cause of this finding was related to the Cross-Cutting area of Problem Identification and Resolution.

The finding was more than minor since the failure to take prompt and adequate corrective actions on plant mitigating systems has the potential to adversely impact plant safety by affecting the availability and reliability of the associated equipment. The finding was determined to be of very low safety significance since all mitigating systems were still available. Adequate corrective actions were not put into place until after the inspectors challenged Plant and Engineering Management. An NCV of 10 CFR 50, Appendix B, Criterion XVI, was identified for the failure to take prompt and adequate corrective actions. The licensee re-qualified VT-2 inspectors, rescheduled the associated VT-2 inspections, and revised the operability evaluation to address surveillance requirements.
Inspection Report# : 2004005*(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance: G Jun 13, 2005
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
RADIATION WORK PERMIT DOSE EXCEEDED THE ESTIMATE BY 61 PERCENT ON TWO SEPARATE WORK ACTIVITIES.
The inspectors reviewed a self-revealing NCV of Technical Specification (TS) 5.4.1 for the failure to follow station as-low-as-reasonably-achievable (ALARA) procedure. During Refueling Outage (RFO) 19, the radiation dose estimate was exceeded by 61 percent and the total was greater than 5 rem on two separate work activities. The control rod drive push/pull and rebuild project was planned with a total dose of 3100 millirem, and the actual dose was 5253 millirem with no revisions to the estimate during the work implementation. The refueling project was estimated at 8500 millirem, and the actual exposure was 13648 millirem. The licensee determined that the work area dose rates were consistent with the plan, but time estimates or person-hours were not consistent with actual work implementation. The finding was entered into the licensee's corrective action program.

Inspection Report# : 2005004*(pdf)*

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Last modified : November 30, 2005