Davis-Besse 3Q/2009 Plant Inspection Findings

Initiating Events

Significance: Identified By: Self-Revealing Item Type: FIN Finding

LOSS OF THE SWITCHYARD J BUS DUE TO A FAULTED COUPLING CAPACITOR POTENTIAL **DEVICE**

A Green self-revealed finding was identified for the failure to implement a maintenance strategy to replace a capacitive coupled potential device (CCPD) in a timely manner. The CCPD had been installed beyond the 25 year life expectancy and failed catastrophically on June 25, 2009, causing the loss of one offsite AC circuit and some burning debris. The licensee included this finding in their corrective action program as CR 09 61025. Corrective actions were initiated to trend secondary voltages on the remaining CCPDs that have been installed beyond 25 years. The six remaining CCPDs have been scheduled for replacement in November, 2009.

This finding affected the initiating events cornerstone and could be reasonably viewed as a precursor to a significant event because a CCDP failure can subject the plant to a unit trip, loss of an offsite power source or startup transformer. This finding is greater than minor because it had an actual impact of causing one offsite AC source to become inoperable. The finding was not a LOCA initiator and did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment will not be available. The burning debris in the switchyard was extinguished within a short time period, and there was not an impact on operating plant equipment because one offsite power source and the emergency diesel generators remained available throughout the event. Therefore, the finding was determined to be of very low safety significance (Green). No violation of NRC requirements occurred. This finding has a cross-cutting aspect in the area of problem identification and resolution, corrective action program (P.1.d).

Inspection Report# : 2009004 (pdf)

Significance: 6 Mar 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

SWITCHYARD TRANSFORMERS RETURNED TO MAINTENANCE RULE A.2 STATUS WITHOUT APPROPRIATE CORRECTIVE ACTIONS COMPLETED

The inspectors identified a non-cited violation (NCV) of 10 CFR 50.65(a)(1), "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," because the licensee did not establish appropriate corrective actions to address the potential for a transformer deluge initiation due to water hammer, and provide reasonable assurance that the system was capable of fulfilling its intended function and could return to monitoring under 10 CFR 50.65(a)(2). This issue was entered into the licensee's corrective action program.

The finding is more than minor. In accordance with IMC 0612, Appendix E, "Examples of Minor Issues," Section 7, Maintenance Rule a(1) and a(2) violations are not minor because they involve structures, systems, and components (SSCs) that have demonstrated some degraded performance or condition. The finding was determined to be of very low safety significance (Green) because it does not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available.

Inspection Report# : 2009002 (pdf)

Significance: 6 Mar 31, 2009

Identified By: NRC Item Type: FIN Finding

SMOLDERING OIL-SOAKED INSULATION

A finding of very low safety significance was self-revealed when improper installation of insulation surrounding the main turbine bearing number two oil deflector caused the main turbine to be taken off-line due to smoking insulation. An insulation blanket was blocking normal air flow used for cooling the oil deflector, causing oil to carbonize and clog the oil deflector screen. This issue was caused by the lack of procedural guidance for the installation and removal of insulation from the turbine. A corrective action was initiated to create a procedure which incorporates specific guidance for removing and installing the insulation. This finding was more than minor because the issue is associated with the design control attribute of the initiating events cornerstone and affects the cornerstone objective of limiting the likelihood of events that upset plant stability. The finding was not a loss of coolant accident (LOCA) initiator and did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions will not be available. The finding was not considered an external event initiator. Therefore, the finding was determined to be of very low safety significance.

Inspection Report# : 2009002 (pdf)

Mitigating Systems

Significance: 6 Apr 10, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to evaluate molded case circuit breakers that exceed their qualified life.

The inspectors identified a Non-Cited Violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the failure to promptly identify and correct a condition adverse to quality regarding the expired qualification of molded case circuit breakers as safety-related components. Specifically, the licensee failed to identify that unqualified safety-related molded case circuit breakers were a condition adverse to quality and, as a result, the corrective actions were not prompt in that a 6 year replacement frequency was specified without an evaluation as to the acceptability of that frequency. The licensee entered this issue into its corrective action program. The inspectors determined that the finding was more than minor because the finding, if left uncorrected, would become a more significant safety concern. The finding screened as of very low safety significance (Green) because the finding was a qualification deficiency confirmed not to have resulted in loss of operability or functionality in service.

This finding has a cross-cutting aspect in the area of human performance, decision making, because the licensee made a nonconservative determination that unqualified breakers were not a condition adverse to quality based on anecdotal history that suggested that no known problem existed at the time with any specific breaker.

Inspection Report#: 2009006 (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 <u>cover letters</u> to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Apr 10, 2009

Identified By: NRC
Item Type: FIN Finding
PI&R Summary

On the basis of the sample selected for review, the team concluded that implementation of the corrective action program (CAP) was generally good. The licensee had a low threshold for identifying problems and entering them in the CAP. Items entered into the CAP were screened and prioritized in a timely manner using established criteria; were properly evaluated commensurate with their safety significance; and corrective actions were generally implemented in a timely manner, commensurate with the safety significance. The team noted that the licensee applied operating experience to station activities. Audits and self-assessments were determined to be performed at an appropriate level to identify deficiencies. On the basis of discussions and interviews conducted during the inspection, workers at the site expressed freedom to raise safety concerns.

Inspection Report# : 2009006 (pdf)

Significance:

Mar 31, 2009

Identified By: NRC

Item Type: NCV NonCited Violation

INADEQUATE MANAGEMENT OVERSIGHT TO ENSURE SPECIFIED CORRECTIVE ACTIONS WERE BEING ACCOMPLISHED

The inspectors identified a non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," in that the licensee failed to have appropriate qualitative or quantitative measures to ensure that corrective actions specified in department directives and requirements of business practices were actually being accomplished. This contributed to further issues in the Chemistry Department with adherence to procedure requirements. This issue was entered into the licensee's corrective action program.

The finding was more than minor because if left uncorrected the finding could become a more significant safety concern and was a factor in subsequent procedure compliance and component mispositioning issues within the Chemistry department. The inspectors determined that the finding was not suitable for SDP evaluation because the failure to adhere to specified requirements or to have methods to determine adherence did not directly result in degraded or inoperable equipment. This finding was reviewed by Regional Management and determined to be of very low safety significance. This finding had a cross-cutting aspect in the area of Human Performance, Work Practices, because the licensee did not ensure adequate supervisory and management oversight of work activities of the technicians in the field and of personnel providing activities to upgrade procedures and standing orders.

Inspection Report# : 2009002 (pdf)

Last modified: December 10, 2009