UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

April 27, 2006

Florida Power and Light Company
ATTN: Mr. J. A. Stall, Senior Vice President
Nuclear and Chief Nuclear Officer
P. O. Box 14000
Juno Beach, FL 33408-0420

SUBJECT: ST. LUCIE NUCLEAR PLANT - NRC INTEGRATED INSPECTION REPORT 05000335/2006002 AND 05000389/2006002 (NOTICE OF ENFORCEMENT DISCRETION (NOED) 06-02-01)

Dear Mr. Stall:

On March 31, 2006, the US Nuclear Regulatory Commission (NRC) completed an inspection at your St. Lucie Plant Units 1 and 2. The enclosed integrated inspection report documents the inspection findings which were discussed on April 7, 2006, with Mr. Johnston and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

This report documents two inspector identified findings and one self-revealing finding, all of very low safety significance (Green). These findings were determined to involve violations of NRC requirements. However, because of the very low safety significance and because they were entered into your corrective action program, the NRC is treating these findings as non-cited violations (NCVs), in accordance with Section VI.A of the NRC's Enforcement Policy. If you contest these NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the St. Lucie facility.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's

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Sincerely,

/RA/

Joel T. Munday, Chief
Reactor Projects Branch 3
Division of Reactor Projects

Docket Nos.: 50-335, 50-389
License Nos.: DPR-67, NPF-16

Enclosure: Inspection Report 05000335/2006002, 05000389/2006002
w/Attachment - Supplemental Information

cc w/encl: (See page 3)

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Letter to Mr. J. A. Stall from Joel T. Munday dated April 27, 2006.

SUBJECT: ST. LUCIE NUCLEAR PLANT - NRC INTEGRATED INSPECTION REPORT 05000335/2006002 AND 05000389/2006002 (NOTICE OF ENFORCEMENT DISCRETION (NOED) 06-02-01)

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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.:	50-335, 50-389
License Nos.:	DPR-67, NPF-16
Report Nos.:	05000335/2006002, 05000389/2006002
Licensee:	Florida Power & Light Company (FPL)
Facility:	St. Lucie Nuclear Plant, Units 1 & 2
Location:	6351 South Ocean Drive Jensen Beach, FL 34957
Dates:	January 1 - March 31, 2006
Inspectors:	T. Hoeg, Senior Resident Inspector S. Sanchez, Resident Inspector R. Aiello, Senior Operations Engineer L. Miller, Senior Emergency Preparedness Inspector J. Kreh, Emergency Preparedness Inspector T. Morrissey, Senior Resident Inspector S. Vias, Senior Reactor Inspector L. Lake, Reactor Inspector
Approved by:	Joel Munday, Reactor Projects Branch 3 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000335/2006-002, 05000389/2006-002; 01/01/2006 - 03/31/2006; St. Lucie Nuclear Plant, Units 1 & 2; Operability Evaluations; PI&R Annual Sample Review.

The report covered a three month period of inspection by resident inspectors and several other inspectors from Region II. Three Green non-cited violations (NCVs) were identified. The significance of most findings is identified by their color (Green, White, Yellow, Red) using IMC 0609, “Significance Determination Process” (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, “Reactor Oversight Process,” Revision 3, dated July 2000.

A. NRC- Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

- Green. The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," for failure of the licensee to evaluate the potential consequences of unfiltered debris migrating from the reactor cavity sump to the Emergency Core Cooling System (ECCS) sump via floor drain and equipment drain lines located within the containment sump area. The licensee took prompt corrective action and modified the Unit 1 containment sump and performed an engineering analysis for both Units 1 and 2 which concluded the amount of debris that will bypass the screen is inconsequentially small as the debris will have settled outside the zone of flow influence surrounding the ECCS pump suction lines and there was reasonable assurance that the amount of debris swept into the suction lines would not prevent the ECCS from performing its design functions.

  The finding was more than minor because it affected the mitigating system cornerstone attribute of "Design Control." Specifically, the licensee did not account for the unfiltered debris flow from the reactor cavity sump following a Loss of Coolant Accident (LOCA) and Recirculation Actuation Signal (RAS) in its initial design. This finding was of very low safety significance and screened out using the SDP Phase 1 worksheet because the licensee's evaluation determined that the unfiltered flow from the reactor cavity sump would not prevent the ECCS from performing its design function. A contributing cause of the finding is related to the cross-cutting element of problem identification, specifically identification, in that the licensee had multiple opportunities to identify this issue during previous inspections and maintenance. (Section 1R15.1)

- Green. A Green self-revealing NCV was identified for the licensee failing to comply with 10 CFR Part 50, Appendix B, Criterion V, “Instructions, Procedures, and Drawings.” As a result of an inadequate procedure, a turbine driven auxiliary feed water (AFW) pump was returned to service without having its mechanical overspeed trip mechanism properly reset following a periodic surveillance test. The licensee performed a thorough root cause evaluation of the event and implemented interim corrective actions to prevent recurrence.

  This finding is greater than minor because the improper resetting and engagement of the overspeed trip mechanism is associated with the reactor mitigating systems cornerstone attribute of equipment performance and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent

undesirable consequences. In addition, if left uncorrected, this finding would result in a more significant safety concern. This finding was evaluated using the Significance Determination Process (SDP) and was determined to be of very low safety significance. A contributing cause of the finding is related to the cross-cutting element of human performance, specifically resources, in that the procedure was inadequate to accomplish the intended task. (Section 1R15.2)

- Green. The inspectors identified a Green NCV of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," for failure to take timely and effective corrective actions to prevent recurrence of Emergency Diesel Generator (EDG) air start motor failures. On January 31, 2006, while performing periodic maintenance on the 2B EDG, four of eight air start motors were found seized and unable to rotate. Disassembly of the failed air start motors revealed an excessive amount of internal rust and corrosion. The corrosion was responsible for binding the motors and indicated that the starting air supplied to the motors had a high moisture content. A nearly identical failure occurred on the 2A EDG in May of 2004, when four of eight air start motors did not rotate when tested. The only corrective action taken as a result of this failure was to replace the motors, and no analysis or apparent cause was performed.

