

Sequoyah 2

1Q/2007 Plant Inspection Findings

Initiating Events

Significance:  Mar 31, 2007

Identified By: NRC

Item Type: FIN Finding

Failure to Properly Follow Procedure When Modifying Feedwater Regulating Valves

A Green self-revealing finding was identified for failure to properly follow installation procedures when implementing a modification to the Unit 2 feedwater regulating valves. Inadequate clearance between the air tubing and fixed structures resulted in thermal movement detaching the air tubing from one valve which caused a reactor trip. The licensee entered the problem into their corrective action program, repaired the tubing, and revised conduct of modification procedures to strengthen the process.

The finding was more than minor because it was associated with the design control attribute of the Initiating Events Cornerstone and resulted in an upset in plant stability by causing a reactor trip. While the finding resulted in an actual trip, the finding was determined to be of very low safety significance because it did not contribute to the likelihood of a loss of coolant accident, contribute to a loss of mitigation equipment functions, or increase the likelihood of a fire or flood. The cause of the finding was associated with the human performance and error prevention aspect of the human performance cross-cutting area because the involved craft, craft supervisor, and field engineer failed to verify and validate information by referring to installation procedures for the appropriate clearance.

Inspection Report# : [2007002](#) (*pdf*)

Significance:  Jun 30, 2006

Identified By: Self-Revealing

Item Type: FIN Finding

Loose Isolated Phase Bus Duct Gasket Actuated Main Generator Neutral Overvoltage Relay Causing Reactor Trip

A self-revealing finding was identified for failure to implement effective preventive maintenance procedures to identify and correct a loose isolated phase bus duct gasket before its attachment degraded to the point of allowing the gasket to contact the bus duct conductor and cause a trip. The licensee entered the problem into their corrective action program and corrected the procedures.

This finding was more than minor because it was associated with the procedure quality attribute of the Initiating Events Cornerstone and resulted in an upset in plant stability by causing a reactor trip. While the finding resulted in an actual trip, the inspectors determined that it did not contribute to the likelihood of a primary or secondary system loss of coolant accident initiator, did not contribute to a loss of mitigation equipment functions, and did not increase the likelihood of a fire or internal/external flood. Thus, the finding was considered to be of very low safety significance.

Inspection Report# : [2006003](#) (*pdf*)

Mitigating Systems

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Certify Qualifications and Status of Licensed Operators Were Current and Valid

The inspectors identified a Green, non-cited violation (NCV) of 10 CFR 55.53, "Conditions of Licenses" for failure to certify the qualifications and status of licensed operators were current and valid prior to their resumption of license duties. Specific aspects of the requalification program that were not valid included plant tours that were not completed with

another licensed operator and not completing all shift functions in positions to which the individuals will be assigned. The licensee entered the finding into the corrective action program as PER No.112004.

The finding is greater than minor because it is associated with the human performance attribute of the Mitigating Systems Cornerstone that affects the cornerstone objective of ensuring the availability, reliability, and capability of operators to respond to initiating events to prevent undesirable consequences that could pose a potential risk to operations. The finding was evaluated using the Operator Requalification Human Performance Significance Determination Process. Under this SDP, record deficiencies can be either minor or of very low safety significance (Green). This finding was determined to be Green because it was related to the program for maintaining active licenses and more than 20% of the records reviewed had deficiencies.

Inspection Report# : [2006005](#) (*pdf*)

G

Significance: Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate 20-foot Separation Zones for Fire Protection in Unit 1 480V Board Room 1B

The inspectors identified a Green non-cited violation of Unit 1 License Condition 16, Fire Protection, and Unit 2 License Condition 13, Fire Protection, for failure to protect certain equipment that was required for safe shutdown from fire damage. The licensee's Safe Shutdown Analysis for a fire in the Unit 1 480V Board Room 1B (Fire Area FAA-095) relied on the fire not damaging at least two of the three Unit 1 battery chargers located in the room plus one of the two Unit 1 inverters and one of the two Unit 2 inverters located in the room. However, the battery chargers and inverters were not separated or protected from fire damage as required by the License Conditions and Fire Protection Program. The licensee entered the issue into the corrective action program.

