

Saint Lucie 1

3Q/2004 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Jun 26, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Procedures per TS 6.8.1.(a)

The inspectors identified two examples of a non-cited violation (NCV) of Technical Specification 6.8.1.(a) for failure to follow procedures in maintaining and reactivating SRO licenses. This resulted in two senior reactor licensed operators standing watch without the appropriate qualifications.

The finding, which involves the mitigating systems cornerstone, is greater than minor because it is associated with human performance attributes that affect the availability, reliability, and capability of licensed operators to respond to initiating events to prevent undesirable consequences. The NRC considers the maintenance and proficiency of licensed operators an element of the defense in depth philosophy, and the compliance with procedures which implement the requirements of 10 CFR 55.53(f), to be significant. (Section 1R11)

Inspection Report# : [2004004\(pdf\)](#)

Significance:  Jun 26, 2004

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Inadequate Corrective Actions to Preclude Repetitive Torque Switch Failure in Close Control Circuit of Unit 1 Valve MV-21-3

A self-revealing NCV of Criterion XVI of 10 CFR 50, Appendix B, Corrective Action was identified for the licensee's failure to implement adequate corrective actions to address water intrusion events which resulted in repetitive torque switch failures in the close control circuit of the Unit 1 MV-21-3, the "A" train ICW to non-safety related TCW piping isolation valve.

The finding was greater than minor because it involved the equipment performance attribute of the mitigating system cornerstone and affected the objective of ensuring that equipment is available and capable to respond to an event. The finding was determined to be of very low safety significance in accordance with the Significance Determination Process (SDP) phase 1, since another independent intake cooling water (ICW) train remained operable and available to perform the safety function. In addition, the valve was repaired and returned to service within the required 72 hour Technical Specification limit when the condition was identified. (Section 1R12)

Inspection Report# : [2004004\(pdf\)](#)

Barrier Integrity

Significance:  Jun 26, 2004

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Improper Configuration Control Of Shutdown Cooling Purification System Led To Inadvertent Reactor Coolant System Leak That Resulted In An Unusual Event

A self-revealing NCV of Technical Specifications 6.8.1(a) was identified for failing to maintain configuration control of the Unit 1 shutdown cooling (SDC) purification system in accordance with normal operating procedure 1-NOP-03.05, Shutdown Cooling.

The finding was considered greater than minor because it involved the reactor coolant system (RCS) barrier and if left uncorrected could have resulted in more significant safety consequences such as a continued loss of reactor coolant inventory eventually resulting in loss of radiological shielding and core cooling. The finding was determined to be of very low safety significance according to Appendix G for Shutdown Operations of the Significance Determination Process since there was not a significant loss of RCS inventory control. (Section 1R14)

Inspection Report# : [2004004\(pdf\)](#)

G

Significance: Dec 27, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Maintain Spray Additive Tank NaOH Concentration Within TS Limits

The inspector identified a non-cited violation of Technical Specification 3.6.2.2.a. for failure to maintain the Unit 1 spray additive tank NaOH concentration within the prescribed range of 28.5 to 30.5%.

This finding is greater than minor because if left uncorrected it could have resulted in a condition where an insufficient amount of NaOH existed to adequately buffer the pH of reactor coolant inside containment during design basis accidents. The finding affected the Barriers Cornerstone, and was determined to be of very low safety significance according to the SDP Phase 1 worksheet since it did not represent a degradation in the radiological barrier function of the containment.

Inspection Report# : [2003007\(pdf\)](#)

Emergency Preparedness

Occupational Radiation Safety

G

Significance: Sep 25, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Follow And To Have Adequate Procedure Guidance For Controls Associated With Posted LHRA Locations

The inspectors identified an NCV of TS 6.11 for failure to meet procedural guidance for locked high radiation area (LHRA) postings and signs, and to have adequate guidance for control of equipment maintained in the vicinity/adjacent to LHRA barrier gates and walls. During the week of August 16, 2004, the licensee failed to post all accessible walls of the Unit 1 Drumming Room LHRA waste storage facility with the required labels (postings) and failed to provide additional signs on walls to deter climbing as specified in Health Physics Procedure (HPP)-3, High Radiation Area, Revision (Rev.) 15. Further, the procedure failed to address the use and storage of other equipment placed against established physical barriers which could potentially facilitate unauthorized access to LHRAs. Equipment examples observed by the inspectors included portable step stools maintained in the vicinity of the LHRA posted Unit 2 (U2) Volume Control Tank (VCT) cubicle and several empty 55 gallon drums placed against the Unit 1 (U1) Drumming Room LHRA storage facility's eastern wall and entrance gate.

