

Saint Lucie 2

3Q/2003 Plant Inspection Findings

Initiating Events

Mitigating Systems

Significance:  Sep 27, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Improper Implementation Of Off-Normal Operating Procedure During Loss Of MFW Event

A self-revealing finding was identified as a non-cited violation of Technical Specification 6.8.1.a for failing to properly implement Off-Normal Operating Procedure (ONOP) 2-0700030, Main Feedwater, during a loss of feedwater event.

This finding is greater than minor because if left uncorrected could result in more significant safety consequences and it also affected an attribute and objective of the Mitigating Systems Cornerstone. Failure to follow an ONOP could affect the capability to mitigate abnormal plant conditions and to prevent undesirable consequences in response to initiating events. The finding is of very low safety significance in accordance with the SDP Phase 1 worksheet because no actual loss of safety function occurred. (Section 1R14)

Inspection Report# : [2003006\(pdf\)](#)

Significance:  Mar 28, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Cables in Containment Fail to Meet 10 CFR 50, Appendix R, Criterion III.G.2 Requirements

Green. The inspectors identified a non-cited violation for the licensee's failure to comply with 10 CFR 50, Appendix R, Criterion III.G.2. This finding is related to a lack of spacial separation or barriers to protect cables in containment which could result in spurious opening of the pressurizer power operated relief valve (PORV) during a fire.

This finding is greater than minor because it affected the mitigating systems cornerstone objective of equipment reliability, in that, spurious opening of the PORV during post-fire safe shutdown would adversely affect the ability to achieve and maintain the reactor in a hot shutdown condition. The finding is of very low safety significance because the initiating event likelihood was low, manual fire suppression capability remained unaffected and all mitigating systems except for the PORV and block valve were unaffected. (Section 4OA5)

Inspection Report# : [2003002\(pdf\)](#)

Barrier Integrity

Significance:  Dec 31, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Inadequate Door Seal Resulted In Both Unit 2 Control Room Emergency Air Cleanup System Trains Inoperable For A Time Longer Than 24 Hours.

Inadequate door seal evaluation during maintenance activities resulted in both trains of Unit 2 control room emergency air cleanup system (CREACS) inoperable for a time longer than 24 hours.

A self-revealing non-cited violation of Technical Specification 3.7.7 Action b was identified. This finding is greater than minor because it affected the barrier integrity cornerstone objective of providing reasonable assurance that physical design barriers provide protection from radionuclide releases caused by accidents or events. The finding is of very low safety significance because CREACS was able to maintain a positive pressure during the affected period and the control room envelope remained operable with respect to its design bases function of maintaining operator dose within general design criterion (GDC) 19. (Section 4OA3.2).

Inspection Report# : [2002004\(pdf\)](#)

Emergency Preparedness

Significance:  Apr 05, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Meet 10 CFR 50.54(q) Change Requirements Which Resulted In A Decrease Of Emergency Plan Effectiveness

Green. A change made to the Emergency Action Limit (EAL) for Reactor Coolant System (RCS) leakage requiring an Unusual Event declaration resulted in a decrease in the effectiveness of the Emergency Plan.

A non-cited violation of 10 CFR 50.54(q) was identified by the NRC inspector. This finding is greater than minor because changing commitments in the Radiological Emergency Plan (REP) which decrease its effectiveness without prior approval potentially impacts the NRC's ability to perform its regulatory function, and potentially creates an ineffective response to a radiological emergency. The safety significance of the finding is very low because, although the Unusual Event declaration could be delayed as a result of the change made to the EAL, criteria for declaration of an Alert and subsequent response, remained unchanged.

Inspection Report# : [2003004\(pdf\)](#)

Occupational Radiation Safety

Significance:  Jun 28, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure Of A Designated Standby Rescue Person To Maintain Continuous Communication With Worker Provided With Supplied-Air Hood Respiratory Equipment (Section 2OS1.1)

Green. A self-revealing non-cited violation of 10 CFR 20.1703 (f) was identified for the failure of the designated standby rescue person to maintain continuous communication with a worker provided with supplied-air hood respiratory equipment during reactor head maintenance activities.

This finding is greater than minor because the failure to maintain continuous communication between the worker and the designated rescue person potentially could decrease timeliness in providing assistance to the worker whose air supply failed in this case, or for any other reason that the individual may have required relief from distress. The finding is of very low safety significance because an indirect communication channel was available between the affected worker and the standby rescue person and, following the loss of breathing air event, was used to request appropriate assistance in a timely manner (Section OS1.1).

Inspection Report# : [2003005\(pdf\)](#)

Significance:  Dec 31, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Radiation Protection Procedures for Access Controls to Radiologically Significant Areas

Green. The licensee failed to follow radiation protection procedures for access controls associated with radiologically significant areas. The failure to follow Radiation Work Permit (RWP) and procedural requirements resulted in workers inappropriately accessing high radiation area (HRA) locations not permitted by their RWP details and in workers entering an airborne radioactive material area without monitoring stay-times used for Derived Air Concentration-hour (DAC-hr.) tracking or revising RWPs.

A non-cited violation (NCV) of Technical Specification (TS) Sections 6.11 and 6.12, with one NRC-identified and two self-revealing examples, was identified. Each of these examples is greater than minor in that the failure to follow procedures which resulted in workers inappropriately accessing HRAs and airborne areas was associated with the program and process attributes of the Occupational Radiation Safety Cornerstone and affected the cornerstone objective to protect occupational workers from exposure to radiation. Each example is of very low safety significance because all individuals were monitored for exposures from external radiation fields and from internally deposited radionuclides, as appropriate; and no individuals exceeded either internal or external exposure limits. (Section 2OS1.1).

