



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

Docket/Report Nos. 50-335/84-10 and 50-389/84-10

Licensee: Florida Power and Light Company  
9250 West Flagler Street  
Miami, FL 33101

Facility Name: St. Lucie, Units 1 and 2

Inspection at: St. Lucie Site, near Ft. Pierce, FL

Inspectors:

*[Signature]*  
C. D. Fejerabend

4/27/84

Date Signed

*[Signature]*  
H. E. Bibb

4/27/84

Date Signed

Approved by:

*[Signature]*  
S. A. Elrod, Section Chief  
Division of Reactor Projects

4/27/84

Date Signed

SUMMARY

Inspection on March 11 - April 10, 1984

Areas Inspected

This routine, resident inspection involved 201 inspector-hours on site in the areas of plant operation, maintenance observation, IE Bulletins, onsite review committee, offsite review committee, onsite organization and administration, design changes, fire protection, refueling activities, followup on TMI action plan items and followup on previous inspection findings.

Results

No violations or deviations were identified.

## 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
- P. L. Fincher, Training Supervisor
- R. R. Jennings, Technical Department Supervisor
- C. A. Pell, Reactor Engineering Supervisor
- H. F. Buchanan, Health Physics Supervisor
- J. G. West, Security Supervisor
- J. Barrow, Fire Prevention Coordinator
- 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

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 conducted by Region II inspection team leader G. A. Belisle.

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

Persons indicated with an asterisk (\*) in paragraph 1 above attended one or more of the interviews.

### 3. Licensee Action on Previous Enforcement Matters

- a. (Closed - Unit 1) Violation 335/83-71-01: Failure to control plant procedures in the control room. The inspector reviewed the Notice of Violation and FP&L's letter of response, L-84-60 dated March 9, 1984. Subsequent inspections have revealed no further instances of loss of control. This area will continue to be reviewed periodically during routine monthly inspections.
- b. (Closed - Unit 2) Violation 389/83-69-02: Failure to document the condition of oil on two plant work orders as required by M-0018-PM-04805. Subsequent reviews by the inspector indicate an increased awareness in this area.
- c. (Closed - Unit 2) Unresolved Item 389/83-15-01: Facility review group and company nuclear review board charters. The inspection found that the current revisions to the administrative procedures met Unit 2 Technical Specification requirements (Paragraph 10 and 11).

### 4. Unresolved Items

Unresolved items were not identified during this inspection.

### 5. General Status

Unit 2 operated by power throughout the reporting period. Unit 1 maintenance and refueling activities continued. Steam generator tube eddy current testing was expanded to 100% extending the outage schedule, with startup now scheduled for the fourth week in April.

An Institute of Nuclear Power Operations (INPO) evaluation team arrived on site April 2 for a scheduled evaluation of station activities.

### 6. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussion with control room operators during the report 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. 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: the limiting conditions for operations 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.

No violations or deviations were identified in this area.

## 8. IE Bulletins

- a. (Closed - Unit 1) IEB No. 83-08 Electrical circuit breakers with undervoltage trip.

Licensee review of all safety related breakers found none other than those in reactor trip system.

- b. (Open - Unit 2) IEB No. 83-08

Licensee review similar to that for Unit 1 identified five breakers with undervoltage trips. They have been identified in licensee response, letter L-84-83, dated March 30, 1984.

No violations or deviations were identified in this area.

## 9. Onsite Review Committee (40700)

On March 2, 1984 the inspectors attended a meeting of the Facility Review Group (FRG) to ascertain whether the onsite review functions were being conducted in accordance with the Technical Specifications and other regulatory requirements.

The inspectors confirmed through attendance at this meeting and review of the minutes from 15 other meetings that the Technical Specifications were being met in areas such as committee membership, qualifications, meeting frequency, quorum and review material.

No violations or deviations were identified in this area.

## 10. Off-site Review Committee (40701)

On March 21, 1984, the inspectors visited FP&L corporate offices in Juno Beach to conduct an audit of the activities of the Company Nuclear Review Board (CNRB) and ascertain that they complied with the Technical Specifications and ANSI-18.7-1976. Full compliance was found in all areas, with one exception. Technical Specification paragraphs 6.5.2.10.a. and b. specify a 14 day limit between CNRB meeting date and report date, and subcommittee review date and report date respectively. Two exceptions to this were found; CNRB meeting #243 (19 day lapse), and CNRB standing review committee meeting of 25 October 1983 (48 day lapse). Nine other reports met the 14 day limit. The inspector judged that these two exceptions did not adversely impact the program and were not indicative of any serious program laxness.

