

Oconee 2

Initiating Events

Mitigating Systems



Significance: Dec 31, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Identify and Correct the Turbine Driven Emergency Feedwater Lube Oil Sump Water Intrusion adverse Condition

The licensee failed to correct a water intrusion problem following identification in 1998, 1999, and 2000 that water was entering the Units 1 and 2 turbine driven emergency feedwater (EFW) pump lube oil sumps. A non-cited violation of 10 CFR 50, Appendix B, Criterion XVI, requirements was identified for failure to identify the source of the water intrusion, failure to identify the rate of water intrusion, and failure to correct the condition adverse to quality. Water in the turbine driven EFW pump lube oil sumps had a credible affect on the operability, availability, reliability and function of the TDEFW mitigation system and was therefore, more than minor. This finding was determined to be of very low safety significance due to the multiple trains of equipment capable of performing secondary side heat removal not affected by the performance deficiency. This included two trains of motor driven EFW pumps per unit, potential cross connect of EFW between units, and the standby shutdown facility. (Section 1R12.2)

Inspection Report# : [2002005\(pdf\)](#)



Significance: Dec 31, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to Perform Surveillance within the Required Periodicity

An inadequacy in the licensee's work planning program resulted in a missed Technical Specification (TS) required surveillance test involving the Keowee Hydro Station overhead power path. A non-cited violation of TS surveillance requirements (SR) 3.3.19.1, Channel Functional Test for Degraded Grid Voltage Protection Actuation Logic Channels, SR 3.8.1.15, 230kV Circuit Breaker Actuation on Switchyard Isolation, and TS 5.5.18, Keowee Hydro Unit Commercial Power Generation Testing Program, was identified when it was discovered that PT/0/A/610/022, Keowee Over Frequency Protection Functional Test, was not performed within the required TS SR frequency. This violation is more than minor because it affected the mitigating system cornerstone objective of equipment reliability, in that, a complex series of tests for the emergency power supply were not performed within the specified frequency. This self-revealing finding was determined to be of very low safety significance based on the fact that there was no unavailability of the Keowee units resulting from the missed surveillances. (Section 1R22.2)

Inspection Report# : [2002005\(pdf\)](#)



Significance: Sep 28, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Unauthorized Design Changes to the East Penetration Room Blowout Panels

The inspectors identified a non-cited violation for the unauthorized design changes to the east penetration room blowout panels which changed the blowout panel design capability to remove water from the auxiliary building following a postulated main feedwater line rupture. This issue was considered to be of very low safety significance because at least one train of emergency feedwater would have been available during all of the accident sequences of concern. (Section 4OA5)

Inspection Report# : [2002004\(pdf\)](#)



Significance: Jun 29, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Complete a Timely Operability Evaluation for Failure of Non-Seismic Piping in the Control Rooms

A non-cited violation was identified for a failure to promptly identify conditions adverse to quality by completing the operability evaluation following identification that non-seismic piping was located in the ceiling of the shared control room for Units 1 and 2. The licensee was

developing a modification package to remove the non-seismic piping from the control room. This issue was considered to be of very low safety significance because of the low probability of piping failure and the ability of the operators to evacuate the control room and successfully shutdown Units 1 and 2 from the remote shutdown stations (Section 4OA5.1).

Inspection Report# : [2002002\(pdf\)](#)



Significance: May 03, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Testing of Pressurizer Code Safety Valves

Inadequate Testing of Pressurizer Code Safety Valves (Section 02.03B.(8))

Inspection Report# : [2002007\(pdf\)](#)



Significance: Mar 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Improper Post-Maintenance Testing of the SSF Diesel Output Breaker

A non-cited violation was identified for an improper post-maintenance test of the refurbished standby shutdown facility diesel generator output breaker. The breaker was returned to service after maintenance without performing a full cycle operation of the breaker while connected to the bus. This issue was considered to be of very low safety significance because the breaker operated properly when later tested in a configuration that demonstrated its ability to function properly (Section 1R19).

