Beaver Valley 2 4Q/2006 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: Jul 19, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO VERIFY THE ADEQUACY OF A TEMPORARY DESIGN MODIFICATION ASSOCIATED WITH THE UNIT 2 CHILLED WATER SYSTEM

An NRC-identified non-cited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," was identified for failure to provide for verifying the adequacy of design associated with a temporary design modification installed on the Unit 2 chilled water system. In particular, adequate justification and bases for assumptions, positions, and conclusions were not adequately provided where necessary, were not identified during reviews, and ultimately challenged the functional capabilities of the system upon implementation. The licensee entered this issue into the corrective action program, performed an apparent cause assessment, will use this modification in engineering training as a case study, will revise design interface review checklist questions to prevent similar issues in the future, and has repaired the system and removed the temporary modification.

This finding was considered more than minor since the modification resulted in degrading temperature trends that if left uncorrected, could have led to a more significant safety concern. Specifically, components necessary to achieve safe shutdown were exposed to higher temperatures for normal operation than credited in the design qualification records. In addition, increasing temperatures in containment under less than favorable external conditions (high ambient temperatures) could have led to exceeding the technical specification limit to support containment operability, and resulted in a plant shutdown. This finding was considered to be of very low safety significance because there was no loss of system safety function and was not impacted by external events.

Inspection Report# : 2006004 (pdf)

Barrier Integrity

Emergency Preparedness

Significance: Aug 22, 2006

Identified By: NRC Item Type: VIO Violation

Inadequate dose assessment procedure.

During an NRC inspection conducted between June 26 and August 22, 2006, for which an exit meeting was held on August 22, 2006, and a Regulatory Conference was held on October 24, 2006, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

10 CFR Part 50.47(b)(9), requires, in part, that adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

Contrary to the above, as of June 27, 2006, the Beaver Valley Power Station (BVPS) method for assessing actual and potential offsite consequences of a radiological emergency condition was inadequate. Specifically, "BVPS Procedure 1/2-EPP-IP-2.6.3, Dose Projection - ARERAS/MIDAS With Real-Time Inputs, revision 13," stated that "IF the duration of a release cannot be estimated, THEN use 1.0 hour, and repeat the projection as better data become available." This is inadequate because the one hour default release duration may not adequately envelope existing plant conditions and therefore could lead to untimely protective action recommendations. As an example, during the June 27, 2006, emergency preparedness exercise, the licensee used one hour as a release duration time, even though the release had been occurring for at least 30 minutes and there was no reason to conclude the release would be terminated within one hour of initiation.

This violation is associated with a White Significance Determination Process finding. Inspection Report# : 2006009 (pdf)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

<u>Physical Protection</u> information not publicly available.

Miscellaneous

Last modified: March 01, 2007