This finding is greater than minor because it adversely affected the access control program and process attribute of the Occupational Radiation Safety cornerstone in that failure to follow or have adequate procedures for maintaining LHRA barrier controls decreased the licensee's ability to provide reasonable assurance to prevent unauthorized entry required for adequate protection of worker health and safety from exposure to radioactive materials as a result of routine civilian nuclear reactor operations. The finding is of very low safety significance because the event did not result in any unanticipated and unexpected worker exposures. Immediate corrective actions included removal of the equipment away from the LHRA barrier walls and gates and positing of proper labels and signs. (Section 2OS1)

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

G

Significance: Sep 25, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Have Adequate Procedural Guidance For Response To Extended Duration ARM Alarms

The inspectors identified an NCV of TS 6.11 for failure to have adequate procedural guidance to meet area radiation monitor (ARM) radiation protection design objectives during periods of prolonged local alarm annunciation. During calendar year 2003 and year-to-date (YTD) 2004, several examples of ARM equipment in prolonged audible or visual alarm, ranging from several days to approximately eight months, were identified with no guidance to address and minimize potential worker habituation and indifference to potential radiological conditions that the alarm annunciators are designed to identify.

This finding is greater than minor because it adversely affected the access control program and process attribute of the Occupational Radiation Safety cornerstone in that failure to properly address prolonged ARM alarms could result in workers improperly responding to actual changes or unexpected operating conditions as a result of routine civilian nuclear reactor operations. The finding is of very low safety significance because there was no failure to identify atypical radiological conditions, no failure to assess doses to workers, nor unexpected personnel exposures (Section 2OS3).

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

Public Radiation Safety

G

Significance: Sep 25, 2004

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Maintain Adequate QC Program Activities To Meet Design Specifications To Ensure Representative Sampling of Main Plant Vent Airborne Effluent Particulates

The inspectors identified an NCV of TS 6.8.1.i for failure to implement Quality Control activities to ensure representative sampling and monitoring of particulates in the main plant vent airborne effluents. Specifically, the licensee failed to establish appropriate guidance for tests and test acceptance criteria for the U1 and U2 Reactor Auxiliary Building (RAB) HEPA ventilation exhaust (HVE) 10A/10B fan plenum cleanup systems which limit maximum diameter of airborne effluent particulates to ensure representative sampling.

This finding is greater than minor because it adversely affected the effluent monitoring program and process attribute of the Public Radiation Safety cornerstone in that failure to ensure representative sampling could impact representative sampling and subsequent monitoring of particulates in airborne effluents released into the public domain as a result of routine civilian nuclear reactor operations. The finding is of very low safety significance because there was no failure to assess dose to the public from airborne particulates released from the main plant vents and doses did not exceed Appendix I to 10 CFR Part 50 design criteria. Licensee immediate corrective actions included adoption of industry approved testing guidance and acceptance criteria for the RAB HVE filters. The finding involved the cross-cutting element of problem identification and resolution, specifically the timeliness of corrective actions. (Section 2PS1).

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

Physical Protection

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

Miscellaneous

Significance: N/A Feb 27, 2004

Identified By: NRC

Item Type: FIN Finding

Problem Identification and Resolution

The inspectors determined that the licensee was generally effective in identifying problems and entering them into the Corrective Action Program. In general, the threshold for initiating Condition Reports (CRs) was low and employees were encouraged by management to initiate CRs.

The inspectors concluded that the Quality Assurance (QA) audits were comprehensive, were well conducted, and had identified numerous performance problems. For example, licensee Quality Assurance identified that not all self assessments or quarterly CR rollups scheduled for performance in 2003, were actually performed as required by plant procedures. Quality Assurance also identified that there has been a lack of emphasis on completing corrective actions as exemplified by an increasing backlog of overdue Plant Management Action Items (PMAIs). At the time of this inspection there was a backlog of 360 overdue PMAIs of varying importance. Additionally, the inspectors observed that a recent revision to procedure ADM-07.01, PMAI Corrective Action Tracking Program removed all time limits for closure of PMAIs.

The inspectors did not identify any reluctance by the plant staff to report safety concerns. The inspectors concluded that the employee concerns program, Speakout, was functioning well.

Inspection Report# : [2004007\(pdf\)](#)

Last modified : December 29, 2004