Beaver Valley 1
3Q/2006 Plant Inspection Findings

Initiating Events

Significance: G Aug 18, 2006
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
HOT WORK RESULTS IN FIRE IN UNIT 1 WEST CABLE VAULT
A self-revealing non-cited violation (NCV) of License Condition DPR-66 Section 2.C.5, Fire Protection Program, was identified for failure to follow plant fire protection procedures related to hot work and ignition control. On August 18, 2006, failure to assess all fire hazards and remove or protect combustible items in the vicinity of hot work resulted in welding activities in the PCA Shop igniting transient combustible material, subsequently igniting plastic sheeting and causing a small class 'A' fire in the adjacent West Cable Vault. The licensee immediately extinguished the fire and stopped all hot work. The event was entered into the licensee's corrective action program (CR-06-04924). A root cause evaluation was initiated by the licensee.

The finding is more than minor because it had a direct impact on the Initiating Events cornerstone objective and could be viewed as a precursor to a more significant event if left uncorrected. Specifically, the licensee's performance deficiency was directly responsible for a Class 'A' fire in the Unit 1 safety-related West Cable Vault of the Safeguards Building. The finding is of very low safety significance because all other normally required fire prevention measures were in place, allowing the fire to be quickly detected and suppressed. No safety-related equipment was affected. The inspectors determined that a contributor of this finding was related to the work practice component of the cross-cutting area of human performance.
Inspection Report# : 2006004*(pdf)*

Mitigating Systems

Significance: G Jul 19, 2006
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
INADEQUATE CORRECTIVE ACTION TO RESOLVE SLEEVE BEARING SET SCREW POSITION
A self-revealing, non-cited violation of 10 CFR 50,Appendix B, Criterion XVI, "Corrective Action," was identified on July 17, 2006, when the Unit 1 '3B' motor-driven auxiliary feedwater (MDAFW) pump [1FW-P-3B] inboard motor bearing oil was sampled and determined to contain babbit (CR-06-04345). The finding was determined to be inadequate problem evaluation and resolution of a prior sleeve-type journal bearing failure, caused by improper positioning of bearing housing set screws, and resulted in recurrent bearing failures of the '3B' MDAFW pump motor. Specifically, corrective actions for a prior failure of a similar bearing did not adequately resolve the proper positioning of the bearing housing set screws, thereby preventing proper bearing alignment within the bearing housing. The licensee has performed a root cause evaluation, has determined proper positioning of the bearing housing set screws, and has performed an extent of condition review for other pump motors with sleeve-type journal bearings.

This finding is more than minor because it is associated with the equipment performance attribute of the mitigating systems cornerstone and affects the objective to ensure the availability of systems that respond to initiating events to prevent undesirable consequences. The finding is of very low safety significance because the finding does not represent an actual loss of safety function. The finding is related to the corrective action program component of the problem identification and resolution cross cutting area in that the bearing set screw position was not thoroughly evaluated and resolved.
Inspection Report# : 2006004*(pdf)*

Significance: G Mar 31, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO SCOPE A SEISMIC, SAFETY-RELATED STRUCTURE INTO THE MAINTENANCE RULE STRUCTURAL MONITORING PROGRAM
The inspectors identified a Non-Cited Violation for failure to include seismic, safety-related valve pits for Unit 1 in the structural monitoring program of the maintenance rule as required by 10 CFR 50.65 (b). FENOC's failure to monitor valve pit structures could have led to the failure to identify rain water, groundwater or piping leaks, as well as pipe and valve support degradation, potentially rendering the river water cross-connect valves unable to perform their required safety function. This finding was entered into the corrective action program for resolution. The licensee has inspected one of two valve pits, has scheduled the inspection of the other valve pit, and will be adding these structures into the appropriate plant procedures and processes to ensure the requisite inspections are performed.

