

Duane Arnold 1Q/2005 Plant Inspection Findings

Initiating Events

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\(pdf\)](#)

Significance:  Apr 27, 2004
Identified By: NRC
Item Type: NCV NonCited Violation

FAILURE TO FOLLOW THE ANNUNCIATOR RESPONSE PROCEDURE FOR RECIRCULATION PUMPS.

A finding of very low safety significance was identified by the resident inspectors when control room operators failed to implement portions of an annunciator response procedure (ARP) 1C04B for high vibrations on the 'B' recirculation pump, after the alarm was validated locally by the vibration engineer. Once identified, the licensee conducted operator training on procedural compliance and performed a root cause evaluation to evaluate the issue of procedural noncompliance.

The finding was more than minor since the failure to perform actions contained in approved procedures has the potential to adversely impact plant safety. The finding was determined to be of very low safety significance since no adverse transients or consequences occurred. An NCV of Technical Specification (TS) 5.4.1.a for procedural non adherence was identified.

Inspection Report# : [2004003\(pdf\)](#)

Mitigating Systems

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\(pdf\)](#)

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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\(pdf\)](#)

G

Significance: Jun 07, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO ENSURE THAT ADEQUATE DESIGN CONTROL WAS MAINTAINED FOR D230 CONTROL RODS.

A finding of very low safety significance was identified through a self-revealing event when Reactor Engineering personnel did not verify that the calculations used to determine depletion limits for the D230 Control Rods were consistent with control rod design limits. As a result, two control rods exceeded segment depletion limits. A contributing cause of this design control violation was related to the cross-cutting area of Human Performance. Once identified, the licensee performed independent calculations and verified that the rods did not exceed nodal depletion limits, thereby maintaining reactivity control. In addition, the licensee is performing a root cause evaluation for the issue.

The finding was more than minor since, if left uncorrected, eight control rods would have potentially exceeded their design depletion limits. Rod programming sequences were changed to prevent exceeding depletion limits. The finding was determined to be of very low safety significance since the control rods design limits were not exceeded. An NCV of 10CFR 50, Appendix B, Criterion III, was identified for the failure to ensure that design control was maintained.

Inspection Report# : [2004003\(pdf\)](#)

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Significance: Jun 03, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO PERFORM PROMPT CORRECTIVE ACTIONS FOR POTENTIAL DEGRADED UNDERGROUND CABLE.

A finding of very low safety significance was identified through a self-revealing event when the licensee failed to take prompt corrective actions for potential degraded underground cable after the April 2003 switchyard cable failure. Prior to the licensee performing corrective actions, an additional underground cable failure of the 'A' river water system (RWS) pump occurred. Once identified, the licensee replaced the cable to the 'A' RWS pump. In addition, the licensee is developing a degraded/aging cable program.

The finding was more than minor since the availability and reliability of the 'A' RWS pump was affected. The finding was determined to be of very low safety significance since three redundant RWS pumps were still available. An NCV of 10 CFR 50, Appendix B, Criterion XVI, was identified for the failure to take prompt corrective actions

Inspection Report# : [2004003\(pdf\)](#)

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 : June 17, 2005