  The finding was more than minor because if left uncorrected, could become a more significant safety concern by affecting additional air start motors and challenging performance of the EDG. The finding is also associated with the equipment performance attribute of the mitigating systems cornerstone. However, the finding was determined to be of very low safety significance in accordance with NRC Inspection Manual Chapter 0609, Appendix A, Attachment 1, SDP Phase 1 screening worksheet because it did not represent an actual loss of the EDG system safety function. A contributing cause of the finding was related to the corrective action aspect of the problem identification and resolution cross-cutting area. (Section 4OA2.2)

B. Licensee-Identified Violations

Violations of very low safety significance, which were identified by the licensee have been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's Corrective Action Program (CAP). These violations are listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

Unit 1 operated at or near full power the entire inspection report period.

Unit 2 operated at or near full power until January 20, 2006, when power was reduced and the reactor manually tripped due to a rapid increase in condenser waterbox conductivity. The unit was restarted on January 23 and returned to full power January 24, where it remained through the end of this inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R04 Equipment Alignment

a. Inspection Scope

.1 Partial Equipment Walkdowns

The inspectors conducted four partial equipment alignment verifications of the safety-related systems listed below to review the operability of required redundant trains or backup systems while the other trains were inoperable or out of service (OOS). The inspectors looked to identify any discrepancies that could impact the function of the system, and therefore, potentially increase risk. These inspections included reviews of applicable Technical Specifications (TS), plant lineup procedures, operating procedures, and/or piping and instrumentation drawings (P&ID), which were compared with observed equipment configurations. The inspectors also reviewed applicable reactor control operator (RCO) logs; equipment out of service and operator work around (OWA) lists; active temporary system alterations (TSA); and outstanding condition reports (CRs) regarding system alignment and operability.

- 2A EDG While 2B EDG OOS
- 2C Intake Cooling Water (ICW) While 2B ICW Pump OOS
- 2B EDG While 2A EDG OOS
- 1A Component Cooling Water (CCW) While 1B CCW Pump OOS

b. Findings

No findings of significance were identified.

1R05 Fire Protection

.1 Fire Protection - Tours

a. Inspection Scope

The inspectors conducted tours of the nine areas listed below to verify they conformed with procedure AP-1800022, Revision 38E, Fire Protection Plan. The inspectors specifically examined any transient combustibles in the areas and any ongoing hot work or other potential ignition sources. The inspectors also assessed whether the material condition, operational status, and operational lineup of fire

protection systems, equipment and features were in accordance with the Fire Protection Plan. Furthermore, the inspectors evaluated the use of any compensatory measures being performed in accordance with the licensee's procedures and Fire Protection Plan.

- 1A and 1B EDG Rooms
- 2B Electrical Penetration Room
- Unit 2 Vital Switchgear Rooms
- Unit 1 ICW Pumps Area
- Unit 2 Cable Spreading Room
- Unit 1 Turbine Lube Oil Spill
- Unit 2 Auxiliary Feedwater (AFW) Pumps Area
- Unit 2 CCW Pumps Area
- Unit 1 Main Control Room Fan Room

b. Findings

No findings of significance were identified.

.2 Fire Protection - Drill Observation

a. Inspection Scope

The inspectors observed a fire drill conducted in the 2A EDG Room on February 24, 2006. The drill was observed to evaluate the readiness of the plant fire brigade to fight fires. The inspectors verified that the licensee staff identified deficiencies, openly discussed them in a self-critical manner at the debrief, and took appropriate corrective actions as required. Specific attributes evaluated were: (1) proper wearing of turnout gear and self-contained breathing apparatus; (2) proper use and layout of fire hoses; (3) employment of appropriate fire fighting techniques; (4) sufficient fire fighting equipment brought to the scene; (5) effectiveness of command and control; (6) search for victims and propagation of the fire into other plant areas; (7) smoke removal operations; (8) utilization of pre-planned strategies; (9) adherence to the pre-planned drill scenario; and (10) drill objectives.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures

a. Inspection Scope

Internal Flooding

The inspectors reviewed UFSAR Section 3.4, Water Level (Flood) Design and UFSAR Table 3.2-1, Design Classification of Structures, System and Components for the Unit 2 safeguards room. Equipment affected by a flood in this room included High Pressure Safety Injection (HPSI), Low Pressure Safety Injection (LPSI), and Containment Spray (CS). The inspectors also reviewed procedure 2-ONP-24.01, Reactor Auxiliary Building Flooding, and verified certain actions required to be

taken could be accomplished as written. The inspectors reviewed the Unit 2 safeguards room sump level indication and control system preventative maintenance (PM) schedule. The inspectors also verified the CAP was being used to identify equipment issues that could be impacted by potential internal flooding.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program

.1 Resident Inspector Quarterly Review

a. Inspection Scope

On March 13, 2006, an inspector observed and assessed licensed operator actions during a simulator requalification evaluation. During this simulator evaluation, the inspector witnessed the operating crew respond to a loss of an instrument bus, followed by a loss of CCW to a reactor coolant pump (RCP) which resulted in a manual reactor trip, and ended with a steam generator tube leak. The inspector also reviewed simulator physical fidelity, especially regarding recent modifications implemented in the main control room. The inspector specifically evaluated the following attributes related to the operating crews' performance:

- clarity and formality of communication
- ability to take timely and conservative actions
- prioritizing, interpreting, and verifying alarms
- correct use and implementation of procedures, including alarm response procedures
- timely control board operation and manipulation, including high-risk operator actions
- oversight and direction provided by the shift supervisor, including the ability to identify and implement appropriate TS actions
- group dynamics involved in crew performance

b. Findings

No findings of significance were identified.

.2 Annual Operating Test Results

a. Inspection Scope

On August 8, 2005, the licensee completed the requalification annual operating tests, required to be given to all licensed operators by 10 CFR 55.59(a)(2). The inspectors performed an in-office review of the overall pass/fail results of the individual operating tests, and the crew simulator operating tests. These results were compared to the thresholds established in Manual Chapter 609 Appendix I, Operator Requalification Human Performance SDP.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

.1 Quarterly Evaluation

a. Inspection Scope

The inspectors reviewed the reliability and deficiencies associated with the two systems listed below, including associated CRs. The inspectors verified the licensee's maintenance effectiveness efforts met the requirements of 10 CFR 50.65 and Administrative Procedure ADM-17.08, Implementation of 10 CFR 50.65, The Maintenance Rule. The inspectors focused on the licensee's system functional failure determination, a(1) and a(2) classification determination, corrective actions, and the appropriateness of established performance goals and monitoring criteria. The inspectors also attended applicable expert panel meetings, and interviewed responsible engineers. The inspectors reviewed associated system health reports, system walkdown reports, and the licensee's goal setting and monitoring requirements.

- Unit 2 Electrical Equipment Room Heating Ventilation and Air Conditioning (HVAC)
- Unit 1 AFW System

b. Findings

No findings of significance were identified.

.2 Periodic Evaluation (Triennial)

a. Inspection Scope

The inspectors reviewed the licensee's Maintenance Rule (MR) periodic assessment, "St. Lucie Plant Maintenance Rule Periodic Assessment" dated December 17, 2004, while on-site the week of January 9-12, 2006. The report was issued to satisfy paragraph (a)(3) of 10 CFR 50.65, and covered the period April 1, 2003 through October 31, 2004, for the both units. The inspection was to determine the effectiveness of the assessment and that it was issued in accordance with the time requirement of the MR and included evaluation of: balancing reliability and unavailability, (a)(1) activities, (a)(2) activities, and use of industry operating experience. To verify compliance with 10 CFR 50.65, the inspectors reviewed selected MR activities covered by the assessment period for the following maintenance rule systems: 125 VDC; Instrument Air (IA); Main Feedwater; AFW; CCW; ICW; HPSI; EDGs; Structures; and CS. Specific procedures and documents reviewed are listed in the attachment to this report.

During the inspection, the inspectors reviewed selected plant work order data, the site guidance implementing procedure, discussed and reviewed relevant corrective action issues, and reviewed generic operations event data. Operational event information was evaluated by the inspectors in its use in MR functions. The inspectors attended an Expert Panel meeting while on site. The inspectors selected work orders, CRs, MR System Health Reports, MR assessments, and other corrective action documents of systems recently removed from 10 CFR 50.65 a(1) status and those in a(2) status for

some period to assess the justification for their status. The documents were compared to the site's MR program criteria, and the MR a(1) evaluations and rule related data bases.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors reviewed the risk assessments for the following six Systems, Structures, or Components (SSCs) or a combination thereof that were non-functional due to planned and/or emergent work. The inspectors also walked down and/or reviewed the scope of work to evaluate the effectiveness of licensee scheduling, configuration control, and management of online risk in accordance with 10 CFR 50.65(a)(4) and applicable program procedure ADM-17.16, Implementation of the Configuration Risk Management Program. The inspectors interviewed responsible Senior Reactor Operators on-shift, verified actual system configurations, and specifically evaluated results from the online risk monitor (OLRM) for the combinations of OOS risk significant SSCs listed below:

- 1C AFW Pump Tripped Unexpectedly
- 2C AFW Pump, 2A CS Pump, Fan HVS-5A All OOS (planned)
- 2B EDG, 2A Circulating Water Pump, 2B CS Pump, 2B LPSI and 2B HPSI Pumps All OOS (planned)
- 2B ICW Pump, 2B Charging Pump, 2B CS Pump All OOS (planned)
- 2B ICW Pump, 2A/B ECCS Pumps (one at a time) All OOS (planned)
- 1B ICW Pump and 1B CCW Pump OOS (planned)

b. Findings

No findings of significance were identified.

1R14 Non-Routine Events

a. Inspection Scope

For the non-routine event described below, the inspectors reviewed control room logs, plant computer data, and strip chart data to determine what occurred and the actions taken by the operators, to assess if their actions were in accordance with plant procedures.

- Unit 2 Condenser Waterbox High Conductivity Plant Shutdown

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the following six condition report interim dispositions and operability determinations to ensure that operability was properly supported and the affected Systems, Structures, and Components (SSC) remained available to perform its safety function with no increase in risk. The inspectors reviewed the applicable UFSAR, and associated supporting documents and procedures, and interviewed plant personnel to assess the adequacy of the interim disposition.

- CR 2006-2748 2B EDG Air Start Motor Failure
- CR 2006-4378 Failed Local Leak Rate Test (LLRT) on Mini-Purge Line
- CR 2006-5271 Valve FCV-07-1B Failure to Fully Close
- CR 2006-6137 Vent Stack Flow Monitor OOS
- CR 2006-0298 Unit 1 Turbine Driven AFW Pump Trip
- CR 2005-34698 Unit 2 ECCS Sump

b. Findings

.1 Containment Building ECCS Sump Design Control

Introduction: The inspectors identified a Green noncited violation of 10 CFR 50, Appendix B, Criterion III, "Design Control," related to the potential for unfiltered flow of liquid from the reactor cavity sump to the ECCS sump during the recirculation phase of reactor core cooling and containment cooling functions. Specifically, the inspectors determined that floor drains located within the screened ECCS sump areas were open and created a unfiltered flow path into the sump area. As a result, unfiltered debris from the reactor cavity sump area could migrate to the ECCS sump area following a loss of coolant accident (LOCA). This issue was applicable to both Units 1 and 2.

Description: On December 10, 2005, while performing a Unit 1 containment sump closeout inspection following a scheduled refueling outage, the inspectors identified a 3" diameter floor drain located in the ECCS sump area that was missing its cover grating. After further review the inspectors also noticed the floor drain assembly was an open pathway from the reactor cavity sump to the ECCS sump area and presented the potential for debris to migrate to the ECCS sump and potentially enter the ECCS pump suction header. The licensee entered this condition in their corrective action program as condition report 2005-34130 and performed an operability and extent of condition review for Unit 1 and Unit 2.

The design of the Unit 1 ECCS sump screens included an outer screen with a mesh of 0.5" and an inner screen over the ECCS pump suction pipe headers of 0.25" mesh. The licensee completed an evaluation and determined that the installation of the ECCS sump floor drain was an original plant design feature whose potential impact on sump operation was not previously considered nor identified. Further, the licensee's disposition for the as found condition concluded ECCS recirculation flow would create a differential pressure across the outer sump screen and induce approximately 17 gallons per minute (gpm) of flow from the reactor cavity sump through the floor drain line into the ECCS sump. Although the flow path was determined to be a credible debris flow path past the outer screen it was not expected to have a significant impact on the existing filtration capability of the ECCS sump screens

because the debris would not enter a zone of influence where it could be drawn into the ECCS suction piping. The inspector reviewed the licensee's evaluation and considered it adequate. As a conservative measure prior to entering Mode 4, the licensee installed a permanent design modification to the floor drain per maintenance support package (MSP) 05236. The subject MSP installed a stainless steel plate drilled with 5/16" holes over the floor drain opening to filter debris from entering the ECCS sump area from the reactor cavity sump.

The licensee wrote condition report 2005-34698 to evaluate Unit 2 for the same condition. Unit 2 Containment ECCS sump design is different from Unit 1 because it has only one screen vice an inner and outer screen. The Unit 2 ECCS sump design uses a fine mesh screen that is 0.135" x 0.135" x 0.04" diameter woven wire cloth. The licensee determined that a 3" floor drain and an additional elevated 4" equipment drain (Reactor Drain Tank Relief Valve Discharge Path) was located inside the Unit 2 ECCS sump screen and posed a similar potential to transport debris from the reactor cavity sump to the Unit 2 ECCS sump. The licensee concluded ECCS recirculation flow would create a differential pressure across the sump screen and induce flow from the reactor cavity sump through the floor drain and equipment drain into the ECCS sump of approximately 100 gpm combined flow. The licensee concluded this condition was outside of the original ECCS sump design basis but that the amount of debris that would bypass the screen is inconsequentially small as the debris will have settled prior to the RAS and that the zone of flow influence surrounding the ECCS pump suction lines would be unaffected and therefore, there was reasonable assurance that the amount of debris swept into the suction lines would not affect the ECCS from performing its design functions. The licensee considered the Unit 2 ECCS sump as operable but degraded and plans to implement a modification to eliminate the vulnerability during the next refueling outage scheduled for April 2006.

Analysis: The inspectors determined that the licensee having not accounted for the unfiltered debris flow from the reactor cavity sump following a LOCA and RAS in its initial design was a licensee performance deficiency. This condition did not conform to the plant design basis as described in the UFSAR in that the ECCS containment sump screen is to provide filtration of ECCS recirculation flow. This finding is greater than minor because it is associated with the reactor mitigating systems cornerstone attribute of design control and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. The licensee staff had to perform additional analyses and operability evaluations as a result of this condition. This finding was evaluated using the Phase 1 Screening worksheet of IMC 0609, Appendix A, Attachment 1 and it was determined that it was of very low safety significance since it was a design deficiency confirmed not to result in a loss of operability. A contributing cause of the finding is related to the cross-cutting element of problem identification and resolution, specifically identification, in that the licensee had multiple opportunities to identify this issue during previous inspections and maintenance.

Enforcement: 10 CFR Part 50, Appendix B, Criterion III, "Design Control", states in part, that measures shall be established for the identification and control of design interfaces and for coordination among participating organizations. Contrary to the above, the licensee failed to effectively identify and control the design interface configuration between the ECCS sump design and the reactor cavity sump design. As a result an unfiltered flow path was available for debris to enter the containment sump and potentially challenge the operability of the ECCS sump. This condition existed since original construction. However, because the failure to provide appropriate design control of the ECCS sumps was of very low safety significance and has been entered into the licensee's corrective action program

(CR 2005-34130, CR 2005-34698), this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000389/2006002-001, Failure to Provide Appropriate Design Control of the Containment ECCS Sumps.

.2 Failure to Reset the 1C AFW Pump Mechanical Over Speed Trip Linkage

Introduction: A self-revealing Green NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified after the licensee failed to fully reset the 1C AFW pump mechanical over speed linkage mechanism following surveillance testing and returning the system to service. The misaligned mechanism increased the probability that the turbine would trip if the pump would have been required to respond to an actual event.

Description: The licensee failed to properly reset the 1C AFW turbine driven pump mechanical over speed trip mechanism after surveillance testing performed on December 16, 2005. The misaligned trip mechanism was identified when the pump tripped during its surveillance test performed on January 5, 2006 while operating at normal speed. The mechanical trip mechanism used a weighted assembly attached to the outboard end of the turbine shaft to push a tappet nut assembly with centrifugal force if an over speed condition was reached. The tappet nut held the trip and throttle valve trip rod in position at standby and normal operating speeds. When the weighted portion of the mechanism extended and moved the tappet, the tappet nut and head lever disengaged, allowing spring pressure to move the trip rod which in turn closed the trip and throttle valve.

Licensee procedure 1-0700022, "Auxiliary Feedwater Normal Operation," Revision 47, specified to reset the mechanical over speed linkage for the 1C AFW pump when securing the pump following its operation without specifying an appropriate qualitative acceptance criteria to ensure the over speed linkage was actually reset. The tappet nut has a beveled edge which contacts a head lever cam to hold the trip rod reset under spring tension. The resetting of the over speed trip mechanism utilized the tappet nut and head lever cam surface contact area to overcome the trip rod spring tension. The licensee determined that the trip mechanism could be reset with only the slightest amount of surface contact area which could and did result in the mechanism tripping at normal operating speed. The licensee revised their procedures to provide appropriate acceptance criteria for resetting the trip mechanism including instructions to verify the top surface of the tappet nut was in line with the head lever to ensure full engagement of the contact surfaces to prevent recurrence.

Analysis: The licensee's failure to reset the trip mechanism properly following a surveillance procedure was a performance deficiency. This finding is greater than minor because the improper resetting and engagement of the overspeed trip mechanism is associated with the reactor mitigating systems cornerstone attribute of equipment performance and affected the cornerstone objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. In addition, if left uncorrected, this finding would result in a more significant safety concern. This finding was evaluated using the Significance Determination Process (SDP) Phase 1 Screening worksheet of IMC 0609, Appendix A, Attachment 1 and it was determined that a Phase 2 evaluation was required because the finding represented an actual loss of safety function of a single train for greater than its allowed outage time. The Phase 3 evaluation was performed for this event by a regional senior reactor analyst who determined that the likelihood of successful recovery of the system after it tripped due to this problem was greater than the generic value for operator recovery used in the Phase 2 SDP sheets. This reduced the calculated risk impact of the event to a value below

that determined in the Phase 2 analysis. As a result of this change, the Phase 3 analysis determined the finding's significance to be of very low safety significance. A contributing cause of the finding is related to the cross-cutting element of human performance, specifically resources in that the procedure was inadequate to accomplish the intended task.

Enforcement: 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings", required that procedures shall include appropriate qualitative acceptance criteria for determining that important activities have been satisfactorily performed. Contrary to the above, licensee operating procedure 1-0700022, Auxiliary Feedwater - Normal Operation, Revision 47, step 8.3.k required the operator to reset the mechanical over speed linkage, however contained no clarifying instructions on how to verify the mechanism was fully reset. As a result, on December 16, 2005, the 1C AFW pump was returned to service with its over speed trip mechanism not fully reset leading to an unexpected trip of the pump on January 5, 2006. Because the failure to provide appropriate qualitative acceptance criteria for resetting of the over speed device was of very low safety significance and has been entered into the licensee's corrective action program (CR 2006-0298), this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000389/2006002-00x, Failure to Provide Appropriate Qualitative Acceptance Criteria for Resetting the 1C AFW Pump Over Speed Trip Linkage. The licensee initiated condition report 2006-0298 to assess the condition and implement necessary corrective actions.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors witnessed and reviewed work order (WO) post maintenance test (PMT) activities of the six risk significant SSCs listed below. The following aspects were inspected: (1) Effect of testing on the plant recognized and addressed by control room and/or engineering personnel; (2) Testing consistent with maintenance performed; (3) Acceptance criteria demonstrated operational readiness consistent with design and licensing basis documents such as TS, UFSAR, and others; (4) Range, accuracy and calibration of test equipment; (5) Step by step compliance with test procedures, and applicable prerequisites satisfied; (6) Control of installed jumpers or lifted leads; (7) Removal of test equipment; and, (8) Restoration of SSCs to operable status. The inspectors also reviewed problems associated with PMTs that were identified and entered into the licensee's CAP.

- WO #35019374 2B EDG Overhaul
- WO #35029406 2A ECCS Ventilation Damper Lube/PM
- WO #35026507 2C AFW Pump Trip and Throttle/Linkage Lube
- WO #36007102 1A EDG Switch
- WO #34021853 2B ICW Pump Motor Overhaul
- WO # Mini-Purge Containment Isolation Valve FCV-25-36 Replacement

b. Findings

No findings of significance were identified.

1R20 Refueling and Other Outage Activities

a. Inspection Scope

On January 20, 2006, the inspectors observed the Unit 2 downpower and subsequent reactor shutdown and associated activities to verify compliance with applicable Mode 3 TS and operating procedures. The inspectors also attended status and planning meetings in the Outage Control Center, and reviewed plant restart schedules. The inspectors observed licensee processes for controlling work activities in accordance with their administrative procedures. The inspectors also reviewed applicable CRs prior to restart and resolution of post-shutdown equipment problems. On January 23 and 24, the inspectors observed startup of the Unit 2 reactor and subsequent power ascension to verify compliance with applicable TS and general operating procedures.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors witnessed portions of the following six surveillance tests and monitored test personnel conducting the tests as well as equipment performance, to verify that testing was being accomplished in accordance with applicable operating procedures. The test data was reviewed to verify it met TS, UFSAR, and/or licensee procedure requirements. The inspectors also verified that the testing effectively demonstrated the systems were operationally ready, capable of performing their intended safety functions, and that identified problems were entered into the licensee's CAP for resolution. The tests included one inservice test (IST).

- OP-1-0010125A, Data Sheet 1, Reactor Coolant System Water Inventory Balance
- OP-2-0400053, Engineered Safeguards Relay Test (A-Train only)
- OSP-1-0608001, 1A AFW Pump Code Run (Inservice Test)
- OSP-1-2200050A, 1A EDG Periodic Test and General Operating Instruction
- OP-2-1400050, RPS Monthly Functional
- OSP-2-2200050A, 2A EDG Periodic Test and General Operating Instruction

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors continued to periodically screen active TSAs for risk significant systems. The inspectors examined the TSA listed below, which included a review of the technical evaluation and its associated 10 CFR 50.59 screening. The TSA was compared to the system design basis

documentation to ensure that: (1) the modification did not adversely affect operability or availability of other systems; (2) the installation was consistent with applicable modification documents; and, (3) did not affect TS or require prior NRC approval. The inspectors also observed accessible equipment related to the TSA to verify configuration control was maintained.

- TSA 2-06-01, Installation of Temporary Pressure Gauge at Valve V3684 and Reversed Logic on Annunciator Q-17

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness (EP)

1EP1 Exercise Evaluation

a. Inspection Scope

Prior to the inspection activity, an in-office review was conducted of the exercise objectives and scenario submitted to the NRC to determine if the exercise would test major elements of the emergency plan as required by 10 CFR 50.47(b)(14). This inspection activity represents one sample on a biennial cycle.

The onsite inspection consisted of the following review and assessment:

- The adequacy of the licensee's performance in the biennial exercise was reviewed and assessed regarding the implementation of the risk-significant planning standards (RSPS) in 10 CFR 50.47 (b) (4), (5), (9), and (10), which are emergency classification, offsite notification, radiological assessment, and protective action recommendations, respectively.

- The overall adequacy of the licensee's emergency response facilities with regard to NUREG-0696, "Functional Criteria for Emergency Response Facilities" and Emergency Plan commitments. The facilities assessed were the Control Room simulator, Technical Support Center (TSC), Operational Support Center (OSC), and Emergency Operations Facility (EOF).

- Other performance areas besides the RSPS, such as the emergency response organization's (ERO) recognition of abnormal plant conditions, command and control, intra- and inter-facility communications, prioritization of mitigation activities, utilization of repair and field monitoring teams, interface with offsite agencies, and the overall implementation of the emergency plan and its implementing procedures.

- Past performance issues from NRC inspection reports and FEMA exercise reports to determine effectiveness of corrective actions as demonstrated during this exercise to ensure compliance with 10 CFR 50.47(b)(14).

- The post-exercise critique to evaluate the licensee's self-assessment of its ERO performance during the exercise and to ensure compliance with 10 CFR 50 Appendix E.IV.F.2.g

The inspectors reviewed various documents which are listed in the Attachment to this report.

b. Findings

No findings of significance were identified.

1EP4 Emergency Action Level (EAL) and Emergency Plan Changes

a. Inspection Scope

The inspectors review of revisions to the emergency plan, implementing procedures and EAL changes was performed for determining that changes had not decreased the effectiveness of the plan. The inspectors also evaluated the associated 10 CFR 50.54(q) reviews associated with non-administrative emergency plan, implementing procedures and EAL changes. The St. Lucie Nuclear Plant Emergency Plan, revisions 46 and 47 were reviewed.

The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 04, "Emergency Action Level and Emergency Plan Changes." The applicable planning standard, 10 CFR 50.47(b)(4) and its related 10 CFR 50, Appendix E requirements were used as reference criteria. The criteria contained in NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1, Regulatory Guide 1.101 were also used as references. This inspection activity represents one sample on an annual basis.

The inspectors reviewed various documents which are listed in the Attachment to this report.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation

a. Inspection Scope

On February 3, 2006, the inspectors observed a quarterly EP drill of the licensee's ERO for personnel in the simulator and TSC. During this drill the inspectors assessed licensee performance to determine if proper emergency classification, notification, and protective action recommendations were made in accordance with EP procedures. The inspectors evaluated the adequacy of the post drill critique conducted in the TSC.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors assessed the accuracy of the following PIs reported to the NRC. The inspectors reviewed the PI data of both Units 1 and 2 for the previous eight quarters (i.e., First Quarter 2004 through Fourth Quarter 2005). Monthly Operating Reports, Licensee Events Reports, RCO Chronological Logs, and CRs were reviewed to verify the reported PI data was complete and accurate.

- Unplanned Scrams per 7000 Critical Hours (Unit 1)
- Unplanned Scrams per 7000 Critical Hours (Unit 2)
- Unplanned Scrams With Loss of Normal Heat Removal (Unit 1)
- Unplanned Scrams With Loss of Normal Heat Removal (Unit 2)
- Unplanned Transients per 7000 Critical Hours (Unit 1)
- Unplanned Transients per 7000 Critical Hours (Unit 2)

The inspectors reviewed the licensee's procedure for developing the data for the EP PIs which are: (1) Drill and Exercise Performance (DEP); (2) ERO Drill Participation; and (3) Alert and Notification System (ANS) Reliability. The inspectors examined data reported to the NRC for the period 01/01/2005 to 12/31/2005. Procedural guidance for reporting PI information and records used by the licensee to identify potential PI occurrences were also reviewed. The inspectors verified the accuracy of the PI for ERO drill and exercise performance through review of a sample of drill and event records. The inspectors reviewed selected training records to verify the accuracy of the PI for ERO drill participation for personnel assigned to key positions in the ERO. The inspectors verified the accuracy of the PI for alert and notification system reliability through review of a sample of the licensee's records of periodic system tests. This inspection activity represents three samples on an annual basis. The inspectors reviewed various documents which are listed in the Attachment to this report.

The inspections were conducted in accordance with NRC Inspection Procedure 71151, "Performance Indicator Verification." The applicable planning standard, Nuclear Energy Institute (NEI) 99-02, Revision 3, "Regulatory Assessment Performance Indicator Guidelines," were used as reference criteria.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

.1 Review of Items Entered into the Corrective Action Program

a. Inspection Scope

As required by Inspection Procedure 71152, Identification and Resolution of Problems, and to help identify repetitive equipment failures or specific human performance issues for followup, the inspectors performed screening of all items entered into the licensee's CAP. This was accomplished by reviewing the description of each new CR and periodically attending CR oversight group meetings.

. 2 Annual Sample: 2A EDG Air Start Motors Found Seized-Up

a. Inspection Scope

The inspectors reviewed licensee actions when, during scheduled EDG maintenance, it was identified that four of eight air start motors were seized due to corrosion. CR 06-2748 was written identifying this condition. This CR also identified that this was a repeat occurrence as documented in CR 04-2750. The corrective actions associated with CR 04-2750 were reviewed by the inspectors.

b. Findings and Observations

Introduction: The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," during review of a recent issue with EDG air start motors. The inspectors determined that the licensee failed to take timely and effective corrective actions to prevent recurrence of EDG air start motor failures. In May of 2004, CR 04-2750 was written identifying an as-found condition where four of eight air start motors did not rotate during testing as part of some preventive maintenance. The only corrective actions taken were to replace the motors with new ones.

Description: On January 31, 2006, while performing periodic maintenance on the 2B EDG, four of eight air start motors were found seized-up. The condition was discovered while performing the Air Starter System Maintenance section of procedure 2-MMP-59.05, EDG 72 Month Preventive Maintenance. Disassembly of the failed air start motors revealed an excessive amount of internal rust and corrosion. The corrosion was responsible for binding the motors and indicated that the starting air supplied to the motors had a high moisture content. The Unit 2 EDG air start system is not equipped with an air dryer system.

As part of the extent of condition, the 2A EDG was functionally tested satisfactorily on January 31, 2006. Unit 1 EDGs have an installed air dryer system, however the 1A EDG has had its air dryer system OOS since September 2005. Therefore, the 1A EDG was functionally tested satisfactorily also on the evening of January 31. The 1B EDG was not tested, but a visual and hand-check of its air start motors was performed satisfactorily. The last time the 2B EDG was tested prior to finding the air start motors seized-up was on January 26, 2006, when it was fast started satisfactorily. This extent-of-condition testing indicated the EDGs were operable throughout the time the air start motors were degraded.

A nearly identical failure occurred on the 2A EDG in May of 2004, when four of eight air start motors did not rotate when tested. The only corrective action taken as a result of this failure was to replace the motors under WO #34009456. The CR was closed with no analysis or apparent cause performed.

Analysis: The inspectors determined that the licensee failed to take timely and adequate corrective actions to prevent recurrence of failures related to EDG air start motors. The finding was more than minor because if left uncorrected, could become a more significant safety concern by affecting additional air start motors and challenging performance of the EDG. The finding is also associated with the equipment performance attribute of the mitigating systems cornerstone. However, the finding was determined to be of very low safety significance in accordance with NRC Inspection Manual Chapter 0609, Appendix A, Attachment 1, SDP Phase 1 screening worksheet because it did not represent an actual loss of the EDG system safety function. The inspectors also determined that the cause of this finding was related to the corrective action aspect of the problem identification and resolution cross-cutting area.

Enforcement: Criterion XVI of 10 CFR Part 50, Appendix B, states in part, that "Measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected." Contrary to this requirement, the licensee failed to take timely and adequate corrective actions for failures related to EDG air start motors. Specifically, in 2004, EDG air start motors were found seized and no analysis or evaluation was performed to determine the cause to prevent the failures from recurring.

The licensee entered the issue into their CAP as CR 06-6293. Because the licensee has entered the issue into their CAP and the finding is of very low safety significance (Green), this violation of 10 CFR 50, Appendix B, Criterion XVI, is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000389/2006002-03: Failure to Take Adequate Corrective Actions for EDG Air Start Motor Failures.

4OA3 Event Followup

.1 (Open) Notice of Enforcement Discretion (NOED) from Technical Specification (TS) 3.6.1.7 Required Action C for Unit 2 Containment Ventilation System

On February 14, 2006, at 4:10 p.m; the licensee entered a 24 hour required action statement per Technical Specification 3.6.1.7 Action c, "Containment Ventilation System," for a failed measured local leak rate test (LLRT) of the containment purge supply inboard isolation valve FCV-25-36. The surveillance being performed was required by TS surveillance 4.6.1.7.4. The required action was to restore the valve to an operable status within 24 hours or be in hot standby within the next 6 hours and in cold shutdown within the following 30 hours. The licensee determined the valve could not be restored within 24 hours and requested enforcement discretion to allow the use of a blind flange in place of closing valve FCV-25-36 to satisfy TS 3.6.1.7 Action c. On February 15, 2006, at 7:20 a.m; the licensee removed valve FCV-25-36 from the system and replaced it with an engineered blind flange. The post installation LLRT was completed satisfactorily at 10:50 a.m. on February 15, 2006. On February 15, 2006, at 2:00 p.m; the NRC verbally granted discretion from TS 3.6.1.7 Action c. The installation of the blind flange ensured the penetration was capable of performing its passive pressure retaining safety function. The licensee initiated condition report 2006-4378 to document the

noncompliance. At the close of this inspection period the inspectors had not yet completed all inspection activities associated with this NOED. Therefore this item is identified as unresolved item, URI 05000389/2006-02-04, Notice of Enforcement Discretion for Containment Ventilation System Purge Valve Failure.

4OA6 Meetings

.1 Exit Meeting Summary

On April 7, 2006, the resident inspectors presented the inspection results to Mr. Gordon Johnston and other members of his staff, who acknowledged the findings. The inspectors asked the licensee whether any of the material examined during the inspection should be considered proprietary. No proprietary information was identified.

.2 Annual Assessment Meeting Summary

On April 18, 2006, the NRC's Senior Resident Inspector and Resident Inspector assigned to the St. Lucie Nuclear Plant, as well as the Region II Public Affairs Officer, met with Florida Power and Light Co. (FP&L) to discuss the NRC's Reactor Oversight Process (ROP) and the St. Lucie annual assessment of safety performance for the period of January 1, 2005 - December 31, 2005. The major topics addressed were: the NRC 's assessment program, the results of the St. Lucie Units 1 and 2 assessment, and future NRC inspection activities. Attendees included FP&L management and site staff.

This meeting was open to the public. The NRC's presentation material used for the discussion is available from the NRC's document system (ADAMS) as accession number ML061090035. The licensee did not have a handout presented at the meeting. ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

4OA7 Licensee Identified Violations

The following violations of very low safety significance (Green) were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as NCV's.

- Unit 2 Technical Specification 3.4.3 requires that pressurizer water be maintained between 27% and 68% indicated level. Contrary to this, on March 8, 2006, pressurizer water level was allowed to exceed 68% by approximately 1% indicated level on one instrument for about 10 minutes. This issue has been captured in the licensee's CAP as CR 06-7033. The finding is of very low safety significance because it does not represent an actual loss of a safety system function.

ATTACHMENT: SUPPLEMENTAL INFORMATION

Supplemental Information

KEY POINTS OF CONTACT

Licensee Personnel

L. Neely, Work Control Manager
B. Jacques, Security Manager
C. Buehrig, Maintenance Rule Coordinator
D. Calabrese, Emergency Preparedness Supervisor
W. Parks, Acting Operations Manager
E. Armando, Site Quality Manager
L. Edwards, Training Manager
K. Frehafer, Licensing Engineer
R. Hughes, Site Engineering Manager
M. Danford, Acting Performance Improvement Department Manager
C. Costanzo, Acting Plant General Manager
G. Johnston, Acting Site Vice President
R. McDaniel, Fire Protection Supervisor
W. Nuruberger, Chemistry Supervisor
D. Allbrition, Acting Operations Supervisor
T. Patterson, Licensing Manager
J. Porter, Operations Support Engineering Manager
G. Swider, Systems Engineering Manager
J. Tucker, Maintenance Manager
S. Wisla, Health Physics Manager
R. Walker, Emergency Preparedness Coordinator
D. Cecchett, Licensing Engineer
D. Mothena, Emergency Preparedness/Juno
M. Gilmore, Emergency Preparedness/Juno
M. Delowery, Projects Manager
D. DuBey, Human Resources
J. Halverson, Maintenance Supervisor

NRC Personnel

B. Moroney, NRR Senior Project Manager
S. Ninh, Region II Senior Project Engineer

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Open/Closed

05000335/2006002-01	NCV	Failure to Reset the 1C AFW Pump Mechanical Over Speed Trip Linkage (Section 1R15).

05000335, 389/2006002-02	NCV	Unit 1 and 2 Containment Building ECCS Sump Design Control (Section 1R15).
05000389/2006002-03	NCV	Failure to Take Adequate Corrective Actions for EDG Air Start Motor Failures (Section 4OA2).

Opened

05000389/2006-02-04	URI	Notice of Enforcement Discretion for Containment Ventilation System Purge Valve Failure (Section 40A3).

Discussed

None

LIST OF DOCUMENTS REVIEWED

Section 1R12 (Triennial) Documents Reviewed

Procedures
SCEG-003, Guideline for the Condition Survey of Structures and Supports by Plant Personnel, Rev. 2A
SCEG-004, Guideline for Maintenance Rule Scoping, Risk Significant Determination and Expert Panel Activities, Rev. 0
SCEG-006, Monitoring System, Structure or Component Performance Under the Maintenance Rule Program, Rev. 2
SCEG-008, Guideline for Maintenance Rule Periodic Assessments, Rev. 0
SCEG-009, Guideline for Maintenance Rule Structural Condition Monitoring by a Qualified Inspector, Rev. 1A
SCEG-018, System and Program Health Reports, Rev. 12
SCEG-019, System and Component Engineering Walkdown Program, Rev. 4A
ADM-17.08, Implementation of 10CFR50.65, The Maintenance Rule, Rev. 17
ADM-17.16, Implementation of the Configuration Risk Management Program, Rev. 8
AP-10526, Outage Risk Assessment and Control, Rev. 24
NAP-407, Equipment Reliability, Rev. 1

Condition Reports (CRs)
CR 2005-1865MR Periodic Assessment April 2003 through October 2004, 10CFR 50.65 (a)(3)
CR 2004-11533 Structures MR walkdowns are overdue
CR 2004-15754 Track update of risk significance input for Maintenance Rule
CR 2004-4881Identify MR risk significance at the functional Level within the systems
CR 2004-6126Missed opportunity for Onsite Nuclear Assurance to identify issues with the MR before the NRC identified the concern
CR 2004-17172 Goal setting and monitoring Figure 4 for Unit #1 Containment Spray
CR 2005-12941 C CCW Pump exceeds the MR Unavailability Limit of 200 hours/year/pump
CR 2005-2173 MRFF Determinations are Not Being Made in a Timely Manner in the SITRIS Software
CR 2005-4685The MRFF section is not being activated on all of the Appropriate Condition Reports

CR 2005-9945The MRFF Section was never activated for CR 2004-7829
CR 2005-13860 Unit 1 & 2 SG tubes have not been Explicitly Included as a Key Component for Monitoring under the MR Scoping
CR 2005-19039 Schedule Not Completed for MR a(1) System Figure 4 Corrective Actions for U2 125 VDC System
CR 2005-30980 Risk Significant MR SSCs negative trend in managing unavailability hours

System Health Reports
125 VDC (System 50), Unit 2, (a)(1)
Instrument Air (IA) (System 18b), Unit 2, (a)(1)
Main Feedwater (System 09a), Unit 2, (a)(1)
Aux Feedwater (System 09b), Unit 1, (a)(1)
Component Cooling Water (CCW) (System 14), Unit 1, (a)(1)
Intake Cooling Water (ICW) (System 21a), Unit 1, (a)(1)
High Pressure Safety Injection (HPSI) (System 03a)
Emergency Diesel Generators (EDGs) (System 59)
Structures (System 58)
Containment Spray (System 07)

Expert Panel Minutes
EP 2005-15, 12/1/2005
EP 2005-14, 11/9/2005
EP 2005-13, 10/13/2005
EP 2005-12, 9/15/2005
EP 2005-11, 9/8/2005
EP 2005-10, 8/25/2005
EP 2005-09, 6/30/2005
EP 2005-08, 5/19/2005

Other
MRule Periodic Assessment Action Plan CR 2005-1865
PSL Functional Failure Trends (1/03-11/05)
Maintenance Preventable Functional Failures (2000-2005)
Attended the Expert Panel Meeting January 12, 2006

Section 1EP1: Exercise Evaluation

Plans and Procedures
EPIP-04, Activation and Operation of the Technical Support Center, Rev. 16
EPIP-05, Activation and Operation of the Operational Support Center, Rev. 14
EPIP-06, Activation and Operation of the Emergency Operations Facility, Rev. 12
EPIP-12, Maintaining Emergency Preparedness - Radiological Emergency Plan Training, Rev. 17
EPIP-13, Maintaining Emergency Preparedness - Emergency Exercises, Drills, Tests and Evaluations, Rev. 9
HP-200, Health Physics Procedure, Rev. 21
COP-06.06, Guidelines for Collecting Post Accident Samples, Rev. 4

Section 1EP4: Emergency Action Level (EAL) and Emergency Plan Changes

Plans and Procedures
Change Packages for the following:
St. Lucie Emergency Plan, Rev. 46
St. Lucie Emergency Plan, Rev. 47
EPIP-08, Off-site Notifications and Protective Action Recommendations, Rev. 8, Rev. 9, Rev. 10
EPIP-01, Classification of Emergencies, Rev. 9, Rev. 10
EPIP-02, Duties and Responsibilities of the Emergency Coordinator, Rev. 16, Rev. 17, Rev. 18, Rev. 19
EPIP-03, Emergency Response Organization Notification / Staff Augmentation, Rev. 12, Rev. 13

Section 4OA1: Performance Indicator (PI) Verification

Procedures and Guidelines
PSG-04.01, Conduct of Emergency Preparedness, Rev. 18A
ADM-25.02, NRC Performance Indicators, Rev. 15

Records and Data
Documentation package (scenario/time line/event notification forms/critique report) for ERO drill on 05/24/2005
Documentation of DEP opportunities in Licensed Operator simulator evaluations on 07/12/2005, 07/13/2005, 07/19/2005, 07/20/2005, 08/02/2005, 08/03/2005, 08/10/2005
Records of drill and exercise participation by selected ERO personnel, 2004-2005
Siren test records for 2005

LIST OF ACRONYMS USED

AFW	Auxiliary Feedwater System
ANS	Alert and Notification System
CAP	Corrective Action Program
CCW	Component Cooling Water
CRs	Condition Reports
CS	Containment Spray
DEP	Drill and Exercise Performance
EAL	Emergency Action Level
ECCS	Emergency Core Cooling System
EDG	Emergency Diesel Generator
EOF	Emergency Operations Facility
EP	Emergency Preparedness
ERO	Emergency Response Organization
FCV	Flow Control Valve
GPM	Gallons Per Minute
HPSI	High Pressure Safety Injection
HVAC	Heating Ventilation and Air Conditioning
IA	Instrument Air
ICW	Intake Cooling Water System
IST	Inservice Test
LLRT	Local Leak Rate Test
LOCA	Loss of Coolant Accident
LPSI	Low Pressure Safety Injection
MR	Maintenance Rule
MSP	Maintenance Support Package
NCVs	Non-cited Violations
NEI	Nuclear Energy Institute
OOS	Out of Service
OSC	Operation Support Center
OWA	Operator Workaround
PI	Performance Indicator
PARs	Publicly Available Records
P&ID	Piping and Instrument Drawings
PMT	Post Maintenance Test
RAC	Recirculation Actuation Signal
RCO	Reactor Control Operator
RCP	Reactor Coolant Pump
RSPS	Risk-Significant Planning Standards
SDP	Significance Determination Process
SSCs	Systems, Structures, and Components
TS	Technical Specification
TSA	Temporary System Alterations
TSC	Technical Support Center
WO	Work Order