

Beaver Valley 1

3Q/2009 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Sep 15, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

PERSONNEL FAILURE TO DEMONSTRATE THAT 10CFR 50.65(a)(2) PERFORMANCE OF CONTAINMENT ISOLATION VALVE LIMIT SWITCHES WAS EFFECTIVELY CONTROLLED THROUGH PERFORMANCE OF APPROPRIATE PREVENTATIVE MAINTENANC

The inspectors identified an NCV of very low significance (Green) of 10CFR 50.65 (a)(2), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants, " due to FENOC personnel's failure to demonstrate that the 10 CFR 50.65(a)(2) performance of the containment isolation vlve limit switches was effectively controlled through the performance of appropriate preventative maintenance. Specifically, as evidenced by repeat dual position indications of containment isolation valves in the control room between 2007 and 2009 resulting in 21 unplanned entries into Technical Specification 3.6.3, the containment isolation valve system 10 CFR 50.65(a)(2) performance demonstration was no longer justified in accordance with Maintenance Rule implementing procedure guidance. This should have resulted in placement of the containment isolation valve system in 10CFR 50.65(a)(1) for goal setting and monitoring. FENOC entered this issue into the CAP (CR 09-64040).

The inspectors determined the finding was more than minor because it is associated with the Equipment Performance attribute of the Mitigating Systems cornerstone and adversely affected the cornerstone objective of ensuring the reliability of systems that respond to initiating events to prevent undesirable consequences. the finding was determined to be of very low significance (Green) because the finding did not result in a loss of system safety function, and did not screen as potentially risk significant due to external initiating events. the inspectors determined that this finding had a cross-cutting aspect in the "Corrective Action Program" component of the Problem Identification and Resolution cross-cutting area because FENOC did not take appropriate corrective actions to address safety issues and adverse trends associated with faulty containment isolation valve limit switches in a timely manner, commensurate with their safety significance and complexity [P.1(d)].

Inspection Report# : [2009008](#) (*pdf*)

Significance:  Jun 30, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Inadequate Post-Maintenance Testing Specified for Safety-Related River Water Check Valve

•Green. A non-cited violation (NCV) of 10CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings" was identified for failure to specify and perform an adequate post-maintenance test (PMT) after replacing a safety-related river water check-valve. Specifically, the PMT under work order 200233562 was not adequate to verify the proper function of the valve 1RW-57 prior to its return to service. The PMT was subsequently performed successfully. This issue was entered into the licensee's corrective action program as condition report 09-59866.

The failure to specify and perform an adequate PMT after replacing a safety-related river water check-valve was a performance deficiency. The finding was more than minor in accordance with IMC 0612, Appendix B (Section 1-3), "Issue Screening," because the failure to specify and perform an adequate PMT is associated with the procedure quality performance attribute of the mitigating systems cornerstone and affects the associated cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences.

This finding has a cross-cutting aspect in the area of human performance associated with resources because the licensee did not have complete, accurate, and up-to-date maintenance work procedures [IMC 0305 Aspect: H.2(c)] (Section 1R19).

Inspection Report# : [2009003](#) (*pdf*)

Significance: G Jun 30, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Continuously Submerged Cables Design Deficiency

• Green. The inspectors identified a non-cited violation (NCV) of 10CFR Part 50, Appendix B, Criterion III, “Design Control,” in that FENOC failed to maintain safety-related cables in an environment for which they were designed. Since NRC Information Notice 2002-12 was issued, FENOC has had several opportunities to trend as-found data, implement effective maintenance programs, and identify and thoroughly evaluate long-term adverse conditions for underground safety-related cables exposed to continuous submerged environments. Cables affected include those for Unit 1 river water and Unit 2 service water. The issue was entered into the licensee’s corrective action program (CR 09-60496) to initiate a review of the current manhole and cable monitoring programs, and to initiate long-term corrective actions.

