

Seabrook 1

4Q/2007 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Apr 27, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate RWST level uncertainty analysis

The team identified a finding of very low safety significance involving a non-cited violation of 10CFR50, Appendix B, Criteria III, Design Control. Specifically, the instrument uncertainty calculation for the refueling water storage tank (RWST) level instruments took credit for instrument temperature compensation; however, the instruments were not temperature compensated. Additional inaccuracies associated with the bulk temperature mismatch and air pressure differences resulted in a non-conservative RWST level error. In response, FPL implemented a compensatory action to maintain adequate margin to the Technical Specification (TS) limit until engineering modified the level measurement to include temperature compensation.

The finding is more than minor because it is associated with the design control attribute of the Mitigating Systems cornerstone objective of ensuring availability, reliability and capability of systems that respond to initiating events to prevent undesirable consequences. This finding was determined to be of very low significance, based on Phase 1 of the SDP, because it did not result in the loss of RWST operability.

Inspection Report# : [2007006](#) (*pdf*)

Significance:  Apr 27, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Non-conservative TDEFWP steam admission valve stroke time test acceptance criteria

The team identified a finding of very low safety significance involving a non-cited violation of 10 CFR 50, Appendix B, Criterion XI, Test Control. The team determined that FPL did not ensure that the turbine driven emergency feedwater pump (TDEFWP) steam admission valve, MS-V-395, inservice test (IST) procedures had acceptance criteria that incorporated the limits from applicable design documents. Specifically, the design basis stroke time of MS-V-395 was not correctly stated in the IST program so that the valve stroked faster than the design basis requirement, but was still considered operable per IST requirements. Following identification of the issue, FPL declared the TDEFWP inoperable, entered the applicable TS, restored the valve stroke time to within its design basis range, and entered the issue into the corrective action program (CAP) for resolution.

The finding is more than minor, because it is associated with the procedural quality attribute of the Mitigating Systems cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. This finding was determined to be of very low significance, based on Phase 1 of the SDP, because it did not result in the loss of a safety function.

Inspection Report# : [2007006](#) (*pdf*)

Significance:  Mar 31, 2007

Identified By: NRC

Item Type: FIN Finding

Inadequate Evaluation of a Deficiency with the Alternate Cooling Water System to the Charging Pumps

The inspectors identified a finding for Seabrook failing to adequately evaluate and take corrective actions to ensure

the ability of alternate water sources to provide cooling to the charging pump lube oil coolers. Seabrook did not perform confirmatory tests or develop an engineering basis for acceptability of the system following initiation of condition reports in 2004 and 2005, which documented concerns with the testing and ability of the alternate cooling water system to perform its Updated Final Safety Analysis Report function. In October 2006, the alternate cooling system failed to function due to rust buildup on the discharge check valves which prevented the valves from opening. This did not violate NRC regulations because the alternate cooling system is not safety-related.

This finding was more than minor because it affected the Mitigating Systems cornerstone attribute of equipment performance and the objective to ensure the reliability of systems that respond to initiating events to prevent undesirable consequences. The risk significance was determined through a detailed assessment. The finding was determined to be of very low safety significance (Green) since the inability to implement alternate cooling water would not increase the chance of core damage. The finding has a cross-cutting aspect in the area of problem identification and resolution because Seabrook did not properly evaluate a known deficiency associated with the alternate cooling water system.

Inspection Report# : [2007002](#) (*pdf*)

Significance:  Jan 11, 2007

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate Corrective actions Result in a Repeat Failure of the "B" EDG

The inspectors identified a Green non-cited violation (NCV) for the licensee's failure to comply with 10 CFR 50, Appendix B, Criteria XVI, Corrective Action. The analyses of previous "B" emergency diesel generator (EDG) voltage regulator failures were inadequate in that they failed to identify corrective actions to prevent recurrence. Specifically, as a result of the inadequate evaluation of the cause for the December 7, 2005 event, the "B" EDG voltage regulator failed and resulted in a generator overvoltage condition during a surveillance test on August 31, 2006. The licensee entered the issue in their corrective action program, performed a root cause evaluation and implemented voltage regulator hardware changes to prevent recurrence of the overvoltage condition.

The finding is more than minor because the voltage regulator failure affected the Mitigating Systems Cornerstone attribute of Equipment Performance and affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events. The function of the EDG is to provide alternating current power to safety systems following a loss of offsite power event. The finding was determined to be of very low safety significance since the EDG was inoperable for a short period of time and the failures were intermittent in nature. The finding has a cross-cutting aspect in the area of problem identification and resolution (sub-category evaluation) in that Seabrook failed to perform adequate analyses of previous events and as a result did not identify appropriate actions to prevent recurrence.

Inspection Report# : [2006016](#) (*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

Last modified : February 04, 2008