

## Saint Lucie 1

### Initiating Events

### Mitigating Systems



**Significance:** Dec 29, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Continued Operation While 1B EDG Out of Service Concurrent With Opposite Train 1A RVLMS Inoperable**

Green. A Non-Cited Violation of Technical Specification (TS) 3.8.1.1 Action b occurred due to continued unit operation for six days while the 1B emergency diesel generator (EDG) was out of service and the opposite required train of 1A reactor vessel level monitoring system (RVLMS) was also inoperable. This finding was of very low safety significance because the licensee's TS were overly restrictive, and subsequently revised to conform with the standard TS. The newly revised TS would have allowed for continued unit operation for up to 14 days while the 1B EDG was out of service regardless of 1A RVLMS operability (Section 4OA3.3).

Inspection Report# : [2001005\(pdf\)](#)



**Significance:** Sep 29, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

#### **Failure to Maintain Control of Fire Alarm Computer Design Features Required by the NRC Approved Fire Protection Program**

Operating License DPR-67 (Unit 1), Condition 2.C(3), and Operating License NPF-16 (Unit 2), Condition 2.C(20), require the licensee to implement and maintain in effect all provisions of the approved fire protection program as described in the UFSAR and as approved by NRC safety evaluation reports. Section 3.5.2 of the UFSAR, Appendix 9.5A, Fire Protection Program, requires that fire protection systems shall be designed in accordance with NFPA 72A-1972 and NFPA 72D-1973 to ensure that detection system failures would be monitored and alarmed. Contrary to these system design requirements, several circuit boards were discovered missing from the Unit 1 and 2 Fire Alarm Computers. This condition, which has probably existed since shortly after original system installation, was subsequently dispositioned by the licensee's corrective action program as CRs 01-1845 and 2113. (Green)

Inspection Report# : [2001004\(pdf\)](#)



**Significance:** Sep 29, 2001

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Inadequate Implementation of Interim Corrective Actions to Compensate for a Degraded Fire Alarm Computer**

Green. A Non-Cited Violation of Technical Specification 6.8.1.f and the Fire Protection Plan was identified for failure to adequately implement the necessary compensatory measures to address a degraded condition affecting operability of the Unit 1 Fire Alarm Computer. This finding was of very low safety significance because the degraded condition was of very low safety significance. Furthermore, the Fire Alarm Computer capability remained functional during the limited time the compensatory measures were not completed.

Inspection Report# : [2001004\(pdf\)](#)



**Significance:** Sep 29, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

#### **Inadequate Corrective Actions Taken to Resolve Degradation of the 1B Emergency Diesel Generator Radiator**

Criterion XVI of Appendix B to 10 CFR 50, Corrective Action, states in part that, "Measures shall be established to assure that conditions adverse to quality . . . are promptly identified and corrected." Contrary to the above, the licensee failed to adequately correct a severely degraded radiator on the 1B EDG. The radiator subsequently failed on May 22, 2001 and again on June 11, 2001. The radiator was ultimately replaced and the EDG returned to service on June 17. This issue was captured in the licensee's corrective action program as CRs 01-1491 and 01-1491 Supplement 1. (Green)

Inspection Report# : [2001004\(pdf\)](#)



**Significance:** Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

#### **Inoperable Cable Spreading Room Smoke Detector**

Operating License DPR-67 (Unit 1), Condition 2.C(3), specifies that the licensee implement all provisions of the approved fire protection program as described in the UFSAR and as approved by NRC safety evaluation reports (SERs). UFSAR Table 9.5A-2 identified NFPA 72A-1972 as the code of record for original installation of the fire detection system. NFPA 72A-1972, requires that smoke detectors shall be located and adjusted to operate reliably in case of smoke at any part of the area protected. Contrary to the above, smoke detector 7B-4 could not detect smoke in the cable spreading room (Fire Zone 57) because it was surrounded by a Thermo-lag enclosure. This condition was identified on March 26, 1998. This issue is in the licensee's corrective action program as CR 98-0259. (Green)

Inspection Report# : [2001003\(pdf\)](#)



**Significance:** Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

#### **Inadequate Testing of Sprinkler System**

Operating License DPR-67 (Unit 1), Condition 2.C(3) and NPF-16 (Unit 2), Condition 2.C(20), specify that the licensee implement and maintain in effect all provisions of the approved fire protection program as described in the UFSAR and as approved by NRC SERs. Section 4.3.1.5 Automatic Water Suppression Systems of the UFSAR, Amendment 33, dated August 17, 1979, indicated that all station automatic water suppression systems conformed to NFPA 13 or 15. The testing and installed design for the water suppression sprinkler system was not consistent with NFPA 13 or NFPA 15. This condition has existed since the original system installation and was identified on February 20, 1998, and documented in the licensee's corrective action program as CR(s) 98-0307, 98-0405, 98-0429. (Green)

Inspection Report# : [2001003\(pdf\)](#)



