Beaver Valley 2
3Q/2007 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Aug 07, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
POST-FIRE SAFE SHUTDOWN CAPABILITY DEGRADED DUE TO AMMONIA GAS HAZARD
Green. (Section 1R05) The inspectors identified a non-cited violation (NCV) of Unit 2 license condition 2.F for failure to maintain adequate protection of a post-fire safe-shutdown area. Ammonia gas migrated through a floor drain, and concentrated in an area (MCC*2-E04 cubicle) at Unit 2 required to achieve and maintain hot standby and cold shutdown. The ammonia gas concentration was sufficient to impede entry into the cubicle and resulted in a degradation of FENOC's fire protection safe shutdown capabilities. The licensee took corrective actions to stage emergency breathing equipment near the area, established monitoring and mitigative actions for the ammonia gas in the cubicle, and entered the deficiency into their corrective action program.

This finding is more than minor because it affects the licensee's post-fire safe-shutdown capability and is associated with the Mitigating Systems Cornerstone and the respective attribute of external factors. Using Phase 1 and 2 of the Fire Protection Significance Determination Process, Inspection Manual Chapter (IMC) 0609, Appendix F, the inspectors determined this finding was of very low safety significance because: (1) duration factor was based on less than three days, (2) fire frequency was based on a cable vault with other electrical equipment, and (3) at least one train of safe shutdown system is still available. The cause of this finding is related to the cross-cutting area of problem identification and resolution, in that timely and appropriate actions were not taken to address safety issues and adverse trends [P.1 (d)].

Inspection Report# : 2007004 *(pdf)*

Significance: G Mar 31, 2007
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to implement and control chemical addition activities results in a degraded auxiliary feedwater pump
A self-revealing, Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, was identified in that the licensee failed to properly implement and control chemical additions to the Unit 2 Steam Generators, which resulted in a valve being out of its normal alignment for approximately 71 days. Subsequently, borated water interacted with the Auxiliary Feedwater System in such a way that ultimately caused the blockage of the 'B' motor-driven auxiliary feedwater pump packing leakoff reservoir drain, water to back up and enter the forced lubrication system of the pump, and result in extended periods of inoperability. FENOC subsequently utilized the corrective action program and performed a root cause evaluation, evaluated appropriate human performance and organizational contributors, and initiated physical repairs and procedure revisions to prevent recurrence.

The inspectors determined that this finding is more than minor because it affected the equipment performance attribute of the associated Mitigating Systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). The inspectors determined that this finding is of very low safety significance, because there was no overall loss of system function due to system redundancy, and that after analysis, the pump would have been able to perform its required safety function for the applicable mission time during design basis events. This finding has a cross-cutting aspect in the area of human performance, because FENOC failed to ensure appropriate coordination of work activities during

steam generator chemical additions, which resulted in a loss of configuration control that degraded a safety-related Auxilary Feedwater pump for an extended period of time [H.3.(b)].
Inspection Report# : 2007002 *(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

Last modified : December 07, 2007