

# Catawba 1

## 1Q/2011 Plant Inspection Findings

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### Initiating Events

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### Mitigating Systems

**Significance:** SL-IV Dec 31, 2010

Identified By: NRC

Item Type: VIO Violation

**Failure to notify the commission of a change in medical status**

•SL-IV. An NRC-identified NCV of 10 CFR 55.25 was identified when the licensee failed to notify the NRC of a permanent change in the medical status of a licensed operator within 30 days of learning of the change.

The failure to meet the requirements of 10 CFR 55.25 was a performance deficiency (PD). The inspectors determined that the violation should be dispositioned using the Traditional Enforcement process because the PD impacted the regulatory process. The inspectors assessed the PD using the NRC's Enforcement Policy, Section 6.4, "Licensed Reactor Operators," and determined the violation should be dispositioned as a SL-IV violation. Cross-cutting aspects are not assigned to PDs dispositioned using Traditional Enforcement. (Section 1R11)

Inspection Report# : [2010005](#) (pdf)

**Significance:**  Dec 31, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to maintain retrievable quality related records**

An NRC-identified NCV of 10 CFR 50, Appendix B, Criterion XVII, "Quality Assurance Records," was identified for the failure to maintain retrievable records of activities affecting quality. Several work orders from the fall of 2009 were irretrievably lost prior to electronic archiving, including records of calibrations performed on Unit 1 containment high-range area radiation monitors.

The inspectors determined that the failure to maintain quality records was a PD. The PD was more than minor because it was associated with the Equipment Performance attribute of the Mitigating Systems Cornerstone and negatively affected the cornerstone objective in that records of activities affecting quality (e.g. containment high-range radiation monitor calibrations) must be maintained in order to provide auditable assurance of system operability. The inspectors evaluated the finding and determined the finding was of very low safety significance (Green) because it was a qualification deficiency confirmed not to result in loss of operability or functionality. The cause of this finding was directly related to the cross-cutting aspect of self and peer-checking in the Work Practices component of the Human Performance area because the lost documents were destroyed prior to completion of electronic archiving. [H.4(a)] (Section 2RS5)

Inspection Report# : [2010005](#) (pdf)

**Significance:**  Jun 28, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

**Emergency Lighting Units Not Installed as Required by the Fire Protection Program**

Green: The inspectors identified a non-cited violation of Catawba Unit 1 Operating License Condition 2.C(5), in that the licensee failed to install emergency lighting units (ELUs) in accordance with the approved fire protection program. Specifically, ELUs were not installed in some areas in the Unit 1 turbine building for access/egress and where local

operator manual actions were required to support post-fire safe shutdown for a fire in the main control room. The licensee initiated Problem Investigation Process C-10-2815 to address the ELU issue associated with the Procedure AP/1/A15500/017.

The licensee's failure to install ELUs for local operator manual actions, as required by the Catawba fire protection program, is a performance deficiency. The finding is more than minor because it is associated with the reactor safety Mitigating Systems cornerstone attribute of protection against external factors (i.e., fire), and it affects the objective of ensuring the reliability and capability of systems that respond to initiating events. Specifically, the finding could affect the licensee's ability to perform local operator actions required to achieve and maintain post-fire safe shutdown conditions following a main control room fire. The team completed a Phase 1 screening of the finding in accordance with IMC 0609, Appendix F, Fire Protection SDP Phase 1

Qualitative Screening Approach, Step 1.3, and concluded that the finding, given its low degradation rating, was of very low safety significance (Green), because the operators had a high likelihood of completing the tasks using flashlights or battery-powered portable hand lights. Consideration was given to the fact that operators normally carry flashlights and would have access to the portable hand lights to provide the necessary lighting. The cause of this finding has a cross-cutting aspect in the Resources component of the Human Performance area, in that the licensee did not ensure that equipment such as fixed 8-hour emergency lighting units were available to support post-fire safe shutdown actions (H.2 (d)). (Section 1R05.05)

Inspection Report# : [2010006](#) (pdf)

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## Barrier Integrity

**Significance:**  Jun 30, 2010

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Enter a Steam Leak on Safety Related Main Steam Piping in the Corrective Action Program**

•Green. An NRC-identified non-cited violation (NCV) of 10 CFR Part 50, Appendix B, Criterion XVI, Corrective Action, was identified for the licensee's failure to adequately identify and correct a steam leak on a safety-related portion of the Main Steam system. The issue was entered into the licensee's corrective action program as PIP C-10-3092 to evaluate the leak for operability and establish corrective actions. An E2 work request was also written to repair the leak.

