



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

Report Nos. 50-335/82-34 and 50-389/82-46

Licensee: Florida Power and Light Company  
P.O. Box 529100  
Miami, FL 33152

Facility Name: St. Lucie

Docket Nos. 50-335 and 50-389

License Nos. DPR-67 and CPPR-144

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

Inspector: M. D. Hunt

M. D. Hunt

10/15/82

Date Signed

Approved by: T. E. Conlon

T. E. Conlon, Section Chief  
Engineering Inspection Branch  
Division of Engineering and Technical Programs

10-15-82

Date Signed

#### SUMMARY

Inspection on September 20-24, 1982

#### Areas Inspected

This routine, unannounced inspection involved 36 inspector-hours on site in the areas of Unit 1 Forced Outages, Unit 2 QA Audits, Instrumentation Installation, Closed NCR's and CDR's.

#### Results

Of the areas inspected, no violations or deviations were identified.

## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*B. J. Escue, Site Manager
- \*R. A. Symes, Supervising QA Engineer
- \*J. J. O'Neill, Licensing Engineer
- \*E. G. Case, QC Electrical Supervisor
- R. Bartz, Piping Director
- G. E. Regal, Assistant Superintendent, Electrical Maintenance Unit 1

Other licensee employees contacted included three construction supervisors, ten technicians, and five office personnel.

#### Other Organizations

- \*J. J. Capezza, Resident Engineer, EBASCO
- \*G. E. Grace, Licensing Engineer, EBASCO
- \*J. C. Orlowski, Licensing Engineer, Combustion Engineering

#### NRC Resident Inspector

- \*S. Elrod

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on September 24, 1982, with those persons indicated in paragraph 1 above. The licensee acknowledged the inspection finding listed below:

Inspector Followup Item 389/82-46-01, Review accessibility of impulse lines, drains and vents.

### 3. Licensee Action on Previous Enforcement Matters

(Closed) Violation 389/82-29-02, Inadequate In-place Storage of Electrical Penetrations. The licensee responded on August 9, 1982, and on September 3, 1982, regarding this violation and regarding the protection of the electrical penetrations. During discussions with the licensee, the inspector reviewed a copy of Attachment 4.9, "Visual Inspection and Cleaning of Electrical Penetrations Prior to Turnover" which will be made a part of SQP-13, "Installation of Electrical and Mechanical Penetrations." The Attachment 4.9 details the sequence for cleaning and sealing of the EPs as well as identifying QC hold points.

In addition, the licensee has advised the inspector that daily inspections will be made to ensure that the EPs are adequately covered until the penetrations are sealed prior to turnover.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Independent Inspection Effort

a. Unit 1 Plant Trips

The inspector held discussions with licensee representatives regarding forced outages on September 2, 1982, and September 7, 1982, each resulting in the unit being separated from the Florida grid. The inspector reviewed preliminary reports which described the causes of the trips and recommended corrective actions to prevent recurrence. Additional review will be made when FP&L submits the 30 day reports for these forced outages.

b. Unit 2 QA Audit Review

The inspector reviewed the corrective actions taken to correct five audit findings for Audit No. QAC-PSL2-82-07, Control of Electrical Activities. The audit period was from February 19 to March 30, 1982. The audit was conducted to verify that cable pulling, termination, and electrical equipment installation were performed by QC and electrical crafts in accordance with SQP-24, SQP-7, Appendix A, JPC:QI:10.20, SQP-40, JPC:QI:12.1, SQP-22, JPC:QI:10.22, SQP-53, SQP-54, SQP-32, JPC:QI:10.30 and Electrical General Installation Notes, Drawing 2998-B-271.

The inspector verified that the findings were corrected, documented, and reinspected by the auditor. With the exception of the five findings, the licensee deemed the QA program to be effective in the areas audited.

Within the areas examined, no violations or deviations were identified.

6. Instrumentation (Components and Systems II) - Observation of Work and Work Activities and Review of Quality Records (52054B and 52056)

The inspector selected redundant instrumentation loops for Steam Generators 2A and 2B level indications. These loops contained Level Indicating Controllers (LIC) 9013A and B (Stm/Gen 2A) and LIC 9023A and B (Stm/Gen 2B). The inspector also selected Flow and Pressure Loop indications for the Auxiliary Feedwater Headers A, B, and C.