No violations or deviations were identified in this area.

## 11. Onsite Organization &amp; Administration (36700)

The inspector conducted a review of the licensee's organization to verify conformance with the Technical Specifications. Areas reviewed included organizational structure, personnel qualifications, licensed operators, overtime usage, lines of authority, plant administrative procedures and changes in plant personnel. A minor discrepancy was noted in that the Unit 2 Technical Specifications require that: "Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Plant Manager or his designee to assure that excessive hours have not been assigned," but the plant procedures contain no such provisions. The operations supervisor committed to inserting a surveillance requirement for monthly review of licensed operator overtime assignments. This is inspector followup item 389/84-10-01.

No violations or deviations were identified in this area.

## 12. Design Changes and Modifications (37700)

The inspector reviewed several Plant Changes/Modifications (PC/M) to verify conformance with the requirements of the Technical Specifications and 10 CFR 50.59. Areas reviewed included procedure control and compliance, testing and test results, adequate safety committee review and approval, as-built drawing update and proper work control. The following PC/M's were audited:

PC/M        279-283  
               ITT Barton Transmitter Replacement with Rosemount Model 1153D Transmitters

PC/M        355-183  
               Thermal Shield Removal - Phase III



PC/M 292-183  
Safety Injection Tank Drain Valve Soft Seat Installation

PC/M 179-283  
Auxiliary Feedwater Motor Operated Valves

No violations or deviations were identified in this area.

13. Fire Protection (64704)

During this inspection period the inspector conducted the necessary reviews of procedures and walkdowns of equipment to ascertain whether the licensee was adequately implementing a program for fire protection and prevention that is in conformance with regulatory requirements, commitments in the license application and industry guides and standards.

Typical of the areas investigated are: control of combustible materials, welding and cutting operations, general housekeeping practices, fire brigade training and drills, fire brigade equipment use and storage, operability of fire protection equipment, and fire protection program procedures. It was noted by the inspector that the solvent which caused the fire reported in last month's inspection report (50-335/84-08) had been removed from the site and replaced by a non-flammable solvent.

No violations or deviations were identified in this area.

14. Refueling Activities

During this inspection period the inspector continued to monitor refueling operations. In particular, close attention was paid to restoration of systems which had been disturbed during this exceptionally long outage in order to ascertain that systems were being returned to an operable status in accordance with approved procedures. Walkdowns of valve lineups were conducted for two major safety-related systems - high pressure/low pressure safety injection (OP-1-0410020, Rev. 19) and auxiliary feedwater (OP-1-0700022, Rev. 11). The "C" auxiliary feedwater pump was found to be out of service and this area will be re-inspected prior to plant startup. Other procedures followed closely were OP-1-1600022, Rev. 12 Unit 1-Refueling Operation and OP-1-1600023, Rev. 14 - Refueling Sequencing Guidelines.

No violations or deviations were identified in this area.

15. Licensee Actions Taken on TMI Action Plan (TAP) Items

a. (Closed - Unit 2) TAP 1.A.1.1. Shift Technical Advisor (STA)

The inspectors verified implementation of the STA program during a previous inspection, report No. 335/82-02. The STA program applies to both units.

- b. (Closed - Unit 2) TAP 1.A.1.1.2 STA Training

This item was inspected and closed as Safety Evaluation Report (SER) No 13.1.2.2 (3) in previous inspection report No. 339/82-62.

- c. (Closed - Unit 2) TAP 1.B.1.2.1 Independent Safety Engineering Group (ISEG)

The license established an ISEG prior to licensing Unit 2. This was closed as SER item 13.4.3 in a previous inspection report, No. 339/83-37. Requirements and qualifications for ISEG members are now included in the plant Technical Specifications.

- d. (Closed Unit 2) TAP 1.C.1.1 Short Term Accident Procedures

The inspector reviewed the licensee's off normal and emergency procedures to confirm that the procedures address the short term accident concerns. Based on this review, the NRR review documented in SER supplement 2 and in previous inspection report No. 339/83-52, this item is considered resolved.

- e. (Open Units 1 and 2) TAP 1.C.1.2.B and TAP 1.C.1.3.B

Revise emergency operating procedures (EOP's) - Licensee letter L-84-32, dated February 13, 1984, provides justification for implementation of upgrade EOPs. The upgraded EOP's are now being revised to address NRR safety evaluation of the CE owners group guidelines.

