

Crystal River 3

3Q/2004 Plant Inspection Findings

Initiating Events

G**Significance:** Jun 26, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Procedures in 10 CFR 50.59 Screening

An NRC identified, Non-Cited Violation (NCV) of Technical Specification 5.6.1.1 was identified for failure to fully implement a procedure which required a 10 CFR 50.59 evaluation to be completed for a one-time test of the power operated relief valve (PORV). Because the required evaluation was not completed, the licensee was unaware that the test would result in opening the PORV. As a result, the PORV unexpectedly opened for a very short period while the plant was operating and caused a reactor pressure transient.

This finding is more than minor because it affected the Primary System Loss of Coolant Accident (LOCA) Initiator attribute of the Initiating Events Cornerstone. The issue was of very low safety significance because although PORV opened for a short period of time with the reactor operating at power, mitigating systems, including the PORV block valve, were available had the valve failed to shut. The cause of the finding involved the cross-cutting element of human performance. (Section 40A3)

Inspection Report# : [2004004\(pdf\)](#)**G****Significance:** Mar 27, 2004

Identified By: Self Disclosing

Item Type: FIN Finding

Loss of Design Control When an Improper Circuit Card Placed in the Integrated Control System Caused a Reactor Trip

A self-revealing Green finding was identified for a loss of design control during maintenance on the integrated control system which later resulted in a reactor trip.

This finding is more than minor because it affected the configuration control attribute of the initiating event cornerstone and resulted in an event that upset plant stability and challenged critical safety functions. The issue was of very low safety significance because although there was a reactor trip, mitigating systems remained available and were not affected. Because no safety systems were affected, the finding did not involve a violation of regulatory requirements. The cause of the finding involved the cross-cutting element of human performance. (Section 40A3.1)

Inspection Report# : [2004003\(pdf\)](#)**G****Significance:** Dec 27, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Correctly Perform the Magnetic Particle Calibration

The inspector identified a non-cited violation of Technical Specification 5.6.1.1 for failure to follow procedural requirements involving incorrect calibration of a magnetic particle testing (MT) yoke. This finding could have inhibited the identification of indications or flaws on American Society of Mechanical Engineers (ASME) Class 2 Safety-Related Feed Water to Once Through Steam Generator (OTSG) "A" piping.

This finding is more than minor because if left uncorrected, it could result in a more significant safety concern. Failure to correctly perform the calibration could reduce the ability to discover indications or flaws which could lead to pipe breaks. The issue was determined to be of very low safety significance because the likelihood of a loss of coolant accident (LOCA) initiator was not affected, the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not have available, and the finding did not increase the likelihood of a fire or flood. (Section 1R08)

Inspection Report# : [2003006\(pdf\)](#)

Mitigating Systems

G**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: 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\(pdf\)](#)

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 4OA3)

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

Barrier Integrity

Significance:  Dec 27, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to Identify and Correct a Small Pressure Boundary Leak in The Pressurizer Upper Level Instrument Tap Nozzles

A self-revealing non-cited violation of Technical Specification 3.4.12.a was identified. Small cracks in the pressurizer upper level instrument tap nozzles resulted in pressure boundary leakage since late 2000.

The finding was greater than minor because the breach in the reactor coolant system (RCS) affected the RCS barrier performance attribute of the Barrier Integrity Cornerstone objective. However, the cracks were very small, were axial in direction, and therefore, were not expected to grow large enough to challenge the structural stability of the nozzle. A Phase 3 analysis was performed and because the likelihood of a LOCA initiator was not affected, the finding was determined to be of very low safety significance. (Section 4OA3.3)

Inspection Report# : [2003006\(pdf\)](#)

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 : December 29, 2004