

Catawba 1

4Q/2015 Plant Inspection Findings

Initiating Events

Significance: G Jun 19, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Failure to Analyze the Spurious Operation of Control Room Area Ventilation Valves and the Adverse Impact on Control Room Habitability

Green: The NRC identified an NCV of the Unit 1 and 2 Catawba Nuclear Station (CNS) Facility Operating License, Condition 2.C.5, for the failure to analyze the spurious operation of two motor operated valves (MOVs) in the control room area ventilation system (CRAVS) and the adverse impact on control room habitability. The licensee entered the issue in its correction action program as action request (AR) 01930126 and a continuous fire watch was already in place due to deficiencies identified during the site's ongoing NFPA 805 licensing activities.

The failure to analyze the spurious operation of two MOVs in the CRAVS and the adverse impact on control room habitability was a performance deficiency (PD). The performance deficiency was more than minor because it was associated with the protection against external events (i.e. Fire) attribute of the Initiating Events Cornerstone and it adversely affected the cornerstone objective to limit the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the finding could be reasonably viewed as a precursor to a significant event based on smoke migration into the control room that could challenge control room habitability and lead to an evacuation of the control room. This PD was the result of degraded defense-in-depth features that limit the effects of a fire to one fire area. The finding was screened as Green because the reactors would be able to reach and maintain safe shutdown utilizing the standby shutdown facility. No cross cutting aspect was assigned because the finding was not indicative of current licensee performance.

Inspection Report# : [2015012](#) (*pdf*)

Mitigating Systems

Significance: G Dec 31, 2015

Identified By: Self-Revealing

Item Type: NCV Non-Cited Violation

Failure to Adequately Implement In-service Test Procedure for the Unit 1 Standby Makeup Pump

Green. A Green self-revealing non-cited violation of Technical Specification (TS) 5.4.1, "Procedures," was identified for the licensee's failure to adequately implement their in-service test procedure for the Unit 1 standby makeup pump (SMP). Operators performed procedure steps out of sequence which resulted in the pump's discharge relief valve lifting, requiring valve replacement. The licensee entered this issue into their corrective action program as nuclear

condition report (NCR) 1954266.

The performance deficiency was considered to be more than minor because it was associated with the equipment performance attribute of the mitigating systems cornerstone and adversely affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the SMP was unavailable to perform its safety function during unplanned testing and maintenance. The internal events risk contribution was determined by the inspectors to be $3E-7$ and thus required a senior reactor analyst to review for external events and large early release frequency (LERF) to ensure the finding was below the Green/White threshold. The external events contribution was determined to be $5E-7$ and thus the total risk was $8E-7$ and core damage frequency (CDF) was determined to be the limiting metric. Consequently the finding was determined to be of very low safety significance (Green). This finding had a cross-cutting aspect of avoid complacency, as described in the human performance cross-cutting area, because the operators failed to implement appropriate error reduction tools such as formal three-way communications while performing the SMP surveillance procedure. [H.12] (Section 1R22)

Inspection Report# : [2015004](#) (pdf)

Significance:  Jun 19, 2015

Identified By: NRC

Item Type: NCV Non-Cited Violation

Fire Protection Program Change did not meet CNS License Condition Requirement 2.C.5 for Units 1 and 2.

Green: The NRC identified a non-cited Severity Level IV violation of the Unit 1 and 2 CNS Facility Operating License, Condition 2.C.5, for the failure to implement and maintain in effect all provisions of the approved fire protection program (FPP). Specifically, the licensee made a change to the approved FPP which involved the de-rating of a credited three hour fire barrier between the control room and the cable spreading room(s) to only a pressure and smoke barrier. The licensee entered the issue in its corrective action program as AR 01932211 and it was added to existing fire watches for the area.

The failure to comply with the CNS Operating License Condition 2.C.5 for a change to the approved FPP involving the de-rating of a credited three hour fire barrier between the control room and the cable spreading room(s) was a performance deficiency. The performance deficiency was more than minor because it was associated with the Mitigating Systems Cornerstone attribute of protection against external events (i.e. Fire.) The performance deficiency negatively affected the cornerstone objective in that the change to the FPP had the potential to adversely affect the availability of the control room to achieve and maintain stable plant conditions due to the increased likelihood of control room abandonment in the event of a fire in the cable spreading rooms. The licensee's failure to submit the FPP change to the NRC was determined to impede the regulatory process because the FPP change required NRC review and approval prior to implementation. The finding was screened as Green because based upon inspection of the affected barriers, the inspectors determined that the barriers would provide a 1-hour or greater fire endurance rating. This violation was determined to be a Severity Level IV violation because the associated finding was evaluated by the SDP as having very low safety significance (i.e., Green finding). No cross cutting aspect was assigned because the finding was not indicative of current licensee performance.

Inspection Report# : [2015012](#) (pdf)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

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