

## Fort Calhoun 2Q/2003 Plant Inspection Findings

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### Initiating Events

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### Mitigating Systems

**Significance:**  Mar 22, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Inadequate Procedures for Frazil Ice**

Green. The licensee did not have documented instructions that addressed the acts-of-nature condition of frazil ice that can occur during the winter months. Frazil ice buildup on intake structure components may cause a degradation of the ultimate heat sink. This is a noncited violation of Technical Specification 5.8.1.a and was determined to be a finding of very low safety significance because no actual degradation of the ultimate heat sink occurred.

Inspection Report# : [2003003\(pdf\)](#)

**Significance:**  Jan 17, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to Assure that at Least One Train of Charging Pumps Was Free of Fire Damage**

A fire in either of two different fire areas could result in the loss of normal charging, which is credited in the licensee's post-fire safe shutdown analysis for maintaining reactor coolant system inventory. The team identified a noncited violation of 10 CFR Part 50, Appendix R, Section III.G.2. This finding was of greater than minor significance because it impacted the mitigating systems cornerstone. This resulted from the finding's potential to affect the licensee's capability to maintain reactor coolant system inventory control in response to a fire in either Fire Areas 6 or 36A. This finding was determined to be of very low safety significance, due to the fact that operators would have sufficient time to perform manual actions to restore at least one train of the charging system prior to reactor coolant makeup being required. Because of the low safety significance and the licensee's actions to initiate compensatory measures and place the issue into their corrective action program, this violation is being treated as a noncited violation in accordance with Section VI.A of the Enforcement Policy (50-285/0302-01)

Inspection Report# : [2003002\(pdf\)](#)

**Significance:**  Sep 28, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

#### **INADEQUATE PROCEDURE FOR CONTROL ROOM VENTILATION OPERATIONS**

The licensee did not have adequate documented instructions for operation of the control room air conditioner. As a result, on two separate occasions operators attempted to start a train of control room air conditioning and the unit started under full load conditions and tripped. This was a noncited violation of 10 CFR Part 50, Appendix B, Criterion

V, "Instructions, Procedures, and Drawings" and was determined to be a finding of very low safety significance because the control room equipment remained operable.

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

**Significance:**  Sep 28, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**INADEQUATE PROCEDURE FOR SAFETY-RELATED 4kV BUS GROUND DETECTION OPERATIONS**

The licensee did not have documented instructions for ensuring the safety-related 4 kV Bus ground detection circuitry was in service. As a result, the licensee transferred power supplies for the bus and the indication of a ground cleared when the actual ground condition was still present. The licensee ultimately identified the problem and removed the ground from the bus. This was a noncited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings" and was determined to be a finding of very low safety significance because the bus remained operable and capable of performing its design function.

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

**Significance:**  Mar 10, 2000

Identified By: NRC

Item Type: AV Apparent Violation

**APPARENT VIOLATION OF 10 CFR PART 50, APPENDIX R, SECTION III.G.1.a FOR FAILURE TO ENSURE THAT ONE TRAIN OF SYSTEMS IN FIRE AREAS 34B AND 36B REQUIRED FOR SAFE SHUTDOWN IS FREE OF FIRE DAMAGE.**

The team identified a condition where the licensee failed to ensure that one train of redundant systems, necessary for achieving and maintaining hot shutdown, located within the same fire area would remain free of fire damage. In particular, the team identified that a fire in Fire Area 34B (upper electrical penetration room) or Fire Area 36B (west switchgear room) could cause the spurious opening of the reactor coolant system head vent valves due to hot shorts. These spurious actuations could open a vent path from the reactor coolant system that exceeds the capacity to makeup to the reactor coolant system, as analyzed in the licensee's safe shutdown analysis. The licensee subsequently identified alternative means of makeup that would mitigate the effects of the event. The licensee disagrees that postulating multiple fire-induced circuit failures is required by NRC regulations or its operating license. This is an apparent violation of 10 CFR Part 50, Appendix R, Section III.G.1.a. This issue was evaluated using the significance determination process, and was determined to be within the licensee response band.

Inspection Report# : [2000001\(pdf\)](#)

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## Barrier Integrity

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## Emergency Preparedness

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## Occupational Radiation Safety

**Significance:** SL-IV Mar 27, 2003

Identified By: NRC

Item Type: VIO Violation

**Failure to follow radiation protection procedural and RWP requirements**

Severity Level IV. Several examples of a violation of Technical Specification 5.8.1.a for the failure to follow radiation protection procedure requirements were identified. Fourteen different security officers deliberately violated applicable radiation protection procedural requirements on 62 occasions by not signing in on the required radiation work permit (RWP) 02-004 and not obtaining an electronic alarming dosimeter when assigned to the Alpha 1 security post during the period of April 27 through October 8, 2002. This violation is being treated as a Severity Level IV violation consistent with the NRC Enforcement Policy. This violation is in the licensee's corrective action program as CR-200303574.

Inspection Report# : [2003009\(pdf\)](#)

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## Public Radiation Safety

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## Physical Protection

**Significance:** N/A Nov 15, 2002

Identified By: NRC

Item Type: FIN Finding

**Verification of Compliance With Interim Compensatory Measures Order**

On February 25, 2002, NRC imposed by Order Interim Compensatory Measures that addressed waterborne threats, vehicle bombs, insider threats, land-based assaults, and mitigative measures. The inspectors determined that, overall, the licensee appropriately: evaluated the impact of the interim design basis explosive on the site; incorporated the Interim Compensatory Measures into the site protective strategy and access authorization program; developed and implemented relevant procedures; evaluated the impact of losses of large areas of the site and vulnerabilities of their computer systems; ensured that the emergency plan could be implemented; and established and effectively coordinated interface agreements with offsite organizations.

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

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## Miscellaneous

**Significance:** N/A May 08, 2003

Identified By: NRC

Item Type: FIN Finding

**Biennial Evaluation of Identification and Resolution of Problems Program**

The team concluded that the licensee was effective at identifying problems and putting them into the corrective action program. The licensee's effectiveness at problem identification was evidenced by the relatively few deficiencies identified by external organizations (including the NRC) that had not been previously identified by the licensee, during the review period. However, the team identified vulnerabilities in the licensee's methods for processing 10 CFR Part 21 reports and cross-referencing work orders to condition reports. The licensee effectively used risk in prioritizing the extent to which individual problems would be evaluated and in establishing schedules for implementing corrective actions. Corrective actions, when specified, were generally implemented in a timely manner. Licensee audits and

assessments were found to be effective. On the basis of interviews conducted during this inspection, workers at the site felt free to input safety findings into the problem identification and resolution program.

Inspection Report# : [2003008\(pdf\)](#)

Last modified : September 04, 2003