Inspection Report# : [2003010\(pdf\)](#)

Significance:  Dec 31, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Failure to Follow Radiation Protection Procedures for Surveys of Radiologically Significant Areas

Green. The licensee failed to follow radiation protection procedures for conducting surveys of personnel. Specifically, the licensee failed to survey the work area directly through surveys or indirectly through extremity monitoring for two workers entering the Unit 1 (U1) reactor containment building (RCB) lower cavity and failed to conduct discrete radioactive particle (DRP) surveys at the required frequency for outage activities conducted in the U1 Refueling Pool, including incore instrumentation (ICI) change-out.

An NCV of TS Section 6.11, with an NRC-identified and a self-revealing example, was identified. Each of these examples is greater than minor. Specifically, the failure to follow procedures for radiation surveys resulted in workers entering the RCB lower cavity without the knowledge of actual radiological conditions and decreased effectiveness of DRP monitoring during tasks conducted in the refueling pool, e.g., change-out. These examples are associated with radiation protection program and process attributes of the Occupational Radiation Safety Cornerstone and affected the

cornerstone objective. Each example is of very low safety significance based on retrospective reviews of the radiological conditions on the lower cavity floor and reactor head prior to decontamination and the dispersal of radioactive contamination due to hydrolasing activities. Further, exposure to radiation and radioactive material, including DRPs, was within regulatory limits for all occupational workers involved in the U1 End of Cycle 18 refueling outage (U1 EOC 18 RFO) activities. (Section 2OS1.1)

Inspection Report# : [2003010\(pdf\)](#)

Significance:  Dec 31, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to Follow Radiation Protection Procedures for Posting of Radiologically Significant Areas

Green. The licensee failed to follow radiation protection procedures for postings associated with radiologically significant areas which resulted in an improperly posted high radiation area at the dry storage warehouse and an airborne radioactivity area at the reactor containment building equipment hatch access.

A self-revealing NCV of TS Sections 6.11 and 6.12, with two examples, was identified. Each of these examples is greater than minor in that the failure to follow procedures which decreased the effectiveness of radiological controls for workers entering HRAs and airborne radiation areas was associated with radiation protection program and process attributes of the Occupational Radiation Safety Cornerstone and affected the cornerstone objective. Each example is of very low safety significance because any workers who may have entered the unposted airborne radiation and HRA conditions were required to wear appropriate monitoring devices within the areas, workers exiting the radiological control area (RCA) are screened for internally deposited radionuclides, and exposures resulting from both external radiation sources and from airborne radioactivity conditions were within regulatory limits for all occupational workers involved in the U1 EOC 18 RFO activities. (Section 2OS1.1)

Inspection Report# : [2003010\(pdf\)](#)

Public Radiation Safety

Significance:  Dec 31, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to Follow Radiation Protection Procedures for Surveys of Personnel

Green. The licensee failed to follow established procedures for personnel monitoring surveys which resulted in the release of radioactive material offsite.

A self-revealing NCV of TS Section 6.11 was identified. The failure to follow procedures resulting in the inappropriate release of radioactive material offsite is associated with radiation protection program and process attributes of the Public Radiation Safety Cornerstone and affected the cornerstone objective to protect members of the public from exposure to radiation, and is therefore greater than minor. The finding is of very low safety significance because there have been less than five occurrences of material released outside the protected area in the past two-year period and it did not involve doses to a member of the public in excess of five millirem (mrem) Total Effective Dose Equivalent (TEDE). (Section 2OS3.2)

Inspection Report# : [2003010\(pdf\)](#)



Significance: Dec 31, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

Failure to Have Written Radiation Protection Procedures for Radiological Surveys of Potentially Contaminated Clothing Bulk-Released to the Public Domain

Green. The licensee failed to have adequate written procedures for radiological surveys of potentially contaminated material which resulted in the release of radioactive material offsite.

A self-revealing NCV of TS Section 6.11 and 10 CFR 20.1501(a) was identified. The finding is greater than minor in that the inappropriate release of contaminated materials offsite is associated with radiation protection program and process attributes of the Public Radiation Safety Cornerstone and affected the cornerstone objective to protect members of the public from exposure to radiation. The finding is of very low safety significance because there have been less than five occurrences of material released outside the protected area in the past two-year period and it did not involve doses to a member of the public in excess of five mrem TEDE. (Section 2PS3.3)

Inspection Report# : [2003010\(pdf\)](#)

Physical Protection



Significance: Jun 28, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

Failure To Search New Fuel Containers Prior To Entering The Protected Area (Section 1R20).

Green. A non-cited violation was identified for the licensee's failure to comply with Section 3.3.6 of the Physical Security Plan. On March 4, 2003, security personnel allowed a shipment of new fuel containers to enter the Protected Area (PA) without performing an adequate search.

This finding is greater than minor because allowing new fuel storage containers, with inadequate seals, to enter the PA without being searched could have adversely affected the licensee's ability to provide adequate assurance that the physical protection program can protect against the design basis threat of radiological sabotage. This finding was evaluated using the Interim Physical Protection Significance Determination Process and determined to be of very low safety significance. The finding was a vulnerability in the implementation of PA search requirements that did not involve a malevolent act, and there had not been two similar findings in four quarters. (Section 1R20)

Inspection Report# : [2003005\(pdf\)](#)

Miscellaneous

Last modified : December 01, 2003