

Catawba 1

2Q/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:  Dec 20, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Adequately Implement Containment Closeout Inspection Surveillance To Identify Debris In Containment Sump

The inspectors identified a non-cited violation for failure to adequately implement a surveillance procedure in accordance with TS 5.4.1.a. Specifically, the licensee failed to identify approximately six gallons of material in the Unit 1 containment sump during a containment closeout inspection in accordance with the licensee's surveillance procedure. The finding is greater than minor because the finding was associated with the reactor safety mitigating system cornerstone objective to ensure the availability, reliability, and capability of a system that responds to initiating events to prevent core damage. The finding is of very low safety significance because the debris in the containment sump did not result in the actual loss of function or loss of a single train of safety injection equipment. (Section 4OA5)

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

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 representative 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

Significance:  Sep 20, 2003
Identified By: NRC

Item Type: NCV NonCited Violation

Effect of RCP Thermal Barrier Rupture on MOV Closure and Containment Isolation

The inspectors identified a non-cited violation for failure to comply with 10 CFR 50 Appendix B, Criterion 3, Design Control, due to inadequate design measures. Specifically, the licensee failed to assure adequate relief valve sizing to prevent exceeding the design pressure of the component cooling water (KC) piping in the event of a reactor coolant pump (RCP) thermal barrier rupture. This finding represented a performance deficiency because it involved the licensee's failure to assure the design adequacy of the KC relief valve to protect the piping from exceeding design limits in the event of a RCP thermal barrier leak. This finding is more than minor because it affects the Reactor Safety Cornerstone, Barrier Integrity attribute of design control and affects the associated objective. The inadequately sized relief valve represents a potential open path way in the physical integrity of the reactor containment. The NRC performed a phase three significance determination screening analysis and concluded the finding is of very low safety significance. (Section 4OA5.1)

Inspection Report# : [2003004\(pdf\)](#)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

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

Miscellaneous

Last modified : September 08, 2004