These indicating loops are identified as FI-09-2A and PI-09-8A (Aux. FW Hdr A), FI-09-2B and PI-09-8B (Aux. FW Hdr B), and FI-09-2C and PI-09-8C (Aux. FW Hdr C). A selection of six indications important to the operator for safe operation from the remote shutdown panel was as follows:

Steam Generator 2A Level	LI-9113
Steam Generator 2B Level	LI-9123
Diesel Generator A Watts	WM-1606-1
Diesel Generator A Volts	VM-1606-1
Diesel Generator B Watts	WM-1616-1
Diesel Generator B Volts	VM-1616-1

The interconnecting cables (signal) between the components (indicator to process cabinet to transmitter) were verified for routing, type, termination, and separation as required by QI 10.1, General Instructions for conduct of inspections, and documentation on Attachment 3 to covered cable and conduit inspections. The impulse lines from the sensing elements to the transmitters were examined by the inspector.

Installation instructions are defined in SQP-57, Instrumentation Installation.

QI 10.42, Mechanical Instrumentation and Tubing Installation Inspection identifies the responsibilities and requirements for inspection of field installed tubing. SQ-57 defines QC hold points when required. The inspection check sheet for QI 10.42 requires identification of the instrument, instrument rack, instrument detail drawing, supports and sensing lines. Calibration of the instrument loops is performed by the Startup and Test Section after the equipment is released by construction forces.

The inspector reviewed ten electrical and eighteen mechanical instrumentation nonconforming reports (NCR). These NCRs reflected current status, were legible, complete, had been reviewed by QC personnel, and were readily retrievable. Further, the reports adequately identified the problem and the corrective action was verified upon completion.

The inspector noted that, in several instances, the drain stubs below the sensing line drain valves did not appear to have adequate access for collecting the discharge when venting the lines. The inspector was advised that this item will be reviewed. This is identified as an Inspector Followup Item 389/82-46-01, Review accessibility of impulse lines, drains, and vents.

Within the area examined, no violations or deviations were identified.

7. Licensee Identified Item (LII) 10 CFR 50.55(e)

(Closed) LII 389/81-18-03, Modutronic Controller/Allen Bradley Selector Switch Improperly Mounted. FP&L reported this item on June 24, 1981. The licensee's records confirm the information contained in the final report

dated August 24, 1981, that the switches in question were spares and are not utilized for any control function. FP&L considers this deficiency not reportable under the regulations.

(Closed) LII CDR 82-13, Contacts Do Not Reverse Position When Switches Are Operated. FP&L reported this item to RII on June 23, 1982. FP&L's final resolution dated August 16, 1982, advised RII that evaluation of the two out of 45 switches found different did not constitute a reportable condition in that extensive repair and/or analysis was not required to determine adequacy of the switches to perform their intended function.

(Closed) LII CDR 82-015, Broken Phase Insulators in Heat Trace Panels. FP&L reported this deficiency on August 13, 1982, and submitted a final report dated September 9, 1982. The broken insulators have been replaced. The licensee's evaluation of the deficiency concluded that it was not reportable in that the repairs were minor, the refueling water storage tank is an alternate, and annunciators provide at least three hours notification before boric acid precipitation is expected under the worst conditions.

(Closed) LII CDR 82-01, General Electric "HFA" Relays. The licensee reported this item as part of a reportable occurrence 335-81-5 on January 27, 1981. The final report was dated January 28, 1982. Nonconforming Report No. 2714E was closed August 18, 1982, which verified the satisfactory reinspection of the replacement relays installed in the three component cooling water pump starting circuits. All actions were verified by the inspector.

(Closed) LII CDR 82-005, Diesel Fuel Oil Day Tank Suction Valves. This item was reported to RII on February 17, 1982. The final report dated May 17, 1982, advised that the valves were originally spring operated. However, the fuel pump suction was not adequate to overcome the valve spring, consequently, the valve would not open allowing fuel flow to the diesel engine. The springs were removed by the d/g representative. Testing was conducted and diesel starting and operation was successful. The inspector reviewed the documentation surrounding this deficiency.

(Closed) LII CDR 82-11, Rigid/Flexible Conduit. The licensee reported to RII on June 23, 1982, that flexible conduit had not been installed as required in several instances. The licensee's final response dated August 24, 1982, defined the corrective actions taken. All affected conduits have been identified and evaluated by engineering. Changes have been made as directed by the evaluation. Inspection is not yet completed but an additional inspection will be performed by a team of licensee and A-E representatives of all seismic aspects of the field run conduits. This inspection was planned before the deficiency was identified.