The finding was determined to be more than minor because if left uncorrected the steam leak could degrade and exceed the value used in the existing analysis for a Design Basis Steam Generator Tube Rupture and also could affect manual operation of equipment during execution of emergency and abnormal operating procedures. It was determined to be of very low safety significance (Green) using IMC 0609, Appendix H Table 4.1, Containment-Related SSCs Considered for Large Early Release Frequency Implications, due to the small size of the flow element line. This finding had a cross-cutting aspect in the corrective action program component of the area of problem identification and resolution because the steam leak was not identified completely, accurately, and in a timely manner (P.1(a)). (Section 40A2.2)

Inspection Report# : [2010003](#) (pdf)

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## Emergency Preparedness

**Significance:**  Mar 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to update bases for EAL changes**

An NRC-identified NCV of 10 CFR 50.54(q) with two examples was identified for failing to maintain emergency

plans that meet the requirements of 10 CFR 50.47(b)(4). The licensee failed to revise the Emergency Action Level (EAL) basis which potentially impacted the licensee's ability to accurately and timely classify emergency conditions. The licensee has entered this issue into their corrective action program as Problem Investigation Program report (PIP) C-11-2304.

The failure to revise the EAL basis document as required by the Catawba Emergency Plan was a performance deficiency (PD). The PD was more than minor because if left uncorrected, the potential to incorrectly classify events associated with the fission product barrier matrix or security-event classification scheme within the brief time available would lead to a more significant safety concern. This finding was associated with the risk significant planning standard (RSPS) 10 CFR 50.47(b)(4). The finding was determined to be of very low safety significance (Green) because it did not result in a loss or degradation of a RSPS function. The cause of this finding was directly related to the cross-cutting aspect of complete and accurate procedures in the Resources component of the Human Performance area because the procedure used to evaluate EAL changes, EPFAM Section 3.10, did not include a requirement to change the EAL basis document as appropriate. [H.2(c)] (Section 1EP4)  
Inspection Report# : [2011002](#) (*pdf*)

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## Occupational Radiation Safety

**Significance:**  Dec 31, 2010

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

### **Failure to barricade and conspicuously post HRAs in Unit 2 lower containment**

•Green. A self-revealing NCV of Technical Specification (TS) 5.7.1, High Radiation Area (HRA), was identified for the failure to barricade and conspicuously post HRAs inside Unit 2 lower containment.

The inspectors determined that the failure to adequately control HRAs was a PD. The PD was more than minor because it was associated with the cornerstone attribute of Program & Process (RP controls) and negatively affected the cornerstone objective in that HRAs must be posted and properly controlled to avoid unnecessary worker exposure. The finding was determined to be of very low safety significance (Green) because it was not related to As Low As Reasonably Achievable (ALARA) planning and the ability to assess dose was not compromised. The cause of this finding was directly related to the cross-cutting aspect of appropriately planning work activities in the Work Control component of the Human Performance area because the potential job site conditions (radiological hazards) associated with down-posting large areas of lower containment were not adequately identified [H.3(a)]. (Section 2RS1)  
Inspection Report# : [2010005](#) (*pdf*)

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## Public Radiation Safety

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## 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.

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## Miscellaneous

**Significance:** N/A Dec 16, 2010

Identified By: NRC

Item Type: FIN Finding

**2010 Catawba PI&R**

The inspectors 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 Program (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 inspectors 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 inspectors found one example where operating experience was not adequately addressed.

Based on interviews conducted with plant employees from various departments, the inspectors determined that personnel at the site felt free to raise safety concerns to management and use the CAP to resolve concerns.

Inspection Report# : [2010007](#) (*pdf*)

Last modified : June 07, 2011