

Catawba 2

4Q/2008 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Dec 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Implementation of Risk Management Actions Associated With Planned Maintenance on the Unit 2 A Train KC Heat Exchanger

The inspectors identified a non-cited violation (NCV) of 10 CFR 50.65(a)(4) for the licensee's failure to provide sufficient details for equipment protection in the approved Critical Activity Plan. In addition, the risk mitigation actions contained in the plan intended to manage and minimize the increased plant risk associated with work on the Unit 2 A Train of Component Cooling Water (KC). The finding was more than minor because the risk mitigation strategies in the Critical Activity Plan were not effectively implemented. In addition, the plan lacked specific guidance on what components were to be posted to provide adequate protection of the 2B train of KC. As a result, work activities were allowed to take place that could have adversely affected the remaining train of KC. This finding was determined to be of very low safety significance because the resulting magnitude of the calculated Incremental Core Damage Probability was less than 1E-5 and the licensee's implementation of more than three Risk Management Actions. The finding directly involved the cross-cutting area of Human Performance under the "Work Activity Coordination" aspect of the "Work Control" component [H.3.b]. This issue has been entered into the licensee's corrective action program as Problem Investigation Process report (PIP) C-08-6133. (Section 1R13.1)

Inspection Report# : [2008005](#) (*pdf*)

Significance:  Dec 19, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Perform Adequate System Leakage Tests (Section 40A2.a.3)

The team identified a Green non-cited violation (NCV) for a failure to comply with 10CFR50.55a(g)(4) in that, the licensee failed to perform adequate system leakage tests of buried Nuclear Service Water (RN) piping repairs. This issue was entered into the licensee's corrective action program as Problem Identification Process C-08-07137.

The performance deficiency associated with this finding involved failure to perform adequate system leakage tests of buried RN piping repairs. Specifically, wooden plugs remained in through wall defects during system leakage tests to verify the quality of eight repair welds to RN piping. By leaving the plugs in place, the repair welds cannot be shown to have been subject to the system pressure required by the ASME B&PV Code, resulting in inadequate system leakage tests, therefore the quality of the welds cannot be fully demonstrated. The failure to perform adequate system leakage tests is more than minor because it is associated with the Reactor Safety/Mitigating Systems Cornerstone attribute of Procedure Quality (testing procedures) and affected the cornerstone objective of ensuring the availability, reliability and capability of the RN system. Because the RN system remained operable but degraded and there was no loss of safety function, the failure to perform adequate system leakage tests was considered to be of very low safety significance (Green). This finding has a cross-cutting aspect in the area of problem identification and resolution in the component of corrective action program because the licensee's extent of condition failed to recognize that repairs were non-conforming despite being signed by an Authorized Nuclear Inservice Inspector (ANII) [P.1(c)] (Section 40A2.a.3).

Inspection Report# : [2008006](#) (pdf)

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Significance: Mar 31, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Identify an Inoperable CRACWS Chiller Prior to Removing the Remaining Chiller from Service Placed Both Units in TS 3.0.3 for Approximately 110 minutes (Section 40A2.2(2))

The inspectors identified a Green non-cited violation of Technical Specification 5.4.1.a, for the failure to adequately establish and implement procedures required by Regulatory Guide 1.33, Appendix A, Section 1.b, Administrative Procedures. Specifically, the licensed operators in the main control room and work control center failed to identify that the “A” Control Room Area Chilled Water System (CRACWS) was inoperable prior to removing the remaining chiller from service for testing. This placed both Catawba units in Technical Specification 3.0.3 for approximately 110 minutes without any of the required actions being taken.

The finding was more than minor because it was associated with the Configuration Control attribute of the Barrier Integrity cornerstone and affected the cornerstone objective of providing reasonable assurance that physical design barriers provide protection from radionuclide releases caused by accidents or events. While the Control Room Area Ventilation System (CRAVS) would have remained operable in terms of filtering air in the areas it services, without chilled water providing cooling, operators would have had to bypass the filtered air paths using Abnormal Operating Procedure (AP) guidance in order to maintain area temperatures at values needed to ensure equipment in the areas remained operable over time. The inspectors determined the finding to be of very low safety significance using the Phase 1 Screening Worksheet of Inspection Manual 0609, “Maintenance Risk Assessment and Risk Significance Determination Process”. The issue would only become evident if the 2A diesel generator failed to re-energize the 2A 4.16kV vital bus following a loss of offsite power (LOOP) event with the “A” chiller control power aligned to the 2A bus and the length of time available before the AP would have had to be entered and the filtered air flow paths bypassed.

The finding directly involved the cross-cutting area of Human Performance under the “Procedural Compliance” aspect of the “Work Practices” component, in that the licensee failed to effectively follow multiple station procedures to ensure redundant CRACWS chillers were not removed from service, resulting in a potential loss of chilled water cooling for areas supplied by the CRAVS [H.4.b]. This issue has been entered into the licensee’s Corrective Action Program as Problem Investigation Process report (PIP) C-07-7073. (Section 40A2.2(2))

Inspection Report# : [2008002](#) (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

Significance: N/A Dec 19, 2008

Identified By: NRC

Item Type: FIN Finding

Catawba December 2008 PI&R Summary

On the basis of the samples selected for review, the team concluded that in general, your corrective action program processes and procedures were effective; thresholds for identifying issues were appropriately low; and problems were properly evaluated and corrected within the problem identification and resolution program (PI&R). However, several observations were identified in the area of an issue screening and prioritization.

The team concluded that, in general, problems were properly identified, evaluated, prioritized, and corrected. The licensee was effective at identifying problems and entering them into the corrective action program (CAP) for resolution. The licensee maintained a low threshold for identifying problems as evidenced by the large number of Problem Investigation Process reports (PIPs) entered annually into the CAP. Generally, the licensee properly prioritized and evaluated issues, formal root cause evaluations for significant problems were thorough and detailed, and corrective actions specified for problems were adequate. Overall, corrective actions developed and implemented for issues were effective in correcting the problems. However, several minor observations were identified in the area of issue screening and prioritization.

The team determined that audits and self-assessments were effective in identifying deficiencies and areas for improvement in the CAP, and in most cases, corrective actions were developed to address these issues. Operating experience usage was found to be generally acceptable and integrated into the licensee's processes for performing and managing work, and plant operations. However, the team found one example where operating experience was not adequately addressed. Personnel at the site felt free to raise safety concerns to management and use the CAP to resolve concerns.

Inspection Report# : [2008006](#) (*pdf*)

Last modified : April 07, 2009