



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

Report No. 50-389/82-29

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

Facility Name: St. Lucie 2

Docket No. 50-389

License No. CPPR-144

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

Inspector: M. D. Hunt 7/14/82
 M. D. Hunt Date Signed

Approved by: T. E. Conlon 7-15-82
 T. E. Conlon, Section Chief Date Signed
 Engineering Inspection Branch
 Division of Engineering and Technical Programs

SUMMARY

Inspection on June 21-25, 1982

Areas Inspected

This routine, unannounced inspection involved 36 inspector-hours on site in the areas of relay coordination, instrumentation cables, QC inspector training certifications, and licensee action on previous inspector findings.

Results

Of the four areas inspected, no violations or deviations were identified in three areas; one violation was found in one area (Inadequate in-place storage of electrical penetrations, paragraph 6).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *B. J. Escue, Site Manager
- *P. Carver, Power Plant Engineering
- *E. W. Sherman, QA Engineer
- *R. A. Symes, Supervising QA Engineer
- *T. D. Geissinger, Area QC Supervisor
- R. McQue, Site System Protection Group Supervisor
- E. Case, Area QC Supervisor Electrical

Other licensee employees contacted included 12 QC inspectors, two technicians, and eight office personnel.

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on June 25, 1982, with those persons indicated in paragraph 1 above. The licensee was informed that the following items had been identified:

- a. 389/82-29-01, Inspector Followup Item (IFI), Review the QC inspector function of the System Protection Group Activities.
- b. 389/82-29-02, Violation, Inadequate in-place storage of electrical penetrations.
- c. 389/82-29-03, IFI, Interface procedure for control of equipment between construction and startup organizations.

The licensee did not comment.

3. Licensee Action on Previous Inspection Findings

(Closed) Violation 389/82-10-01, Qualification Records for QC Electrical Inspection Personnel. FP&L submitted a response to this violation April 21, 1982, which was acknowledged by RII April 29, 1982. A review of training records for seven electrical QC inspectors was made by the inspector. These records indicate that training is now being given and documented in accordance with Quality Instruction 2.1 revision 5, Certification of Plant Construction QC Inspection Personnel.

(Closed) Violation 389/81-04-05, Unauthorized Modification of Seismic Cable Tray Support 1336. The FP&L response to this violation is dated May 11, 1982. The licensee documented this discrepancy on Nonconforming Report 1710E. Support reinspection form IR No. E-81-5987 had been completed indicating the rework required by NCR 1710E had been satisfactorily

completed. Examination of support 1336 verified that the corrective modification was complete and in accordance with drawing 2998-G-824, sh 15.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Electrical (Components & System II) - Review of Quality Records (51056B)

The inspector met with representatives of the FP&L System Protection Group to review information obtained during the relay coordination study. In addition, the QA/QC function for this group was examined.

The inspector was informed that at present the relay coordination study was not complete. All protective relay settings at this time are temporary. Final settings will be made when the data is available. QA/QC responsibility for this group has not been completely developed. However, efforts are under way as evidenced by the revision to the following System Protection Group Quality Assurance instructions:

- a. QI-1-SP-1.0, Rev. 4, Organization of System Protection Group Quality Assurance Program.
- b. QI-2-SP-2, Rev. 4, Instructions For The Training and Indoctrination of Personnel.
- c. QI-2-SP-4, Rev. 2, Instructions For Preparation and Revision of Quality Instructions.
- d. QI-10-SP-1, Rev. 1, Instructions For Inspection And Test Program For Nuclear Power Plants.
- e. QI-14-SP-1, Rev. 3, Instructions For Scheduling Of Inspections And Tests And Labeling Inspection And Test Status

The overall program will be reviewed further at a later date when the permanent relay settings become available and this work is started. The planned follow up review is identified as an inspector follow up item 389/82-29-01, Review the QC Inspector Function of the System Protection Group Activities. Within the area examined, no violation or deviations were identified. One Inspector Follow up Item, 389/82-29-01 was identified.

6. Instrumentation (Cables & Terminations II) - Observation of Work & Work Activities - Review of Quality Records - (52064B & 52066B)

The inspector selected electrical cables associated with instrumentation components that perform a safe shutdown function. The components are located inside the containment. This requires one cable between the component and the electrical penetration and another cable from the penetration to the instrumentation cabinet or control board indicator. The

instrumentation components are listed as follows with the two associated cables:

<u>FUNCTION</u>	<u>INSTRUMENT I.D.</u>	<u>ASSOCIATED CABLES</u>
Pressurizer Level	LT-1103	23140A, 20140A(NB)
Pressurizer Pressure	PT-1106	23091A, 20091A(SB)
RC Pump Casting Diff. Pressure	PDT-1110	23119C, 20119C(NA)
Pressurizer Pressure	PT-1102	23372A, 20372A(MA)
Pressurizer Pressure	PT 1102C	23374A, 20374A(MC)
Pressurizer Level	LT 1104	23370D, 20370D(SB)
RC Pump Casting Diff. Pressure	PDT 1120	23119G, 20119G(NB)
Pressurizer Pressure	PT 1108	23370A, 20370A(SA)

The routing defined by the cable pull card for the listed cables was verified at various points in the raceway system and at the cable termination locations. These cables had been installed and QC accepted in accordance with Site Quality Procedure(SQP) 24, Cable Pulling and SQP 22, Cable Termination.

During the visual examination of these cables it was noted that the terminal blocks located on the containment side of electrical penetrations E-3, C-2, E-7, D-7 and D-8 were not covered, thus exposing the cable terminations and terminal blocks to dirt, dust and falling materials that could become lodged across these terminations causing electrical faults. The inspector also found a wooden box containing electrical penetration modules which was open. The lid had been removed from the box containing the modules and the box was being used as a work bench while some concrete repair work was being performed nearby.

The condition described is in violation of Site Quality Procedures SQP-13, Installation of Electrical and Mechanical Penetrations, paragraph 6.1.1, SQP-31, Housekeeping During Construction, paragraphs 8.4.1 and 8.4.5, and ANSI N45.2.3-1973, Housekeeping During the Construction Phase of Nuclear Power Plants, Section 3.5 (2)(c). This is a violation identified as 389/82-29-02, Inadequate in-place storage of electrical penetrations.

During this inspection it was noted that cable terminations had been undone at various locations. Review of records indicated that these cables had once been terminated, inspected, accepted and documented as such by the QC inspectors. After turnover to the startup group, various leads had been lifted for various reasons. A termination order had been issued to cover these cables, however, no method exists to determine the status of a lifted lead without examining several records. Also, this leads to confusion on the part of inspectors in determining if a cable has been lifted for test purposes or if it has not yet been terminated without a review of records. Discussions with the QA auditor revealed that a procedure is being developed to better identify the status of equipment. This new procedure will be reviewed during a future inspection. This item is identified as an

inspector followup item 389/82-29-03, Interface procedure for control of equipment between construction and startup sections.

The inspector reviewed the training records and certifications for 5 instrumentation QC inspectors. The training records were in accordance with the requirements of QI 2.1, revision 5 dated 2/22/82, entitled "Certification of Plant Construction QC Inspection Personnel".

Within the area inspected, one violation 389/82-29-02 and one inspector followup item 389/82-29-03 was identified.