

Saint Lucie 2

1Q/2009 Plant Inspection Findings

Initiating Events

Significance:  Mar 31, 2009

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

Failure to Implement Adequate Process Controls during Maintenance Activities Resulted in a Manual Reactor

A self-revealing finding was identified for failure to implement adequate process controls to minimize risk during maintenance on the Unit 2, 5B feedwater heater high level limit switch resulting in a manual reactor trip on June 4, 2008. No violations of NRC requirements were identified because the feedwater heater drain system is non-safety related. The licensee entered the issue into the corrective action program as condition report (CR) 2008-18858. Corrective actions included development of specific procedural direction for controlling and insulating energized control circuit leads during work evolutions using the risk management process, design modifications to address vulnerability when performing maintenance on level switches, and evaluation of industry best practices for training and handling of energized leads.

The finding was more than minor because it resulted in a manual reactor trip. The finding was associated with the human performance attribute and affected the Initiating Events cornerstone objective of limiting the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as at power operations. Using the NRC Manual Chapter 0609, ASignificance Determination Process,@ Attachment 609.04, Phase 1 screening worksheet, the finding was determined to be of very low safety significance because it was a transient initiator but did not increase the likelihood that mitigation equipment would not be available. The cause of the finding is related to the cross-cutting area of Human Performance, with a work control component. Specifically, the licensee did not adequately plan work activities to minimize the risk of grounding the energized leads (H.3(a)).

Inspection Report# : [2009002](#) (*pdf*)

Mitigating Systems

Significance:  Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Identify and Correct an Open and Degraded Missile Shield Door

The inspectors identified a Non-Cited Violation (NCV) of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," for failure to identify and correct the west side entrance door of the 2B diesel fuel oil storage tank (DFOST) building that was unable to be closed due to a rusted latching mechanism and hinge assembly. The licensee entered the finding in their corrective action program (CAP) for resolution as condition report (CR) 2008-24914.

The finding is greater than minor because it involved the protection against external factors performance attribute of the Mitigating System Cornerstone and affected the objective of ensuring that missile shield equipment is available and capable to prevent damage to mitigating systems. Significance Determination Process (SDP) Phase 1 Screening indicated that the finding is potentially risk significant due to an external event initiator and therefore, a Phase 3 analysis was required. The finding was determined to be of very low safety significance because of the low probability of a strong tornado impacting the region along with the unlikelihood the DFOST would be struck by a generated missile due to its location relative to the subject missile door. In addition, since the only one train of equipment was impacted for less than Technical Specifications (TS) allowed outage time, mitigating systems were

available to allow successful core cooling in the event of a tornado. For these reasons, the Phase 3 analysis determined the risk associated with the finding to be Green. This finding was related to the identification of issues aspect of the CAP component in the problem identification and resolution crosscutting area (MC 0305 aspect P.1(a)). (Section 1R05)

Inspection Report# : [2008004](#) (*pdf*)

Significance:  Sep 30, 2008

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Monitor the Station Blackout Cross-tie Cable

The inspectors identified a Green non-cited violation (NCV) of 10 CFR 50.65(a)(1) for the licensee's failure to monitor the SBO cross-tie cable for Units 1 and 2 against license established goals. The cable has not been tested or energized since 1993. The licensee initiated condition report 2007-36986 for the development of a monitoring program for the cross-tie cable.

This finding is more than minor because it is associated with the design control attribute and affected the mitigating systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to preclude undesirable consequences during a station blackout. The inspectors did not identify a cross-cutting aspect for this finding. (Section 4OA5.2)

Inspection Report# : [2008004](#) (*pdf*)

Barrier Integrity

Emergency Preparedness

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Although the NRC is actively overseeing the Security cornerstone, the Commission has decided that certain findings pertaining to security cornerstone will not be publicly available to ensure that potentially useful information is not provided to a possible adversary. Therefore, the [cover letters](#) to security inspection reports may be viewed.

Miscellaneous

Significance: N/A Aug 25, 2006

Identified By: NRC

Item Type: FIN Finding

Identification and Resolution of Problems

The inspectors identified that the licensee was effective at identifying problems and entering 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. 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. Operating experience usage was also found to be effective. Self assessment results adequately identified problems. The inspectors identified a number of weaknesses that are detailed in the report in various aspects within the corrective action process.

On the basis of the samples selected for review, the inspectors concluded that, 1) in general problems were properly identified, evaluated, and corrected within your problem identification and resolution program, 2) the processes and procedures of your corrective action program were generally effective; thresholds for identifying issues were appropriately low, and in most cases, corrective actions were adequate to address conditions adverse to quality, and 3) on the basis of interviews conducted during this inspection, workers at the site felt free to input safety findings into the corrective action program.

Inspection Report# : [2006008](#) (*pdf*)

Significance: N/A Jan 14, 2005

Identified By: NRC

Item Type: FIN Finding

Special Inspection's Findings and Observations Related with Breaker Failures

- After two safety-related 4160 volt circuit breakers failed to close, the licensee developed and performed sufficient tests to verify the ability of the remaining safety-related 4160 volt circuit breakers to operate.
- While the initial operability tests ensured that a breaker would cycle once, the licensee did not take into consideration breakers that must operate multiple times in performing various design functions. As a result, for any breaker cycled after passing an initial voltage verification test, but before operability was confirmed by a smooth operation check of the spring charging motor limit switch bracket, the licensee did not have reasonable assurance that the breaker would perform its safety function until a second successful voltage verification test was completed.
- The licensee's root cause evaluation was sufficient to identify the cause of the breaker failures associated with the 1A and 1C Component Cooling Water Pump Breakers. However, it did not examine the following potential programmatic or organizational causes of the breaker failures: inadequate receipt inspection for the 1A Component Cooling Water Pump Breaker evidenced by the failure to identify the bent limit switch bracket; failure to refurbish the 1C Component Cooling Water Pump Breaker within the time frame identified in the maintenance program, or to identify the technical basis for extending the refurbishment cycle by 25%; and failure of the preventive maintenance procedure to identify the degraded performance of the 1C Component Cooling Water Pump Breaker.
- The licensee did not fully implement industry related operating experience in two areas; post-refurbishment receipt inspection of the Westinghouse DHP 4160 volt breakers and effects of hardened grease on 4160 volt breaker operation.

Inspection Report# : [2004011](#) (*pdf*)

Last modified : May 28, 2009