

Catawba 2

1Q/2004 Plant Inspection Findings

Initiating Events

Mitigating Systems



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

G**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 40A5.1)

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

Emergency Preparedness

Occupational Radiation Safety

G**Significance:** Jun 28, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Post a Radiation Area

The inspectors identified a non-cited violation for failure to post a radiation area as required by 10 CFR 20.1902, Posting Requirement, paragraph (a), Posting of Radiation Areas. Radioactive samples having a dose rate greater than 5 millirem/hour at 30 centimeters were stored in the chemistry lab in such a manner that an individual could receive a whole body dose from the stored material without the proper radiation sign posting. The finding was more than minor because it was associated with the Occupational Radiation Safety Cornerstone and affected the process attribute of exposure/contamination control and monitoring. The finding was determined to be of very low safety significance using the Occupational Radiation Safety SDP, because this finding was not an overexposure or substantial potential for an overexposure, and did not compromise the ability to assess dose, nor was it an ALARA issue. (Section 20S1.1)

Inspection Report# : [2003003\(pdf\)](#)G**Significance:** Jun 28, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Adequate Routine Surveys

The inspectors identified a non-cited violation for failure to perform adequate radiological surveys as required by 10 CFR 20.1501, General, paragraph (a). Three radiological surveys conducted in the chemistry laboratory over a three month period were insufficient to detect radiation levels from potential radiological hazards that could create radiation areas. The finding was more than minor because they were associated with the Occupational Radiation Safety Cornerstone and affected the process attribute of exposure/contamination control and monitoring to protect the worker from exposure to radiation. The finding was determined to be of very low safety significance using the Occupational Radiation Safety SDP, because it was not an overexposure or substantial potential for an overexposure and did not compromise the ability to assess dose, nor was it an ALARA issue. (Section 20S1.2)

Inspection Report# : [2003003\(pdf\)](#)

Public Radiation Safety

Physical Protection

Miscellaneous

Last modified : May 05, 2004