

Crystal River 3

4Q/2006 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Jun 23, 2006

Identified By: NRC

Item Type: FIN Finding

Failure to Conduct an Extent of Condition Review after Three Motor Operated Valves Were Found with Their Pinion Gears Installed Incorrectly

A Green finding was identified by the inspectors for failure to conduct an extent of condition evaluation when three motor operated valves (MOVs) which were thought to not be susceptible to incorrect pinion gear installation were found with their pinion gears installed backwards.

This finding is more than minor because it affected the equipment performance attribute of the mitigating system cornerstone and affected the cornerstone objective of ensuring reliability of a mitigating system. Using NRC Manual Chapter 0609, "Significance Determination Process," Appendix A, Phase 1, this finding was determined to be of very low significance (Green), because the finding has not resulted in a loss of safety function and was not screened as potentially risk significant due to external events. The primary cause of the finding was related to the cross cutting area of Problem Identification and Resolution, in that station personnel failed to determine the need for additional MOV inspections when three MOVs which were initially thought to not be susceptible to incorrect pinion gear installation were found with reversed pinion gears, one of which was also discovered with an improperly staked pinion key.

Inspection Report# : [2006009](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Significance:  Dec 31, 2006

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Conduct Adequate Surveys for Liquid Effluent Releases

The inspectors identified a non-cited violation (NCV) of 10 CFR 20.1501(a) for failure to perform accurate surveys to demonstrate compliance with Technical Specification (TS) 5.6.2.3 Offsite Dose Calculation Manual (ODCM) controls used to maintain doses to members of the public from radioactive effluents as low as reasonably achievable (ALARA) in accordance with Appendix I to 10 CFR 50 design criteria as specified in 10 CFR 50.36a. Specifically, as of December 4, 2006, the licensee failed to conduct adequate dose evaluations to demonstrate compliance with TS 5.6.2.3 for radioactive liquid effluent releases made from the station discharge tank SDT-1 to a percolation pond located within the owner controlled area. The failure to conduct accurate dose evaluations for this liquid release pathway impaired the licensee's ability to demonstrate compliance with ODCM ALARA limits for the liquid radioactive waste processing equipment and operations. The issue was entered into the licensee's corrective action program for resolution.

The violation is more than minor because it adversely affects the program and process attribute of the Public Radiation Safety cornerstone, in that it involved an occurrence in the licensee's radioactive effluent release program that is contrary to NRC regulations. The finding was determined to be of very low safety significance because preliminary calculations based on recently determined dilution factors for the settling pond demonstrated that resultant offsite dose values were small fractions of the ODCM limits (Appendix I to 10 CFR Part 50 design criteria). Further, evaluations of radionuclide concentrations in the effluent were conducted in accordance with 10 CFR 20.1302(b) (2)(i) to demonstrate compliance with 10 CFR 20.1301 limits. (Section 2PS1)

Inspection Report# : [2006005](#) (*pdf*)

Physical Protection

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

Miscellaneous

Significance: N/A Jun 23, 2006

Identified By: NRC

Item Type: FIN Finding

Identification and Resolution of Problems

The team concluded that in general, problems were properly identified, evaluated, prioritized, and corrected within the licensee's problem identification and resolution program. Evaluation of issues was generally comprehensive and technically adequate. Formal root cause evaluations for issues classified as significant conditions adverse to quality were comprehensive and detailed. Overall, corrective actions developed and implemented for issues were effective in correcting the problems. One exception was noted concerning corrective action for identified deficiencies with three motor-operated valves.

The processes and procedures of the licensee's corrective action program (CAP) were generally adequate; thresholds for identifying issues were appropriately low, and in most cases, corrective actions were adequate to address conditions adverse to quality. Nuclear Assessment Section 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 CAP and addressed. However, the inspectors observed that several lower threshold issues had not been entered into the CAP.

Based on discussions and interviews conducted with plant employees from various departments, the inspectors did not identify any reluctance to report safety concerns.

Inspection Report# : [2006009](#) (*pdf*)

Last modified : March 01, 2007