Catawba 2
3Q/2009 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: SL-IV Sep 30, 2009
Identified By: NRC
Item Type: VIO Violation
Inaccurate fire watch records
The NRC identified a violation of 10 CFR 50.9(a) requirements when it was determined that multiple contract fire watch employees deliberately pre-signed fire watch ICM forms resulting in inaccurate fire watch records. Specifically, on seven occasions fire watch employees deliberately pre-signed the fire watch ICM forms and then another qualified employee performed the fire watch but failed to correct the inaccurate ICM form. The licensee entered the deficiency into the corrective action program for resolution.

This issue was dispositioned using traditional enforcement due to the willful aspects of the performance deficiency. Furthermore, the failure to provide complete and accurate information has the potential to impact the NRC's ability to perform its regulatory function. Although the investigation revealed that no fire watch surveillances were actually missed, this issue is considered more than minor due to the willful aspects of the performance deficiency. In accordance with the guidance in Supplement VII of the Enforcement Policy,
this issue is considered a Severity Level IV violation because it involved information that the NRC required be kept by a licensee that was incomplete or inaccurate and of more than minor safety significance. No cross-cutting aspect was identified because this performance deficiency was dispositioned using traditional enforcement. (Section 1RO5.2)

Inspection Report# : 2009007 *(pdf)*

Significance:  Mar 31, 2009
Identified By: Self-Revealing
Item Type: NCV NonCited Violation
Failure to translate design requirements into a maintenance program to ensure Component Cooling Water system operability was maintained over the design life of the plant (Section 4OA3.1)
•Green: A self-revealing non-cited violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified for the failure to translate the design basis for the Component Cooling Water (KC) heat exchanger Nuclear Service Water (RN) outlet control valve and the vendor's construction drawings into maintenance procedures to ensure the valve would remain operable over the design lifetime of the component. More specifically, the valve's actuator arm assembly was not scoped into the licensee's maintenance procedures for replacement, despite the fact that the vendor drawing identified the assembly as a consumable. As a result, an initially undetected failure of the assembly rendered the 1A train of KC inoperable for 72 hours, which included three periods of time (in excess of the unit shutdown requirements in Technical Specification (TS) Limiting Condition for Operation (LCO) 3.0.3) in which the 1B train was also unavailable due to planned maintenance.

The finding was determined to be more than minor because it is associated with the Mitigating Systems cornerstone of "Design Control." It impacts the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events and prevent undesirable consequences. The failure to adequately maintain the valve actuator arm assembly resulted in a train of safety-related equipment being rendered inoperable, which was determined to be a safety system functional failure.

Using the IMC 0609, "Significance Determination Process," Phase 1 Worksheet, the inspectors concluded that a Phase 2 evaluation was required because the finding resulted in a loss of safety function. The inspectors performed a Phase 2 analysis using Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations," of IMC 0609, "Significance Determination Process," and the Phase 2 Worksheets for Catawba Nuclear Station. The finding was determined to be of very low safety significance (Green) based upon the Phase 2 evaluation. This finding was reviewed for crosscutting aspects and none were identified. This issue has been entered into the licensee's Corrective Action Program as Problem Investigation Process (PIP) report C-09-0546. (Section 4OA3.1)

Inspection Report# : 2009002 *(pdf)*

Significance: G 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: G Dec 19, 2008
Identified By: NRC
Item Type: NCV NonCited Violation
Failure to Perform Adequate System Leakage Tests (Section 4OA2.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 4OA2.a.3).

Inspection Report# : 2008006 *(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 : December 10, 2009