

Crystal River 3 2Q/2005 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance: **G** Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to establish appropriate quantitative acceptance criteria to assure Crystal River 3 Technical Specification 3.8.1 operability of the offsite power supply

The inspectors identified a non-cited violation when the licensee failed to establish appropriate quantitative acceptance criteria to assure offsite power operability for compliance with Crystal River 3 Technical Specification 3.8.1.

This finding is more than minor because if left uncorrected, a more significant safety concern could occur if a low voltage condition of the offsite power supply was not immediately recognized and corrected. The finding was of very low safety significance according to the SDP Phase 1 worksheet since none of the functions identified in phase 1 were degraded as a result of this deficiency. (Section 1R22)

Inspection Report# : [2005003\(pdf\)](#)

Significance: **G** Jun 30, 2005

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to properly evaluate and correct emergency diesel generator loss of fuel oil header prime condition caused by leakage past the fuel header check valves

A self revealing, non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI was identified for failure to properly evaluate and correct a long standing emergency diesel generator (EGDG) loss of fuel oil header prime condition caused by leakage past the fuel header check valves. As a result, two separate slow fast start failures occurred in the 'A' EGDG during fast start surveillance tests, conducted on April 23, 2004 (NCR 125149) and March 23, 2005 (NCR 154522). A third related failure was identified in July 5, 2001, when the 'B' EGDG failed to start during a monthly surveillance test (NCR 44603).

This finding is more than minor because it directly affected the mitigating system cornerstone objective of ensuring the reliability and operability of a mitigating system. This issue was of very low safety significance because the condition did not affect the capability of the 'A' EGDG to perform its design safety function. In addition, the slower fast start time was bounded by the accident analysis calculations. Corrective actions included, replacing the fuel oil check valves with a higher closing spring force valve, priming the system three times per month, and initiating actions to modify the fuel oil system. (Section 4OA3)

Inspection Report# : [2005003\(pdf\)](#)

Significance: **TBD** Jun 16, 2005

Identified By: NRC

Item Type: AV Apparent Violation

Unprotected Post-Fire Safe Shutdown Cables and Related Non-feasible Local Manual Operator Action

Preliminary Greater than Green. An apparent violation of 10 CFR 50, Appendix R, Section III.G.2, for failure to physically protect or separate cables from fire damage and instead relying on an unapproved local manual operator action. The unprotected cables were associated with a common electrical protection and metering circuit which was installed such that fire damage to a cable in or just above the 3A 4160V engineered safeguards (ES) switchgear could result in tripping and locking out all feeder breakers to both 4160V ES busses, resulting in a loss of all safety-related alternating current power.

In addition, the local manual operator action to reset the 3B emergency diesel generator breaker lockout on the 3B 4160V ES switchgear was determined to be non-feasible. During a severe fire in the adjacent 3A 4160V Switchgear Room the fire response activities would cause the location for the operator action (the 3B 4160V Switchgear Room) to be exposed to hot smoke, water mist, and water on the floor.

This finding is greater than minor because it degraded the defense in depth for fire protection and also because it is associated with the protection against external factors attribute and degraded the reactor safety mitigating systems cornerstone objective. The finding adversely

affected the reliability and capability of equipment required to achieve and maintain a safe shutdown condition following a severe fire in the 3A 4160V ES Switchgear Room. (Section 40A5.01)

Inspection Report# : [2005007\(pdf\)](#)

Significance:  Sep 25, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Investigate Deficient Condition of Boric Acid Leakage Affecting The Low Pressure Injection System As Required By Boric Acid Corrosion Control Procedure

The inspectors identified a Non-Cited Violation (NCV) of 10 CFR 50, Appendix B, Criterion V, for failure to follow boric acid corrosion control program procedures that required an investigation of boric acid leakage identified on decay heat pump DHP-1B.

This finding is more than minor because if left uncorrected it could become a more significant concern, that being loss of integrity of components in the low pressure injection system. The finding was of very low safety significance because only minimal corrosion was observed when inspected. (Section 1RO4)

Inspection Report# : [2004005\(pdf\)](#)

Significance:  Sep 25, 2004

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Redundant Channels of A Post-Accident Monitoring Function Not Operable Due To Reversed Power Supplies Redundant channels of a post-accident monitoring function not operable due to reversed power supp

A self-revealing Non-Cited Violation (NCV) of Technical Specification 3.3.17 D was identified when both channels of the Degrees of Subcooling Monitor were found to have their respective power supplies crossed.

The finding was more than minor because the failure of degrees of subcooling monitor indication during certain LOCA scenarios could challenge the control room operators in taking timely action to establish the plant conditions (trip reactor coolant pumps within one minute) needed to assure safety. The finding was of very low safety significance because operators retained the ability to diagnose a loss of subcooling margin using emergency operating procedures had a loss of subcooling margin occurred. (Section 40A3)

Inspection Report# : [2004005\(pdf\)](#)

Significance:  Sep 25, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Establish Adequate Corrective Actions For Fire Brigade Response Results In A Recurrent Problem

The inspectors identified a Non-Cited Violation (NCV) of Crystal River 3 Operating License Condition 2.C.(9) when prompt corrective measures were not taken to ensure the availability of a fire brigade member to respond to a fire emergency.

This finding is more than minor because if left uncorrected, adequate fire response capability would be challenged which would be a more significant safety concern. A significance determination process review assumed fire confinement was affected with a low degradation rating which resulted in the finding being screened as having very low safety significance. The finding involved the cross-cutting element of problem and identification of resolution, in that interim corrective actions were narrowly focused and ineffective to prevent recurrence. (Section 1RO5)

Inspection Report# : [2004005\(pdf\)](#)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

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

Miscellaneous

Significance: N/A Jul 02, 2004

Identified By: NRC

Item Type: FIN Finding

Problem Identification and Resolution

The licensee's corrective action program was generally effective at identifying problems at an appropriate threshold level and entering them into the corrective action program. Evaluation of issues was generally comprehensive and technically adequate. Formal root cause evaluation for issues classified as significant conditions adverse to quality were especially comprehensive and detailed. Overall, corrective actions developed and implemented for issues were effective in correcting the problems. The inspectors generally found that the scope and depth of corrective actions implemented by the licensee were appropriate for the severity and risk significance of the problem identified. Industry operating experience items were effectively evaluated for applicability and entered into the corrective action program (CAP). Nuclear Assessment Section (NAS) audits and departmental self-assessments were effective in identifying issues and directing attention to areas that needed improvement. Licensee identified weaknesses and issues in self-assessments were appropriately entered into the corrective action program and addressed. Based on discussions conducted with plant employees from various departments the inspectors did not identify any reluctance to report safety concerns. Further, the inspectors concluded that the licensee was aggressive in addressing potential chilling effect issues. However, the inspectors observed from the more recent data reviewed that several lower threshold issues had not been entered into the CAP. In addition, several examples were identified where problem evaluations lacked thoroughness or were narrowly focused.

Inspection Report# : [2004007\(pdf\)](#)

Last modified : August 24, 2005