

Oconee1

2Q/2008 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Jun 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Required Pressure Tests Not Performed (Section 1R08.1)

The inspectors identified a Green non-cited violation (NCV) of 10 CFR 50.55a(g)(4) for the failure to perform periodic leakage testing of Class 1 portions of low pressure injection system during the third inspection interval of the Unit 1 Inservice Inspection Program as required by Section XI of the American Society of Mechanical Engineers (ASME) Code for the third 10-year Inservice Inspection interval. The licensee entered this issue into their Corrective Action Program (CAP) for resolution.

This finding is more than minor because it affected the Equipment Performance attribute of the Mitigating Systems Cornerstone objective, in that there were no additional measures taken to perform the required pressure testing (or obtain regulatory relief within the time limits of the regulation) to ensure the availability, reliability, and capability of a system that responds to initiating events to prevent undesirable consequences. This finding is of very low safety significance because it was not a design issue resulting in a loss of operability, did not represent an actual loss of a system's safety function, did not result in exceeding a Technical Specification (TS) allowed outage time, and did not affect external event mitigation. This finding has a cross-cutting aspect of Work Control in the area of Human Performance, as identified in NRC Manual Chapter 0305, Section 06.07 [H.3.(b)]. (Section 1R08.1)

Inspection Report# : [2008003](#) (*pdf*)

Significance:  Mar 31, 2008

Identified By: Self-Revealing

Item Type: FIN Finding

Inadequate Installation of SSF DG Field Flash Relay Cover (Section 1R19)

A self-revealing finding (FIN) was identified for failure to implement self-checking during Standby Shutdown Facility (SSF) diesel generator (DG) field flash relay cover reinstallation, resulting in a failure of the relay during post maintenance testing and subsequent loss of the electronic governor.

The inspectors determined that the licensee's failure to correctly install the SSF DG field flash relay cover was a performance deficiency. The finding was considered to be more than minor because it affected the mitigating systems cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events. The finding was determined to be of very low safety significance (Green), based on the Phase 1 screening criteria found in MC 0609, Appendix A, Attachment 1, in that the additional 15.6 hours of SSF unavailability resulting from the deficiency was less than the TS allowed outage time. Additionally, the Oconee Phase 2 pre-solved table for exposure times of less than three days yields a Green result for the SSF DG. This finding has a cross-cutting aspect of human error prevention techniques [H.4.a], as described in the work practices component of the human performance cross-cutting area. (Section 1R19)

Inspection Report# : [2008002](#) (*pdf*)

Significance:  Mar 14, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Design Control in the Translation of Design Basis Information into Procedure for Draining and Nitrogen Purging the RCS (Section 1R21.2.2)

The inspectors identified a finding of very low safety significance involving a non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion III, Design Control. Specifically, the licensee failed to verify the applicability of design basis information, related to critical vortex height to assure adequate low pressure injection (LPI) pump suction conditions, before translating that information into the shutdown operations procedure for draining the reactor coolant system.

This finding is greater than minor because if left uncorrected, the finding would become a more significant safety concern. In particular, the station routinely uses older calculations, test information, and analyses to establish operator action or alarm set points, support operability determinations, or change the design of the plant. If the applicability of that information is not verified for the system configuration and conditions under review, the quality of that engineering product could be compromised, resulting in a significant safety concern. The finding was determined to be of very low significance, via Manual Chapter (MC) 0609, Appendix G, Attachment 1, Shutdown Operations Significance Determination Process (SDP), Phase 1 because it did not significantly degrade the station capability to recover decay heat removal. The cause of the finding is related to the cross-cutting area of problem identification and resolution, specifically with respect to corrective action, because the licensee did not thoroughly evaluate the previous similar finding in the 2006 Oconee Component Design Bases Inspection (CDBI) such that the resolution adequately addressed causes and extent of condition (MC 0305, aspect P.1.c).

[Section 1R21.2.2]

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

G

Significance: Mar 14, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Verification of Local Manual Operating Capability for EFW Flow Control Valves (Section 1R21.2.6)

The inspectors identified a finding of very low safety significance involving a NCV of 10 CFR 50, Appendix B, Criterion III, Design Control. Specifically, the licensee failed to establish measures to verify the design capability for local manual handwheel operation of the emergency feedwater (EFW) flow control air operated valves (AOVs). Local manual operation was an alternate method of controlling EFW flow specified in station emergency procedures.

The finding is more than minor because it is associated with the design control attribute of the Mitigating System Cornerstone and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The finding was of very low safety significance since it did not result in a loss of system safety function.