This finding is of greater than minor safety significance because it affected the objectives of the Mitigating Systems Cornerstone of Reactor Safety. It affected the availability and reliability of systems that mitigate initiating events to prevent undesirable consequences and also involved a lack of required fire barriers or separation for equipment relied upon for safe shutdown following a fire. The finding is of very low safety significance because of the low frequency of fires that could damage two of the three Unit 1 battery chargers, both Unit 1 inverters, or both Unit 2 inverters that were located in the Unit 1 480V Board Room 1B concurrent with a failure of the sprinkler system.

Inspection Report# : [2006005](#) (*pdf*)

G

Significance: Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Unprotected Power Cables to Vital Inverters in the Unit 1 480V Board Room 1B

The inspectors identified a Green non-cited violation of Unit 1 License Condition 16, Fire Protection, and Unit 2 License Condition 13, Fire Protection, for failure to protect certain electrical cables for safe shutdown equipment from fire damage. The power cables to Unit 1 vital inverter 1-II and Unit 2 vital inverter 2-II were routed through the north end of the Unit 1 480V Board Room 1B (Fire Area FAA-095) without protection or separation from fire damage as required by the License Conditions and Fire Protection Program. The licensee entered the issue into the corrective action program and revised the fire procedure to add local manual operator actions to mitigate the effects of fire damage to the cables of concern.

This finding is of greater than minor safety significance because it affected the objectives of the Mitigating Systems Cornerstone of Reactor Safety. It affected the availability and reliability of systems that mitigate initiating events to prevent undesirable consequences and also involved a lack of required fire barriers or separation for equipment relied upon for safe shutdown following a fire. The finding is of very low safety significance because of the low frequency of fires that could damage the cables of concern and also damage the redundant safe shutdown equipment.

Inspection Report# : [2006005](#) (*pdf*)

G

Significance: Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Maintain Lighting for Time-Critical Local Manual Actions for Post-Fire Safe Shutdown

The inspectors identified a Green non-cited violation of Unit 2 License Condition 13, Fire Protection, for failure to

maintain adequate lighting in the Unit 2 main steam valve vault room to support time-critical operator actions required for post-fire safe shutdown. The licensee entered the issue into the corrective action program and replaced the light bulbs to restore the room lighting.

This finding is of greater than minor safety significance because it affected the objectives of the Mitigating Systems Cornerstone of Reactor Safety. It affected the availability and reliability of systems that mitigate initiating events to prevent undesirable consequences. The finding is of very low safety significance because of the low frequency of fires that could lead to core damage if the operator actions in the Unit 2 main steam valve vault room were not performed in a timely manner.

Inspection Report# : [2006005](#) (*pdf*)

Significance:  Jun 30, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Secure Crane Wall Doors in Mode 3

The inspectors identified a non-cited violation of Technical Specification 6.8.1 for failure to follow procedure when entering containment at the beginning of the Unit 2 Cycle 13 outage. The doors between the raceway and the lower part of the polar crane wall were left unsecured while in Mode 3. This would result in a lower containment sump level than was assumed in design basis calculations. The licensee immediately secured the doors and changed the procedure to emphasize the need to close and secure the doors.

This finding was more than minor because, although the licensee demonstrated that sufficient water was available for the containment sump to remain operable, the functional evaluation used assumptions substantially different from those in the design basis calculations with a significant reduction in margin in the calculation output. This finding was of very low safety significance because the degraded condition did not result in a loss of safety function of one or more trains and was not potentially risk-significant due to possible external events.

Inspection Report# : [2006003](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

[Physical Protection](#) information not publicly available.

Miscellaneous

