

Fort Calhoun 1Q/2003 Plant Inspection Findings

Initiating Events

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:  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:  May 29, 2002

Identified By: NRC

Item Type: FIN Finding

Nonconservative controls of containment cleanliness

The licensee exercised a nonconservative decision making process when controlling foreign materials in containment and eliminating the potential for blocking the Emergency Core Cooling System Suction Strainers. As a result, approximately 20 55-gallon drums with paper taped onto the lid on the same elevation as the sumps and several hundred other pieces of tape remained in containment during initial plant heatup following a refueling outage. This finding was of very low safety significance because the containment emergency sumps remained available.

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

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\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Significance:  May 17, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

FAILURE TO OBTAIN A RADIOLOGICAL BRIEFING PRIOR TO ENTERING AN UNSURVEYED AREA

The inspector identified a violation of very low safety significance because workers failed to obtain a radiological briefing prior to working in an unsurveyed area. On May 15, 2002, the inspector observed two workers installing scaffolding on top of Safety Injection Tank 6B, an area 10 feet above the designated work location that had not been surveyed. The workers had not contacted radiation protection personnel prior to entering the area. Technical Specification 5.8.1 requires procedures to be established and implemented as referenced in Regulatory Guide 1.33, Appendix A. Procedure SO-G-101 "Radiation Worker Practices," Step 5.6.1, states, areas in the radiologically controlled area that are greater than 8 feet off the floor are not routinely surveyed and requires workers to contact radiation protection prior to entering these areas to obtain a briefing on radiological conditions. The failure to obtain a radiological briefing prior to working in an unsurveyed area was a performance deficiency. The finding was more than minor because it was associated with one of the Occupational Radiation Safety cornerstone attributes (training proficiency) and affected the associated cornerstone objective. The finding involved an occurrence of workers unplanned, unintended dose or potential of such a dose that could have been significantly greater, as a result of a single minor, reasonable alteration of the circumstances. Using the Occupational Radiation Safety Significance Determination Process, the inspector determined the finding had very low safety significance because no overexposure resulted or no substantial potential for an overexposure occurred. The licensee documented this violation in the corrective action program as Condition Report 2002-01512. The finding is considered a noncited violation consistent with Section VI.A.1 of the NRC Enforcement Policy.

Inspection Report# : [2002008\(pdf\)](#)

Public Radiation Safety



Significance: May 17, 2002

Identified By: NRC

Item Type: VIO Violation

FAILURE TO PREVENT RADIATION LEVELS FROM EXCEEDING REGULATORY REQUIREMENTS ON THE EXTERNAL SURFACE OF A SHIPMENT PACKAGE

A violation of low-to-moderate risk significance was identified for failure to comply with Department of Transportation (DOT) regulations. On April 24, 2002, the licensee shipped dry active waste in a sea-land container to a radioactive waste processing vendor. When the sea-land container arrived, dose rates on the exterior surface exceeded the 200 millirem per hour limit as specified in the DOT regulations. The vendor found that dose rates were approximately 600 millirem per hour. 10 CFR 71.5 requires each licensee who transports licensed materials offsite or on public highways to comply with the requirements in 49 CFR Parts 170 through 189. 49 CFR 173.441(a) requires that each package of Class 7 (radioactive) material offered for transportation be designed and prepared for shipment so that, under conditions normally incident to transportation, the radiation level does not exceed 200 millirem per hour at any point on the external surface of the package. The failure to prevent radiation levels from exceeding 200 millirem per hour at any point on the external surface of a sea-land container was a performance deficiency. The finding was more than minor because it was associated with one of the Public Radiation Safety cornerstone attributes (DOT package radiation limits) and affected the associated cornerstone objective. Using the Public Radiation Safety Significance Determination Process, the inspector determined the violation had low-to-moderate risk significance because the radiation levels on the external surface of the sea-land container exceeded the DOT radiation limit; however, the radiation levels did not exceed five times the limit. The licensee documented this event in the corrective action program as Condition Report 2002-01009.

Inspection Report# : [2002008\(pdf\)](#)

Inspection Report# : [2002010\(pdf\)](#)

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\(pdf\)](#)

Miscellaneous

Last modified : May 30, 2003