

## Saint Lucie 2 3Q/2012 Plant Inspection Findings

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### Initiating Events

**Significance:** G Apr 20, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to correct a LPSI pump design deficiency**

An NRC-identified Green NCV of 10 CFR Part 50 Appendix B, Criterion XVI, Corrective Actions was identified for the licensee's failure to correct an identified condition adverse to quality associated with Low Pressure Safety Injection (LPSI) pump casing distortion. Specifically, the licensee failed to implement corrective actions to address an identified LPSI pump design deficiency, which resulted in failure of the 2A LPSI pump in March 2009. This issue was documented in the licensee's corrective action program as condition report 2009-16124.

This finding was more than minor because it was associated with the equipment reliability attribute of the Mitigating Cornerstone and it adversely affected the associated cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, the failure to correct the LPSI pump design deficiency impacts the availability, reliability, and capability of the LPSI system to respond to plant events. In accordance with NRC Inspection Manual Chapter 0609.04, Significant Determination Process – Phase 1 screening, the finding was determined to be of very low safety significance (Green) because the finding did not result in a loss of system safety function or a loss of safety function of a single train for greater than allowed Technical Specification allowed outage time. The finding did not represent an actual loss of safety function for greater than its technical specification allowed outage time.

The finding had a cross-cutting aspect in the area of work practices, resources because the licensee failed to ensure that equipment is available and adequate to assure nuclear safety. Specifically, the licensee failed to maintain long term plant safety by minimizing longstanding LPSI pump design issues. [H.2(a)] (Section 40A2.a(3)(ii))

Inspection Report# : [2012007](#) (*pdf*)

**Significance:** G Mar 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to Follow Reactor Protection System Surveillance Procedure Resulting in Reactor Plant Trip**

Green. A Green, self-revealing, non-cited violation (NCV) of Technical Specification (TS) 6.8.1 was identified which requires that written procedures be established, implemented, and maintained covering activities referenced in NRC Regulatory Guide 1.33, Revision 2, dated February 1978, including safety related activities carried out during operation of the reactor plant. Licensee surveillance test procedure 2-OSP-63.01, "Unit 2 RPS Logic Matrix Test," was not complied with as written when a Reactor Protection System (RPS) logic matrix switch was inadvertently placed out of position resulting in an unplanned reactor trip. The licensee entered this violation in their corrective action program as condition report 1657802.

The licensee's failure to fully implement RPS testing procedure 2-OSP-63.01, "Unit 2 RPS Logic Matrix Test," as written is a performance deficiency. The finding was determined to be of more than minor significance because it

resulted in a reactor trip and is similar to NRC Manual Chapter 0612 Appendix E, example 4.b. The inspectors evaluated the risk of this finding using IMC 0609, "Significance Determination Process," Attachment 4, "Phase 1 - Initial Screening and Characterization of Findings." The inspectors determined that the finding was of very low safety significance because it did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. The finding involved the cross-cutting area of human performance, in the component of work practices and the aspect of procedural compliance (H.4.b), in that the licensee failed to ensure that personnel followed procedure requirements to prevent unexpected results.

Inspection Report# : [2012002](#) (*pdf*)

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## Mitigating Systems

**Significance:** G Dec 31, 2011

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Follow Operability Determination Procedure for Evaluation of Past Operability**

The inspectors identified a NCV of Technical Specification (TS) 6.8.1 and Regulatory Guide (RG) 1.33 for the licensee failing to implement a written procedure for operability determinations. Safety related procedure EN-AA-203-1001, "Operability Determinations and Functionality Assessments," was not fully implemented as written on multiple occasions when the 1A and 2A auxiliary feed water pump discharge pressure gauges used for periodic in-service surveillance testing were found out of calibration during periodic maintenance. Specifically, during the performance of maintenance procedure 1400064P, "Installed Plant Instrumentation Calibration," pressure gauge PI-09-7A was found out of calibration, required adjustment, and a condition report written for evaluation in the licensee's corrective action program. The inspector determined a performance deficiency existed when on three separate occasions from 2009 thru 2011, the senior reactor operator concluded incorrectly that the out of calibration gauge conditions did not affect past operability and therefore no engineering evaluation was performed as required by procedure EN-AA-203-1001.

The finding was more than minor because if the performance deficiency is not corrected then it could lead to a more significant safety concern. Using the NRC Manual Chapter 0609, "Significance Determination Process," Table 4A, "Characterization Worksheet," the finding does not represent an actual loss of safety function or screen as potentially risk significant due to seismic, flooding, or severe weather. A contributing cause of the finding is related to the cross-cutting area of Problem Identification and Resolution, with a corrective action program aspect. Specifically, the operator failed to thoroughly evaluate the condition for past operability of the affected auxiliary feed water pump.

Inspection Report# : [2011005](#) (*pdf*)

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## Barrier Integrity

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## Emergency Preparedness

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## Occupational Radiation Safety

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### Public Radiation Safety

**Significance:**  Sep 30, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

#### **Failure to ship radioactive material in accordance with DOT regulations**

A self-revealing, Green non-cited violation (NCV) of 10 CFR 71.5 was identified for the licensee's failure to ship radioactive material in accordance with Department of Transportation (DOT) requirements as specified in 49 CFR Parts 171-180. Specifically, upon receipt at its destination, a radioactive shipment classified as an "excepted package for limited quantities" was found to have external surface package dose rates exceeding the limit of 0.5 millirem per hour (mrem/h) as specified in 49 CFR 173.421(a)(2). The package recipient identified a maximum dose rate of 3.95 mrem/h on the exterior surface of the package and notified the licensee of the discrepancy. The licensee entered the event into their corrective action program as Action Request (AR)-01628106.

The performance deficiency was more than minor because it was associated with the "Program & Process Procedures" attribute (DOT package limits) of the Public Radiation Safety Cornerstone. The inspectors determined the cornerstone's objective was adversely affected based on the fact that shipment of radioactive material in excess of DOT limits in the public domain is contrary to NRC and DOT regulations. Assurance that the public will not receive unnecessary dose is decreased if packages are not prepared so that dose rates in accessible areas remain below regulatory limits during transit. The finding is of very low safety significance (Green) because there was little to no risk to members of the public.

This finding involved the cross-cutting area of Human Performance with the aspect of conservative decision-making, in that the licensee assumptions failed to ensure that equipment packaged for shipment would not exceed DOT limits during transport. [H.1(b)] (Section 2RS8)

Inspection Report# : [2012004](#) (*pdf*)

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### Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

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### Miscellaneous

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