**Significance:** Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

#### **Inadequate Corrective Action for Shutdown Cooling Suction Relief Valve Lifting**

10CFR50 Appendix B, Criterion XVI requires that conditions adverse to quality be identified and corrected in a timely manner. The licensee determined that prior corrective actions did not prevent repetitive inadvertent lifting of the 1A SDC system suction relief valve while attempting to place the system into service. On April 2, and April 4, 2001, the licensee declared Unusual Events due to excessive RCS leakage when the 1A SDC suction relief valve lifted. These events were described in CRs 01-0714 and 01-741. (Green)

Inspection Report# : [2001003\(pdf\)](#)



**Significance:** Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

#### **Failure to Meet TS for Cooling Loops**

Technical Specification 3.4.1.3 requires at least two of four reactor and/or shutdown cooling loops to be operable in Mode 4. On April 3, 2001, three of the four Unit 1 cooling loops were out of service while in Mode 4. Actions were not initiated within one hour to restore a loop. This event was addressed in the licensee's corrective action program as CR 01-0728. (Green)

Inspection Report# : [2001003\(pdf\)](#)



**Significance:** Jun 30, 2001

Identified By: Licensee

Item Type: NCV NonCited Violation

#### **Relay Problem Could Have Resulted in EDG Overloading**

Technical Specification 3.8.1.1 requires that both EDGs remain operable in Modes 1 through 4. On April 22, 2001, the licensee identified a sticking CSAS relay that could have caused the 1A diesel to become overloaded during certain design basis accidents for the period of October 1999 through April 2001. The event was captured in the licensee's corrective action program as CR 01-1198. (Green)

Inspection Report# : [2001003\(pdf\)](#)

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Jun 30, 2001

**Significance:**

Identified By: Licensee

Item Type: NCV NonCited Violation

**Failure to Meet TS for Hydrogen Recombiners**

Technical Specification 3.6.4.2 requires that two hydrogen recombiners be operable in Modes 1 and 2. On April 28, 2001, the licensee inadvertently entered Mode 2 with the 1B Hydrogen Recombiner tagged out of service. This condition existed for about one day. This event was placed into the licensee's corrective action program as CR 01-1195. (Green)

Inspection Report# : [2001003\(pdf\)](#)**Significance:** TBD Apr 03, 2002

Identified By: NRC

Item Type: AV Apparent Violation

**Failure to Have an Installed Fixed Fire Suppression System in an Alternative Shutdown Area**

To Be Determined. An apparent violation of Section III.G.3 of 10 CFR 50, Appendix R was identified for failure to have an installed fixed fire suppression system in an Alternative Shutdown Area. The licensee's Cable Spreading Room (CSR) is designated as an area requiring Alternative Shutdown capability. The St Lucie Unit 1 CSR Halon 1301 fire suppression system would not be able to extinguish a deep-seated fire involving cable insulation and jacket material. This finding appears to have a low to moderate safety significance because a completely failed Halon system would result in a change in core damage frequency (CDF) of 4.9E-6. (Section 1R05).

Inspection Report# : [2002006\(pdf\)](#)G

Dec 30, 2000

**Significance:**

Identified By: Licensee

Item Type: NCV NonCited Violation

**TS 6.2.2.a Minimum Shift Complement Not Maintained When NWE Relieved ANPS**

Requirements of TS 6.2.2.a for minimum operating shift complement were not maintained when the NWE relieved the ANPS. The NWEs had not fulfilled proficiency watch requirements of 10CFR55.53 for SRO licenses (Section 4OA3)

Inspection Report# : [2000007\(pdf\)](#)

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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

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## Physical Protection

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Dec 30, 2000

**Significance:**

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure of a Security Officer posted as Compensatory Measure for a Deactivated Alarm System to Maintain a Position to View the Zone of Detection**

Green. The inspectors identified a non-cited violation of the St. Lucie Security Plan. A security officer posted at perimeter gate 04

was not in a position which allowed him to observe the areas for which he was providing compensatory measures. The finding was of very low safety significance because of the non-predictable basis of the single officer failure and there was no evidence that the vulnerability had been exploited, (Section 3PP3.2)

Inspection Report# : [2000007\(pdf\)](#)

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## Miscellaneous

**Significance: N/A** Feb 02, 2001

Identified By: NRC

Item Type: FIN Finding

### **Corrective Action Program**

The inspectors determined that the licensee was effective at identifying problems and entering them into the corrective action program. Generally, problems entered into the program were adequately evaluated and appropriate corrective actions were identified. Formal root cause evaluations and corrective actions for significant issues were thorough and detailed. Corrective actions were generally implemented in a timely manner commensurate with their safety significance. However, the licensee's efforts to upgrade the emergency operating procedures to incorporate revisions and other changes to the Combustion Engineering emergency procedure guidelines have not been timely. This issue had also been recently identified by the licensee and actions were initiated to more aggressively address the procedure changes. Interviews and other information indicated that plant employees were not reluctant to report nuclear safety issues.

Inspection Report# : [2001002\(pdf\)](#)

Last modified : July 22, 2002