Inspection Report# : [2001005\(pdf\)](#)



Significance: Mar 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Untimely Corrective Action for Potential Flooding Problem From Fire Suppression Systems in the Cable Spreading Rooms

A non-cited violation was identified for inadequate corrective action related to a the potential flooding problem that would result from actuation of the cable spreading room fire suppression system. Resolution to this licensee identified problem, which involved replacement of the open head sprinklers with a closed head design, was not completed in a prompt manner. This issue was considered to be of very low safety significance, because no fires occurred in the cable spreading rooms, therefore, the lack of adequate corrective action had no adverse affect on the plant. Additionally, sufficient margin existed in the plant response capability for a reactor coolant pump seal failure/loss of coolant accident that could occur from a fire and resulting suppression actuation in the cable spreading rooms (Section 4OA5.4).

Inspection Report# : [2001005\(pdf\)](#)

Barrier Integrity



Significance: Dec 31, 2002

Identified By: Self Disclosing

Item Type: FIN Finding

Failure to Identify SG Tube Defect

A self-revealing finding was identified for the failure of a steam generator tube to successfully meet the "3 times normal operating delta-p pressure" (3 DP) test criterion (4250 psid) during the in-situ pressure testing process. A performance deficiency was identified, in that the in-service inspection procedures did not have enough guidance to be able to identify a defect in this tube the previous outage; thereby, allowing the unit to operate last cycle with one tube that may not have met the 3 DP limit the entire cycle. The finding was of very low safety significance because, the tube did not fail the performance criterion of meeting the "accident leakage limit." Specifically, having ruptured at a test pressure of 3987, the tube exceeded the normal operating delta pressure (1490 psid), main steam line break/faulted condition (2898 psid), and the main feedwater anticipated transient without scram analysis pressure (~1500 psid). In addition, the unit exhibited no signs of leakage during the last operating cycle from this tube. (Section 1R08.1)

Inspection Report# : [2002005\(pdf\)](#)



Significance: Jun 29, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Procedures Resulting in Conducting Penetrant Examination on the Wrong Weld

A non-cited violation was identified for a failure to assure that a Penetrant Examination (PT) was performed on the correct weld or component in accordance with requirements of Technical Specification (TS) 5.4.1, which requires the use of written procedures; specifically in this case, Procedure NDE-35 and Drawing No. ISI OCN 1-009, Reactor Coolant Pump 1B1 Suction Piping. This finding was of very low safety significance because, although the inspectors identified that the licensee examiners performed the PT on the wrong weld, the PT was subsequently performed on the correct weld and found to be acceptable (Section 1R08).

Inspection Report# : [2002002\(pdf\)](#)

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Miscellaneous

Significance: SL-IV Jul 26, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Update the FSAR Regarding Portions of the HPSW Piping in the Auxiliary Building

Contrary to 10 CFR 50.71(e), the licensee failed to update the FSAR regarding portions of the HPSW piping in the Auxiliary Building. [NOTE: Per the ROP, this type of issue is not evaluated through the SDP; but rather, it is to be evaluated in accordance with the guidance in Section IV.A.3 of the NRC Enforcement Policy. Accordingly, the NRC determined that this violation should be characterized at Severity Level IV due to its low safety significance and because the particular regulatory process was not significantly impeded. Additionally, it was also determined that this violation should be non-cited in accordance with Section VI.A.1 of the NRC's Enforcement Policy.]

Inspection Report# : [2002011\(pdf\)](#)

Significance: N/A Mar 22, 2002

Identified By: NRC

Item Type: FIN Finding

Identificaton and Resolution of Problems - Baseline Inspection Results

The inspectors determined that, in general, the licensee's corrective action program was effective at identifying, evaluating, and correcting problems. The threshold for entering problems into the corrective action program was sufficiently low. Other than minor discrepancies, no problems were identified concerning the documentation of corrective action program issues. The inspectors identified a few examples where corrective actions were unclear or incomplete or were improperly closed out to other processes. Licensee reviews of operating experience information were comprehensive. Recent root cause and apparent cause evaluations were more clear, concise, and of a higher quality than those reviewed from early 2001. The results of the last comprehensive corrective action program audits conducted by the licensee and other related audits were properly entered into the corrective action program. The inspectors concluded that, although the significance of the problems resulting from human performance errors has decreased and the trend had improved in some departments, only moderate improvements have occurred for the entire site. Previous non-compliance issues documented as non-cited violations were properly tracked and resolved via the corrective action program. Based on discussions with plant personnel and the apparent low threshold for items entered in the corrective action program database, the inspectors concluded that personnel at the site felt free to raise safety concerns to their management.

Inspection Report# : [2002006\(pdf\)](#)

Last modified : March 25, 2003