
FLORIDA POWER & LIGHT COMPANY

Central File
50-389

September 8, 1976
L-76-328

Norman C. Moseley, Director
Office of Inspection and Enforcement, Region II
U. S. Nuclear Regulatory Commission
230 Peachtree Street, N. W., Suite 818
Atlanta, Georgia 30303

Dear Mr. Moseley:

Re: IE:II:DHD
50-389/76-1

Florida Power & Light Company has examined the above-referenced inspection report and has determined that it contains no proprietary information.

Very truly yours,

for 

Robert E. Uhrig
Vice President

REU/MV/hlc

cc: Jack R. Newman, Esq.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
230 PEACHTREE STREET, N. W. SUITE 818
ATLANTA, GEORGIA 30303

AUG 26 1976

In Reply Refer To:
IE:II:DHD
50-389/76-1

Florida Power and Light Company
ATTN: Dr. R. E. Uhrig, Vice President
of Nuclear and General Engineering
P. O. Box 013100
9250 West Flagler Street
Miami, Florida 33101

Gentlemen:

This refers to the inspection conducted by Mr. D. H. Danielson of this office on July 28-30, 1976, of activities associated with your application for an NRC Construction Permit for St. Lucie Plant, Unit 2 and to the discussion of our findings held with Mr. B. J. Escue at the conclusion of the inspection.

Areas examined during the inspection and our findings are discussed in the enclosed inspection report. Within these areas, the inspection consisted of selective examination of procedures and representative records, interviews with personnel, and observations by the inspector.

Within the scope of this inspection we identified no significant deviations from the requirements of 10 CFR 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants," of the NRC regulations.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you believe to be proprietary, it is necessary that you submit a written application to this office requesting that such information be withheld from public disclosure. If no proprietary information is identified, a written statement to that effect should be submitted. If an application is submitted, it must fully identify the bases for which information is claimed to be proprietary. The application should be prepared so that information sought to be withheld is incorporated in a separate paper and referenced in the application since the application will be placed in the Public Document Room. Your application, or written statement, should be submitted to us within 20 days. If we are not contacted as specified, the enclosed report and this letter may then be placed in the Public Document Room.



AUG 26 1976

Florida Power and Light
Company

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Should you have any questions concerning this letter, we will be glad to discuss them with you.

Very truly yours,



C. E. Murphy, Chief
Reactor Construction and Engineering
Support Branch

Enclosure:
IE Inspection Report No.
50-389/76-1



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
230 PEACHTREE STREET, N. W. SUITE 818
ATLANTA, GEORGIA 30303

IE Inspection Report No. 50-389/76-1

Licensee: Florida Power and Light Company
P. O. Box 013100
Miami, Florida 33101

Facility Name: St. Lucie Unit 2
Docket No.: 50-389
License No.: Pending
Category: A1

Location: Hutchinson Island, Florida

Type of License: 800 Mwe (CE)

Type of Inspection: Routine, Unannounced, Preconstruction

Dates of Inspection: July 28-30, 1976

Dates of Previous Inspection: December 16-18, 1975

Principal Inspector: D. H. Danielson, Reactor Inspector
Projects Section
Reactor Construction and Engineering
Support Branch

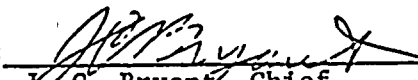
Accompanying Inspector: R. W. Wright, Reactor Inspector
Engineering Support Section No. 1
Reactor Construction and Engineering
Support Branch

Other Accompanying Personnel: C. E. Murphy, Chief
Reactor Construction and Engineering
Support Branch

Principal Inspector: *D. H. Danielson*
D. H. Danielson, Reactor Inspector
Projects Section
Reactor Construction and Engineering
Support Branch

5/20/76
Date

Reviewed by:


J. C. Bryant, Chief

Projects Section
Reactor Construction and Engineering
Support Branch

8/17/76
Date

SUMMARY OF FINDINGS

I. Deviations

None

II. Licensee Action on Previously Identified Deviations

None

III. New Unresolved Items

None

IV. Status of Previously Reported Unresolved Items

None

V. Design Changes

None

VI. Unusual Occurrences

None

VII. Other Significant Findings

None

VIII. Management Interview

On July 30, 1976, the inspectors met with Mr. B. J. Escue, Project Construction Superintendent, and members of the plant staff to review the scope and findings of the inspection. It was noted that within the scope of the inspection we identified no significant deviations from the requirements of 10 CFR 50, Appendix B.

DETAILS I

Prepared by: *D. H. Danielson*
D. H. Danielson, Reactor Inspector
Projects Section
Reactor Construction and Engineering
Support Branch

8/20/76
Date

Dates of Inspection: July 28-30, 1976

Reviewed by: *J. C. Bryant*
J. C. Bryant, Chief
Projects Section
Reactor Construction and Engineering
Support Branch

8/20/76
Date

1. Individuals Contacted

Florida Power and Light Company (FP&L)

B. J. Escue - Project Construction Superintendent
N. T. Weems - Assistant QA Manager, Construction
A. M. Anderson - Senior QA Engineer, Electrical
D. R. Stone - Project QC Supervisor

2. Scope of Inspection

This inspection was performed to review the licensee's site audit activities and onsite contractor organizations' QA/QC programs for site preparation activities authorized under an LWA-2.

