Beaver Valley 2
3Q/2005 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Sep 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
FAILURE TO DEMONSTRATE EFFECTIVE MAINTENANCE ON THE UNIT 2 TDAFW STEAM ADMISSION VALVES
The inspectors identified an NCV of 10CFR50.65(a)(2), which involved the failure to demonstrate that the performance of turbine-driven auxiliary feedwater (TDAFW) steam admission solenoid valves was being effectively controlled through adequate maintenance. Four separate solenoid coil failures occurred in 2005, but were considered individual component failures and thus not system functional failures. FENOC formed a root cause team following the fourth valve failure to provide an in-depth review of the recurrent failures.

This finding is more than minor because it involves the reliability of a mitigating systems component. A failure of two valves in the same train would have caused a start of the TDAFW pump and the injection of relatively cold water to the steam generators followed by a subsequent cooldown of the reactor coolant system. This scenario would also affect the containment isolation function of the affected steam line since both valves are considered containment isolation valves This finding is of very low safety significance since it did not result in a loss of system function as described in Generic Letter 91-18. FENOC has entered this issue into the corrective action program, and plan to re-evaluate the effectiveness of the administrative procedures utilized to implement the maintenance rule. Additionally, FENOC is evaluating the solenoid coil deficiencies, performed an extent of condition review, and have appropriate corrective actions identified within the corrective action program to resolve the multiple failures that have occurred. A contributing cause to this finding is related to the evaluation subcategory of the problem identification and resolution cross-cutting area because the licensee failed to perform a 10CFR50.65(a)(1) evaluation to validate that effective maintenance was being performed on the affected valves.
Inspection Report# : 2005007*(pdf)*

Significance: G Sep 30, 2005
Identified By: Self-Revealing
Item Type: FIN Finding
SWITCHYARD TRANSIENT CAUSED BY CRANE THAT DAMAGED 345kV TRANSMISSION LINE
The inspectors identified a self-revealing finding because an overhead crane contacted an incoming 345 kilovolt feeder to the Beaver Valley Power Station (BVPS) switchyard. The incoming line was isolated automatically by protective relaying and the subsequent electrical transient caused a loss of the running service air compressor on Unit 2. Operators quickly discovered the lowering instrument air pressure and took actions to restore header pressure by starting the backup condensate polisher compressor.

This finding is more than minor because it affected an attribute and the objective of the initiating events cornerstone in that it caused a transient that upset plant stability and therefore could be viewed as a precursor to a significant event. This event could have resulted in a loss of instrument air and a subsequent reactor trip. This finding is of very low safety significance since although it did contribute to the likelihood of a reactor trip, it did not contribute to the likelihood of unavailable mitigating system components. FENOC performed a root cause and instituted appropriate interim corrective actions in the area of crane movements and heavy loads. Additionally, FENOC has identified a contributing cause for the unexpected trip of the running station air compressor and have actions within the corrective action program to mitigate this action from recurring. A contributing cause to this finding is related to the personnel subcategory of the human performance cross-cutting area because of a lack of attention to detail while moving a crane near overhead power lines.
Inspection Report# : 2005007*(pdf)*

Significance: G Sep 30, 2005
Identified By: NRC
Item Type: NCV NonCited Violation
DEGRADED SERVICE WATER SYSTEM PIPE SUPPORT
The inspectors identified an NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Actions," for inadequate and untimely corrective actions regarding a degraded (corroded) service water piping support that existed for approximately nine years.

This finding is more than minor because if the corroded pipe support was left uncorrected, it would become a more significant safety concern in

that the service water piping would not maintain structural integrity during a seismic event due to the corroded and inoperable pipe support, and result in a large service water leak that could impact safety-related equipment that require service water for cooling. This finding was considered to be of low safety significance because the pipe support was determined to be degraded by approximately 20 percent, but capable of performing its intended function. The licensee will update the design basis calculation to address the wall loss from corrosion, and has cleaned and painted the affected area to ensure further degradation does not occur. Additionally, system walkdown effectiveness was being evaluated due to the longstanding nature of this degradation. A contributing cause to this finding is related to the corrective action subcategory of the problem identification and resolution cross-cutting area, because the licensee failed to correct a long-standing degradation that existed in a pipe support for the safety-related service water system.
Inspection Report# : 2005007*(pdf)*

Significance: G Dec 31, 2004
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
FAILURE TO IMPLEMENT AN ADEQUATE TDAFW PUMP SEAL PACKING PROCEDURE
The inspectors identified a self-revealing, non-cited violation of Technical Specification (TS) 6.8.1, when the Unit 2 Turbine Driven Auxiliary Feedwater (TDAFW) pump failed a quarterly test due to improper seal packing adjustment. During the test, the operators secured the pump when the outboard gland temperature exhibited excessive temperatures due to lack of seal leak-off. The outboard packing was adjusted during the previous successful test of the TDAFW pump, however, the licensee did not use an adequate packing adjustment procedure.

The finding is greater than minor because it adversely affected the reliability of a safety-related AFW pump as well as the mitigating systems cornerstone objective. The finding is of very low safety significance since an engineering analysis determined that the pump would have remained operable, and was therefore capable of performing its design basis function.
Inspection Report# : 2004006*(pdf)*

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Physical Protection information not publicly available.

Miscellaneous

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