- f. (Closed Unit 2) TAP 1.C.6 Procedures for verifying correct performance of operating activities.

This item was previously inspected and closed for Unit 1 in report No. 335/81-18. The same procedures and controls apply also to Unit 2. Routine resident inspections of licensee operation and maintenance activities have confirmed that the procedures are implemented.

- g. (Closed Unit 2) TAP 1.C.5 Procedures for feedback of operating experience to plant staff. The inspector reviewed plant administrative procedure No. 00005724, Rev. 3 which implements licensee general office procedure No. PR 3418. This review, together with the review complete for Unit 1, (Report No. 335/81-05) completes this item for both units.

- h. (Closed Units 1 and 2) TAP 1.D.2.2 Plant Safety Parameter Display Console Installation

The licensee has installed the SPDS system in both units. SER supplement 4 for Unit 2 accepts the licensee schedule to have the SPDS operable and operators trained by the end of the first refueling outage, scheduled for November 1984 (TAP Item 1.D.2.3 remains open for both units).

i. (Closed - Unit 2) TAP I.G.3 Training During Low Power Testing

Licensee personnel involved in startup of Unit 2 had been previously licensed on Unit 1. The training program included specific training on the differences between Units 1 and 2. RII and resident inspectors closely monitored the low power physics testing and witnessed power ascension. Although not specifically documented in previous inspection reports, this item is considered to have been adequately addressed.

j. (Closed - Unit 2) TAP II.E.3.1 Emergency Power for Pressurizer Heaters

Review of plant drawings and control boards shows that the pressurizer heaters are powered from vital power sources that deenergize upon transfer to the emergency diesel generators, with ability to reenergize manually from the control room if required. Operation from the diesel generator source is addressed in Emergency Procedures No. 2-0030140 - Blackout Operation, No. 2-0120040 Natural Circulation and No. 2-0030143 - Total Loss of AC power.

k. (Closed - Unit 2) TAP II.E.4.2.1 thru 4 Containment Isolation Diversity

NRR evaluation of the design determined that Unit 2 containment isolation signals provided acceptable diversity. (SER Paragraph 6.2.4)

l. (Closed Unit 2) TAP II.E.4.2.5.B Containment Pressure Set Point

The licensee complied with this requirement prior to receiving an operating license. The setpoint was evaluated, found acceptable and documented in SER paragraph II.E.4.2

m. (Closed Unit 2) TAP II.E.4.2.6 Containment Purge Valves

The licensee provided qualification information for further evaluation as requested in the SER. NRR evaluation, documented in SER Supplement 2, found the eight inch mini-purge system to be acceptable. The inspector confirmed that administrative controls had been implemented to maintain the 48 inch purge valves sealed closed and verified closed at least every 31 days in operating modes above cold shutdown.

n. (Closed Unit 2) TAP II.E.4.2.7 Containment Purge Valves Close on High Radiation Signal

The inspector reviewed applicable plant drawings and procedures and confirmed that the containment purge valves do close on high radiation signal.



- o. (Closed Unit 2) TAP II.F.1.1 Additional Accident Monitoring Instruments

Installation and testing of the additional accident monitoring instruments were reviewed in previous inspection reports No. 389/83-04 and 389/83-47. Review and discussion of the reports with the inspectors and review of operating and emergency procedures confirmed that the additional instrumentation had been included.

- p. (Closed Unit 1) TAP II.F.1.4 Containment Pressure

The inspector confirmed that the instruments had been installed and that calibration was current in preparation for Unit 1 startup.

- q. (Closed Unit 1) TAP II.F.1.5 Containment Water Level

The inspector confirmed that the instruments were installed and that calibration was current for Unit 1 startup.

- r. (Closed Unit 1) TAP II.F.1.6 Containment Hydrogen Monitor

The inspector confirmed that the monitors were installed and operating in standby mode in accordance with operating procedures.

- s. (Closed Unit 2) TAP II.G.1.2 Power Supplies for Pressurizer Relief Block Valves

NRR evaluation of the design determined that the changeover to emergency power supplies is automatic and is an acceptable design. (SER Section 22.II.G.1)

- t. (Closed Unit 2) TAP II.K.1.10 IE Bulletins Nos. 79-05, 79-06 and 79-08, Operability Status

Licensee actions with regard to these bulletins have been reviewed in conjunction with Unit 1 operation. This area was also addressed during Unit 2 prelicense review and evaluation. The area was inspected but not documented as "Closed" in inspection report No. 389/83-52.

No violations or deviations were identified in this area.