

Catawba 2

3Q/2004 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Jun 19, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Promptly Correct YC System Chiller Divider Plate Clamps

The inspectors identified a non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action, for the failure to perform prompt corrective actions to prevent recurrence of a significant condition adverse to quality on the control room area ventilation chilled water (YC) system 'A' chiller inlet flow divider plate support clamp. This resulted in a test failure of the YC system 'A' chiller.

The finding is greater than minor because it affected the reactor safety mitigating system cornerstone objective of ensuring reliable, available, and capable systems that respond to initiating events. The finding is of very low safety significance because, both trains of YC were not inoperable at the same time and each train is fully capable of performing the mitigating system safety function; therefore, there was not a complete loss of system function.

Inspection Report# : [2004004\(pdf\)](#)

Significance:  Jun 19, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain/Control the Thickness of the Ground Barrier Missile Protection Shield Over RN Train 'B' Electrical Conduits

The inspectors identified a non-cited violation for the failure to comply with 10 CFR 50, Appendix B, Criterion III, Design Control, to assure that the minimum tornado missile protection shield thickness of 5.0 feet was maintained or controlled when the ground barrier over the Unit 2, nuclear service water (RN), train 'B' electrical conduits was removed with the remaining ground coverage less than 5 feet.

The finding is more than minor because it affected the reactor safety mitigating system cornerstone objective of ensuring equipment reliability. The finding was determined to be of very low safety significance because of the low frequency of tornados, the relative small amount of electrical conduit that did not have the required ground coverage, the short exposure time, and the low impact on mitigating systems since just one pump in one train of RN was involved.

Inspection Report# : [2004004\(pdf\)](#)

Significance:  Mar 27, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Seal Not Installed in a Cable Conduit Penetrating a Fire Barrier

The inspectors identified a non-cited violation of Unit 2 operating license condition 2.C.5 for the licensee's failure to have a penetration seal installed in a cable conduit located in a 3-hour fire barrier separating the Unit 2 A and B Electrical Penetration Rooms.

This finding was determined to be greater than minor because it is associated with the protection against external factors (fire) attribute and degraded the reactor safety mitigating system cornerstone objective in that the committed fire boundary separating two Safe Shutdown trains was not intact. The finding is of very low safety significance because a credible or likely fire scenario resulting in damage to the opposite train of equipment could not be identified following analysis and review of industry test data.

Inspection Report# : [2004003\(pdf\)](#)

Significance:  Dec 20, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Identify and Correct Known Conditions Adverse to Quality - two examples: (1) 1B Containment Spray Heat Exchanger and (2) 2B Diesel Generator Battery

The inspectors identified the first of two examples of a non-cited violation for failure to comply with 10 CFR 50 Appendix B, Criterion XVI,

due to a failure to promptly identify and take effective corrective actions. Specifically, in this first example, the licensee failed to take effective corrective actions to prevent the 2B diesel generator battery bank from becoming inoperable sometime between October 18 - 25, 2003. Corrective actions resulting from the increased battery surveillance frequency were not adequate to identify an adverse trend in cell voltages prior to multiple cells being below the TS voltage. This finding is greater than minor because it affected the reactor safety mitigating system cornerstone attribute to ensure availability, reliability, and capability of the system. The finding is of very low safety significance because there was no loss of safety function on the battery bank. The safety function was verified by the licensee performing capacity testing on two battery cells, which showed sufficient capacity existed and therefore cell reversal conditions were not present. (Section 1RST)

The inspectors identified the second of two examples of a non-cited violation for failure to comply with 10 CFR 50 Appendix B, Criterion XVI, due to a failure to promptly identify and take corrective actions. Specifically, in this second example, the licensee failed to promptly identify and correct deficiencies and nonconformances in the 1B containment spray heat exchanger for known structural degradation of the tube support baffle plates from approximately 1992 until October 6, 2003. The finding is greater than minor because the finding effected the Barriers cornerstone objective of providing reasonable assurance that physical barriers protect the public from radio nuclide releases caused by accidents or events, specifically the cornerstone attribute of maintaining the functionality of the containment by maintaining design structural integrity. Additionally, the finding is greater than minor because the heat exchanger actually was declared inoperable in excess of the allowed TS LCO time, which directly affected the cornerstone objective of functionality of the containment. The finding is under the Barrier Integrity cornerstone and is of very low safety significance because, the finding did not represent an actual reduction of the atmospheric pressure control function of the reactor containment since the other train was available and was designed for one hundred percent capability to meet design requirements. Extensive licensee engineering analysis, with vendor support, determined that heat exchanger past operability was maintained because service water flow during design accident system configurations was below newly developed limits due to system flow balancing. (Section 1R12)

Inspection Report# : [2003005\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

Significance: N/A Aug 27, 2004

Identified By: NRC

Item Type: FIN Finding

Catawba 2004 PI&R

The licensee was generally effective in identifying problems at a low threshold and entering them into the corrective action program. The licensee properly prioritized issues and routinely performed adequate evaluations that were technically accurate and of sufficient depth. However, the licensee was slow at times to initiate Problem Investigation Process reports (PIPs) for documenting conditions adverse to quality that met the initiation criteria established in the program procedures. In addition, examples were identified where problems were not accurately and thoroughly described in PIPs; thereby, adversely impacting the licensee's ability to properly code the problems for trending and develop proper corrective actions. This was especially true with respect to human performance deficiencies.

Several examples of recurring problems were noted after corrective actions had been completed. It was also noted that actions taken to correct equipment problems have sometimes been slow; but, licensee management applied increased attention to equipment problems and increasing equipment reliability through the Equipment Reliability Initiative started in early 2004. The licensee's self-assessments and audits were effective in identifying deficiencies in the corrective action program. The inspectors did not identify any reluctance by plant personnel to report safety concerns.

Inspection Report# : [2004009\(pdf\)](#)

Last modified : December 29, 2004