Failure to maintain safety related cables in an environment for which they were designed is considered a performance deficiency. The finding was more than minor in accordance with IMC 0612, Appendix B (Section 1-3), “Issue Screening,” because if left uncorrected, the performance deficiency has the potential to lead to a more significant safety concern. Specifically, the deficiency did not result in the present loss of operability or functionality and did not represent a risk significant external event such as flooding. The issue was entered into the licensee’s corrective action program (CR 09-60496) to initiate a review of the current manhole and cable monitoring programs, and to initiate long-term corrective actions.

The performance deficiency had a cross-cutting aspect in the area of Problem Identification and Resolution, Corrective Action Program, because the licensee did not thoroughly evaluate problems such as resolutions, address causes, and evaluate the effectiveness of corrective actions [IMC 0305 Aspect: P.1 (c)] (Section 4OA2.3).

Inspection Report# : [2009003](#) (*pdf*)

Significance: G Nov 24, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE CORRECTIVE ACTION FOR POTENTIAL BLOCKAGE OF AFW PUMP LUBE OIL COOLING SYSTEM ORIFICES WHEN SUPPLIED BY RW/SW

The team identified a finding of very low safety significance involving a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, in that FENOC did not take adequate corrective action following the identification of a condition adverse to quality. Specifically, in 2004, 2005 and 2006, FENOC identified that if the Unit 1 river water (RW) system or the Unit 2 service water (SW) system was aligned to the suction of the auxiliary feedwater (AFW) pumps it could result in blockage of cooling water flow for the pumps, but did not take actions to correct the deficiency. FENOC entered the issue into their corrective action program to correct the non-conformance. In addition, FENOC developed Operations Department standing orders to limit the use of TS action statement 3.7.6.a which credited the use of the lineup, and formalized compensatory actions to address an Appendix R compliance deficiency. The finding was more than minor because there was reasonable doubt as to the operability of the AFW system when supplied from RW or SW systems. In addition, the finding was associated with the design control attribute of the Mitigating Cornerstone and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Since the finding represented a potential loss of safety function, the team conducted Significance Determination Process (SDP) Phase 2 and Phase 3 analyses which determined the finding was of very low safety significance (Green). Finally, the finding had a cross-cutting aspect in the area of Problem Identification and Resolution, Corrective Action Program Component, because FENOC did not adequately evaluate this condition adverse to quality, including classifying, prioritizing, and evaluating for operability when it was identified in February 2004, and again in March 2005 and June

2006.

Inspection Report# : [2008008](#) (pdf)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Sep 03, 2009

Identified By: NRC

Item Type: FIN Finding

Beaver Valley 2009 Biennial PI&R Inspection Summary

The inspectors concluded that FENOC was, in general, effective in identifying, evaluating, and resolving problems. Beaver Valley personnel identified problems at a low threshold and entered them into the Corrective Action Program (CAP). The inspectors determined that Beaver Valley personnel screened issues appropriately for operability and reportability, and prioritized issues commensurate with the safety significance of the problems. Root and apparent cause analyses appropriately considered extent of condition, generic issues, and previous occurrences. The inspectors determined that corrective actions addressed the identified causes and were typically implemented in a timely manner. However, the inspectors noted one NCV of very low safety significance in the area of prioritization and evaluation of issues. This issue was entered into FENOC's CAP during the inspection.

FENOC's audits and self-assessments reviewed by the inspectors were thorough and probing. Additionally, the inspectors concluded that FENOC adequately identified, reviewed, and applied relevant industry operating experience (OE) to the Beaver Valley Power Station. Based on interviews, observations of plant activities, and reviews of the CAP and the Employees Concerns Program (ECP), the inspectors did not identify any concerns with site personnel willingness to raise safety issues, nor did the inspectors identify conditions that could have had a negative impact on the site's safety conscious work environment (SCWE).

Inspection Report# : [2009008](#) (pdf)

Last modified : December 10, 2009