This finding was considered more than minor, because it was associated with the equipment performance attribute of the Mitigating System Cornerstone, and affected the availability and reliability of mitigating equipment. This finding was of very low safety significance since there never was a loss of function of the equipment in these structures.
Inspection Report# : 2006002*(pdf)*

Significance: G Mar 31, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
INADEQUATE CORRECTIVE ACTIONS TO RESOLVE MAIN STEAM SAFETY VALVE (MSSV) COMPONENT DEFICEINCIES THAT WERE THE SUBJECT OF INDUSTRY OPERATING EXPERIENCE
The inspectors identified a self-revealing Non-Cited Violation against 10 CFR 50, Appendix B, Criterion XVI, Corrective Actions, for inadequate corrective actions to resolve main steam safety valve (MSSV) component deficiencies in Unit 1. Specifically, the failure to internalize several years of industry operating experience impacted the initial lift setpoints of all main steam safety valves on the "C" main steam header, and would have led to higher lifting pressures for potentially the entire operating cycle. This finding was entered into the corrective action program for resolution. Subsequently, the licensee performed a root cause evaluation, replaced all five "C" main steam header MSSVs with improved materials less susceptible to the failure mechanisms encountered, and will perform a mid-cycle lift test as a proof test of the new materials.

The inspectors determined this finding is more than minor because it impacted the reliability and function of mitigating equipment important to safety. The inspectors determined that this finding is of very low safety significance, because there was no overall loss of function due to the redundant safety and atmospheric relief valves that remained capable of performing the necessary design basis function. A contributing cause to this finding is related to the identification subcategory of the problem identification and resolution cross-cutting area. Specifically, the failure to internalize several years of industry operating experience resulted in the oxidation condition that impacted the initial lift setpoints of all MSSVs on the "C" main steam header for potentially the entire operating cycle.

Inspection Report# : 2006002*(pdf)*

Significance: G Mar 31, 2006
Identified By: NRC
Item Type: FIN Finding
FAILURE TO CONSIDER EXTERNAL EVENTS DURING REACTOR COOLANT SYSTEM DRAIN-DOWN ACTIVITIES
The inspectors identified a finding which involved the failure to adequately plan for entry into a reduced inventory condition during the Unit 1 refueling outage. This resulted in an increased exposure to a reduced "time to boil". Controls were not in place to ensure that post drain-down required equipment was properly staged. Specifically, the reactor coolant system (RCS) drain-down was prematurely secured when it was discovered that the stud de-tensioners were not staged in containment to begin entry into reactor operating mode 6. Stud de-tensioner movement into the containment had been halted during the drain-down due to a suspension of crane operations as a result of high winds. The licensee entered this deficiency into their corrective action program for resolution. In addition, a trend review condition report was initiated to

evaluate the shutdown risk impacts that resulted from this and other issues that arose during the outage.

This finding is greater than minor because the licensee's risk assessment failed to consider unusual external conditions that were present or imminent. This finding was determined to be a finding of very low safety significance because the event did not involve a loss of control or a reduction in mitigation capability. The cause of this finding is related to the cross-cutting element of human performance.
Inspection Report# : 2006002*(pdf)*

Barrier Integrity

Significance: G Jun 30, 2006
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO PERFORM AN ADEQUATE OPERABILITY DETERMINATION FOR CURRENT LEAKAGE PAST MAIN STEAM SAFETY, DUMP AND RESIDUAL RELEASE VALVES
The inspectors identified an NCV of 10 CFR 50, Appendix B, Criterion 16, for failure to perform an adequate operability evaluations for degraded components to assure off-site dose consequences are bounded in the radiological safety analysis for a SGTR event. Specifically, some barrier integrity components (HCV-1MS-104 and 1MS-26, Atmospheric Steam Dump Valve(s), and Steam Generator Safety Valves) were degraded (leaking) and FENOC did not quantify and evaluate the current leakage regarding additional radiological dose consequences during a design basis accident (SGTR event). The licensee entered this deficiency into their corrective action program and implemented corrective actions to assess the magnitude of additional steam leakage that would be permitted before licensing basis dose results are exceeded.

This finding is more than minor because it was associated with the SSC and Barrier Performance Attribute of the barrier integrity cornerstone and affected the objective of providing reasonable assurance that the physical design barrier (containment) protected the public from radio nuclide releases caused by accidents or events (SGTR). The finding is of very low safety significance because although degraded, the leaking residual heat release valve and other components (e.g., safety valves and atmospheric dump valves) are not important to LERF and do not affect CDF. The cause of this finding is related to the corrective action program component of the PI&R cross-cutting area, in that a degraded component was not adequately evaluated to assure proper operability was determined.
Inspection Report# : 2006003*(pdf)*

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

Last modified : December 21, 2006