Fort Calhoun
3Q/2003 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: G Sep 20, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate testing of DG
A noncited violation of Technical Specification Surveillance Requirement 3.7(1)a.i was identified for the failure to adequately test the diesel generators. The licensee used a practice of alternating between the primary and secondary air start systems when performing the 184-day full speed starts of the diesel generators. In a normal alignment, only the primary air start system could start the diesel generator within the required 10-second Technical Specification requirement; the secondary air start system could not. When the diesel generators were tested using the secondary air start system, they were tested in an altered configuration with time delays disabled to ensure the diesel generators started within the required time and then were placed back into a normal untested configuration.

This finding was more than minor since it is associated with the equipment performance attribute of the mitigating systems cornerstone. The finding was characterized under the Significance Determination Process as having very low safety significance because there was no actual loss of function or operability of any safety-related equipment.
Inspection Report# : 2003005*(pdf)*

Significance: G Sep 20, 2003
Identified By: NRC
Item Type: NCV NonCited Violation
Inadequate DG surveillance test acceptance criteria
A noncited violation of 10 CFR Part 50, Appendix B, Criterion V, was identified as a result of the diesel generator test procedure not containing appropriate quantitative or qualitative acceptance criteria to determine operability of diesel generators when conducting the full speed starts of the diesel generators. The licensee's acceptance criteria did not account for a 2 hertz speed droop of the fully loaded diesel generator when selecting the minimum acceptable frequency. In addition, the procedure did not recognize that the steady state unloaded frequency of greater than 63 hertz would require decreasing the maximum ambient operability temperature of diesel generators.

This finding was considered more than minor because it was associated with the procedure quality attribute of the mitigating systems cornerstone in that the procedure could not ensure the capability of the diesel generator to support emergency core cooling system components in response to an initiating event. The finding was characterized under the Significance Determination Process as having very low safety significance because the as-found diesel generator frequency and voltage were adequate to support the emergency core cooling system loads and no actual loss of safety function occurred.
Inspection Report# : 2003005*(pdf)*

Significance: G 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: G 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: G 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: 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)*

Public Radiation Safety

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

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 : December 01, 2003