3. Site Audits

The PSAR, Chapter 17, paragraph 17.1.18.5, specifies the FP&L audit commitments. The detailed instructions for conducting and scheduling audits are provided in Quality Procedure Nos. QR 18.1 and QP 18.2, respectively.

To verify compliance with the above commitments, the inspector examined reports and related records for five audits performed since February 1976. This examination covered audit planning, scope and purpose, documentation of results, management review, and followup of corrective action. FP&L reports of audits that were reviewed are as follows:

- a. EBASCO Document Control, QAC-EBASCO-76-16
- b. FP&L Document Control System, QAC-FPL-QC-76-17

- c. FP&L QC Construction Material Control, QAC-FPL-CONSTR-QC-76-2
- d. EBASCO Indoctrination and Training, QAC-EBASCO-76-3
- e. FP&L Construction QA Indoctrination and Training, QAC-FPL-CONSTR-76-6

Within the areas examined, there were no deviations disclosed.

4. Review of Contractor QA Manual

The PSAR, Chapter 17, paragraph 17.1.4.3, specifies the FP&L suppliers' QA program evaluation commitments. The detailed instructions for evaluation of a suppliers QA program are provided in Quality Procedure No. QP 4.3.

Raymond International, Inc. is installing sheet piling for the reactor containment building cofferdam and the intake structure cofferdam. The inspector reviewed the Raymond International QA manual to assure adequate plans and procedures had been established for their scope of work. This review included site organization, management review, control of material and processes, control of conditions adverse to quality, document control, test control and control of test equipment, control of quality records and audits. In addition, documented evidence of FP&L evaluation and acceptance of the Raymond International QA program and procedures was reviewed by the inspector. Within the areas examined, there were no deviations disclosed.

DETAILS II

Prepared by:

J. D. Gillmore for
R. W. Wright, Reactor Inspector
Engineering Support Section No. 1
Reactor Construction and Engineering
Support Branch

4/19/76
Date

Dates of Inspection: July 28-30, 1976

Reviewed by:

T. E. Conlon
T. E. Conlon, Chief
Engineering Support Section No. 1
Reactor Construction and Engineering
Support Branch

8/19/76
Date

1. Persons Contacted

a. Florida Power and Light Company (FP&L)

N. T. Weems - Assistant QA Manager, Construction
A. M. Anderson - QA Engineer, Electrical
L. T. Stone - QA Engineer, Civil
B. J. Escue - Project Construction Superintendent
D. R. Stone - Project QC Supervisor
R. G. Reesby - Area QC Supervisor (Civil)

b. Contractor Organizations

(1) Ebasco Services, Inc. (Ebasco)

J. C. Murphy - Sr. Resident Engineer

(2) Moretrench American Corporation (MAC)

C. Williams

2. Scope

This inspection was conducted to observe and evaluate the work in progress and to ascertain whether activities relative to site preparation are being accomplished in accordance with NRC requirements and SAR commitments, and to determine if procedures and recordkeeping requirements have been developed and are being properly implemented in the subject inspection areas.

3. Procedure Review

The following Ebasco specifications, FP&L quality control procedures, construction site procedure, and contractor operating procedure

were examined for conformance to SAR commitments, applicable codes and standards.

<u>Document Number</u>	<u>Title</u>
FLO-2998.472 (R5)	- Dewatering
FLO-2998.471 (R2)	- Excavation and Backfill
QA 10.8 (R1)	- Checking/Record Review of Dewatering Systems and Components
QI 10.10 (R1)	- Inspection of Excavations and Fill Compaction
CSP 25	- Excavation and Backfill
COP-2-1	- Sheet Pile and Excavation

No items of procedural noncompliance were identified.

4. Observation of Work Activities

a. Project Status Prior to Commencement of LWA-2 Work

The soils above elevation minus 60 feet were excavated and recompacted to a relative density of 85 percent AASHO over the entire plant area to provide satisfactory bearing, settlement and resistance to liquefaction characteristics. The final site grade is at elevation plus 18 feet and the ground water level is estimated to be the normal high water level in the Indian River at elevation plus 2 ft.

b. Activities Observed

(1) Pile Driving

Raymond International has completed the driving of sheet piling and the installation of the top wale for the reactor containment building cofferdam. The inspector observed the driving of sheet piling for the intake structure Cofferdam.

(2) Dewatering

Moretrench has reactivated wells formerly used for Unit 1 to draw down the water level within the construction boundaries of Unit No. 2 from elevation plus 2 to minus 15. Excavations below elevation minus 15 will require individual systems set up for each particular excavation. The IE inspector observed the contractor installing such

a system for the reactor containment building base mat excavation. The well casing utilized was 8 inch diameter PVC pipe capable of withstanding 160 psi and meeting code requirements ASTM 1785 and ASTM 2665. This internal well system should be capable of lowering the water table within the reactor containment building area to elevation minus 30.

(3) