



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

Report Nos.: 50-335/84-13 and 50-389/84-15

Licensee: Florida Power and Light Company  
9250 West Flagler Street  
Miami, FL 33102

Docket Nos.: 50-335 and 50-389

License Nos.: DPR-67 and NPF-16

Facility Name: St. Lucie 1 and 2

Inspection Dates: April 11 - May 11, 1984

Inspection at St. Lucie site near Ft. Pierce, Florida

Inspectors:	<u>S. A. Elrod</u>	<u>6/6/84</u>
	C. D. Feierabend, Senior Resident Inspector	Date Signed
	<u>S. A. Elrod</u>	<u>6/6/84</u>
	H. E. Bibb, Resident Inspector	Date Signed
Approved by:	<u>S. A. Elrod</u>	<u>6/6/84</u>
	S. A. Elrod, Section Chief	Date Signed
	Division of Reactor Projects	

SUMMARY

Areas Inspected:

This routine resident inspection involved 165 resident inspector hours onsite in the areas of plant operation, surveillance observation, maintenance observation, Engineered Safety Systems, Headquarters requests and Inspection and Enforcement Circulars (IEC).

Results: No items of noncompliance or deviations were identified.

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## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*C. M. Wethy, Plant Manager
- J. H. Barrow, Operations Superintendent
- \*T. A. Dillard, Maintenance Superintendent
- D. A. Sager, Operations Supervisor
- N. G. Roos, Quality Control Supervisor
- C. F. Leppla, Instrument & Control Supervisor
- R. R. Jennings, Technical Department Supervisor
- C. A. Pell, Reactor Engineering Supervisor
- H. F. Buchanan, Health Physics Supervisor
- J. G. West, Security Supervisor
- L. W. Pearce, Nuclear Plant Supervisor
- M. Altermatt, Nuclear Plant Supervisor
- F. G. Davis, Nuclear Plant Supervisor
- C. L. Burton, Nuclear Plant Supervisor
- A. W. Bailey, Quality Assurance Supervisor
- D. A. Brodnick, Company Nuclear Review Board
- \*J. J. Walls, Quality Control Engineer

Other licensee employees contacted included technicians, operators, Shift Technical Advisors, and security force members.

#### \*Attended exit interview

### 2. Exit Interview

The inspectors attended entrance and exit interviews and conducted by Region II inspectors G. A. Belisle and K. Davenport.

The inspector conducted interim interviews during the inspection period and conducted an exit interview at the conclusion of the inspection period. The inspector discussed the scope of the inspection and stated that no potential violations or deviations were identified.

### 3. Licensee Action on Previous Inspection Findings

Not inspected.

### 4. Unresolved Items

Unresolved items were not identified during this inspection.

## 5. General Status

Unit 2 continued full power operation throughout the inspection period. Unit 1 attained criticality on April 27, after an extended refueling and maintenance outage. After completing low power physics testing the unit was shutdown to replace a failed reactor coolant pump seal. Additionally, the licensee completed eddy current testing of several steam generator tubes that had inadvertently been missed during recent testing. Preparations for restart are in progress.

## 6. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the inspection period. The inspector verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of the reactor, auxiliary and turbine buildings were conducted to observe plant equipment conditions, including potential fire hazards, fluid leaks, and excessive vibrations and to verify that maintenance requests had been initiated for equipment in need of maintenance. The inspector, by observation and direct interview, verified that the physical security plan was being implemented in accordance with the station security plan.

No violations or deviations were identified in this area.

## 7. Surveillance Observation

During the inspection period, the inspector verified plant operational compliance with at least 16 different TS requirements. Typical of these was confirmation of compliance with the TS for Reactor Coolant system leakage, linear heat rate, reactor protection instrumentation, safety injection tanks, Containment Systems, Auxiliary Feedwater system, and AC and DC sources.

The inspector verified that testing was performed in accordance with adequate procedures, test instrumentation was calibrated, limiting conditions for operation (LCO) were met, removal and restoration of the affected components were properly accomplished, test results met requirements and were reviewed by personnel other than the individual directing the test, and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

The inspector personally observed portions of I&C procedure 2-1400050, revision 5, Reactor Protection System - Monthly Functional Test.

In addition, during this inspection period, the inspector conducted annual inspection module 61700, Surveillance Procedures and Records. This module is performed to determine whether the surveillance of safety-related systems and components is being conducted in accordance with approved procedures as

required by the TS, inservice inspection (ISI), and inservice testing (IST) programs for pumps and valves, and NRR-approved fire protection/prevention program.

Technical Specification surveillances for the following areas were reviewed:

- a. Reactivity Control and Power Distribution.
- b. Instrumentation
- c. Reactor Coolant system.
- d. Emergency Core Cooling system (LWR) or Liner Cooling system (HTGR).
- e. Containment systems.
- f. Plant and Electrical Power systems.
- g. Fire Protection/Prevention systems.
- h. IST program.

No violations or deviations were identified in this area.

#### 8. Maintenance Observation

Station maintenance activities of selected safety-related systems and components were observed/reviewed to ascertain that they were conducted in accordance with requirements. The following items were considered during this review: that LCO were met; activities were accomplished using approved procedures; functional testing and/or calibrations were performed prior to returning components or systems to service; quality control records were maintained; activities were accomplished by qualified personnel; parts and materials used were properly certified; and radiological controls were implemented as required. Work requests were reviewed to determine status of outstanding jobs and to assure that priority is assigned to safety-related equipment maintenance which may affect system performance.

The inspector observed maintenance activities following testing of the main steam safety valves. This included confirming that cotter pins were installed.

The inspector observed portions of the testing and replacement of a new seal on the 1B2 reactor coolant pump in accordance with plant work order No. 3925. The following procedures were used to perform the work:

- M-0008, Revision 7 - Reactor Coolant Pump Seal Removal
- M-0009, Revision 7 - Reactor Coolant Pump Seal Installation
- M-0010, Revision 5 - Reactor Coolant Pump Seal Cartridge Assembly Flow Test

M-0042, Revision 1 - Use of M&TE on Nuclear Safety Related Equipment  
by Mechanical Maintenance  
QI-11-PR/PSL-2, Revision 9 - Mechanical Test Control

No violations or deviations were identified in this area.

9. Followup on Headquarters Request

a. 480 Volt Power Cables

The inspector confirmed that the licensee has replaced the three conductor #2 AWG (1-3/C #2) 480 Volt power cables as committed to in licensee letter L-83-142 dated March 11, 1983. The inspector reviewed Design Change P/CM 240-183, including Construction Work Order 6247, which documented installation of qualified replacement cables.

b. Unit 2 Snubber Inspection

The inspector confirmed that the licensee had inspected the two mechanical snubbers, Nos. 129 and 130, that had been identified as inaccessible during power operation. The inspection was completed on April 9 and 10, using licensee procedure QI 18-2.

No violations or deviations were identified in this area.

10. Followup of Previously Identified Items

a. (Closed - Unit 1) RI-82-02 Total Loss of AC Power

The inspector reviewed licensee procedures 1-0030143 and 2-0030143, Total Loss of AC Power, and determined that the licensee had addressed the issue.

b. (Closed - Unit 1) IFI 335/81-25-01 Review of Results of Integrated - Engineered Safety Function (ESF) Test

The inspector reviewed the results of the most recent ESF Test during a previous inspection. IE Report No. 335/84-08.

c. (Closed - Unit 2) IFI 389/83-43-03 Total Loss of AC power. (See paragraph 10.a above)

No violations or deviations were identified in this area.

11. Engineered Safety System Verification

The inspectors verified operability of the Auxiliary Feedwater systems for both units by performing walkdowns of control boards, electrical power supplies, instrumentation, piping and valve positions. During the walkdown the inspectors observed that plant cleanliness was acceptable and that locked valves were controlled in accordance with licensee procedures.

No violations or deviations were identified in this area.

12. Inspection and Enforcement Circulars (IEC)

The inspector reviewed licensee actions in response to the following IECs.

- a. (Closed - Unit 2) IEC 77-11, Leakage of Containment Isolation Valves with Resilient Seats.

Licensee receipt and review was documented in a previous Inspection Report 50-335/77-19.

- b. (Closed - Unit 1) IEC 80-04, Securing of Threaded Locking Devices on Safety Related Equipment

The licensee completed review and upgraded procedures as required. This was reviewed for Unit 2 during a previous Inspection Report 50-339/80-03.

- c. (Closed - Unit 2) IEC 81-05 Self Aligning Rod End Bushings for Pipe Supports

A previous Inspection Report 50-335/82-18 documented review and confirmation that this inspection requirement had been included in the licensee's NDE Manual.