

Duane Arnold 2Q/2005 Plant Inspection Findings

Initiating Events

G**Significance:** 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\(pdf\)](#)**G****Significance:** 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\(pdf\)](#)**G****Significance:** 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\(pdf\)](#)**G****Significance:** 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:  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:  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:  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:  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:  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 cross-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:  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:  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:  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:  Jan 24, 2005

Identified By: Self Disclosing

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:  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\(pdf\)](#)

Significance:  Jul 18, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO PERFORM THE ANNUNCIATOR RESPONSE PROCEDURE FOR THE "B" SBDG OUTPUT BREAKER.

A finding of very low safety significance was identified by the resident inspectors when control room operators did not perform the annunciator response procedure (ARP) 1C08B-A-2, "'B' Diesel to 1A4 Breaker 1A411 Trip," when the 'B' standby diesel generator (SBDG) output breaker failed to close. Once identified, the licensee conducted operator training on procedural compliance and standards.

Inspection Report# : [2004004\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance:  Jul 26, 2004

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

FAILURE TO FOLLOW THE APPROVED PROCEDURES FOR THE DRAINING OF THE FUEL POOL COOLING SYSTEM.

A finding of very low safety significance was identified through a self-revealing event when the control room operators failed to follow the approved procedure for the draining of the fuel pool cooling system. The draining evolution resulted in the floor drains backing up, thereby contaminating a significant portion of the south end of the floor in the reactor building. Once identified, the licensee cleaned up the contaminated area, which resulted in workers receiving an unplanned dose for the scheduled evolution. Additionally, the licensee conducted operator training on management expectations and pre job briefings.

Inspection Report# : [2004004\(pdf\)](#)

Public Radiation Safety

Physical Protection

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

Miscellaneous

Last modified : August 24, 2005