Specifically, the licensee performed a technical evaluation during the inspection which demonstrated that a plant operator would be able to successfully cycle the valves using the manual handwheel. [Section 1R21.2.6]

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

G

Significance: Sep 30, 2007

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure To Promptly Identify A Condition Adverse To Quality

A self-revealing non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion XVI, Corrective Action, was identified for failure to take timely corrective action to repair the Standby Shutdown Facility (SSF) air conditioning compressor #2. As a result, the SSF was unnecessarily inoperable for over one week. The inspectors determined that

the licensee's failure to promptly repair the SSF air conditioning compressor #2 was a performance deficiency. This finding was more than minor because it affected the availability and reliability attribute of the Mitigating Systems Cornerstone, in that it reduced the reliability of the SSF air conditioning system, which was required to maintain building temperatures for both habitability and electrical equipment operability. The licensee determined that the SSF remained available as long as one of the two compressors was functional. However, in the event of the SSF being required, reduced capacity and reliability of the air conditioning system would have reduced the likelihood of successful operation of the SSF. The SSF was inoperable from September 4 - 7, 2007, while inadequate repairs were conducted, and again from September 7 - 13, 2007, while no action was taken. The SSF was available for most of this period because compressor #1 was functional. This finding was evaluated using the SDP and was determined to be of very low safety significance because there was no loss of safety function. The inspectors determined this finding was related to the cross cutting aspect of appropriate corrective action being taken in a timely manner [P.1.d], as described in the corrective action component of the problem identification and resolution cross cutting area (Section 1R19).

Inspection Report# : [2007004](#) (pdf)

Significance:  Jul 27, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Corrective Action Resulting in the Inoperability of Unit 1 Reactor Coolant Makeup Pump

A non-cited violation of 10 CFR 50, Appendix B, Criterion XVI was identified by the NRC for failure to take adequate corrective action to prevent unexpected inoperability of the Unit 1 standby shutdown facility (SSF) reactor coolant makeup (RCMU) system during Unit 2 core offload.

The failure to promptly correct a condition adverse to quality involving proper control of Units 1 and 2 reactor core offload activities that ensure the SSF RCMU system remains operable during core offload was a performance deficiency. This finding is more than minor because it is associated with the human performance attribute of the mitigating systems cornerstone and affects the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. This finding is of very low safety significance because it did not result in a loss of operability due to a design or qualification deficiency, did not represent an actual loss of safety function, and was not potentially risk significant due to possible external events. This finding directly involved the cross-cutting area of Problem Identification and Resolution under the "timely corrective action" aspect of the "Corrective Action Program" component, in that the licensee failed to take corrective actions for an identified condition that could and did impact the operability of the opposite unit SSF RCMU system during reactor core offload [P.1.(d)]. (Section 4OA2 a.(2).1)

Inspection Report# : [2007008](#) (pdf)

Barrier Integrity

Significance:  Sep 30, 2007

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure To Implement LTOP Controls

A self-revealing NCV of Technical Specification (TS) 3.4.12, Low Temperature Overpressure Protection (LTOP), was identified for failure to take the appropriate actions when administrative controls specified by TS 3.4.12 were required and not available. The inspectors determined that the licensee's failure to implement administrative controls to provide low-temperature, overpressure protection for the Reactor Coolant System (RCS) was a performance deficiency. In that not all RCS overpressure protection requirements were met, the finding was considered to be more than minor because it affected the barrier integrity cornerstone objective to provide reasonable assurance that the physical design barriers protect the public from radio-nuclide releases caused by accidents or events. In the event of an overpressure condition, a required control room alarm would not have functioned, which would have affected the operators' ability to recognize the event and take action. The likelihood of an overpressure condition and subsequent loss of inventory caused by an RCS overfill, actuation of pressurizer heaters, or loss of decay heat removal, was evaluated by a Phase III SDP analysis. Due to the low probability of the initiating events, the likelihood of appropriate operator action, and the availability of automatic overpressure protection, the finding was determined to be of very

low safety significance. The inspectors determined the cause of this finding was related to the cross cutting area of Human Performance [H.2.a], within the specific component of Resources, and its aspect of minimizing long-standing equipment issues (Section 4OA3).

Inspection Report# : [2007004](#) (*pdf*)

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 Jul 27, 2007

Identified By: NRC

Item Type: FIN Finding

PI&R Summary

The inspectors concluded that, in general, problems were properly identified, evaluated, and corrected. The licensee was effective at identifying problems and entering them into the corrective action program (CAP) for resolution; however, several minor plant material condition deficiencies were identified during plant system walkdowns that had gone undetected by licensee personnel. The licensee maintained a low threshold for identifying problems as evidenced by the continued large number of Problem Investigation Process reports (PIP) entered annually into the CAP.

Generally, the licensee properly prioritized issues and examined issues; although several minor problems were noted where lower significance issues were mis-categorized or the investigations lacked thoroughness. Formal root cause evaluations for significant problems were generally thorough and detailed. Corrective actions specified for problems were generally adequate; although, several minor problems were noted where corrective actions were not complete or not comprehensive. Audits and self-assessments were effective in identifying deficiencies in the CAP. Personnel at the site felt free to raise safety concerns to management and to resolve issues through the CAP.

Inspection Report# : [2007008](#) (*pdf*)

Last modified : August 29, 2008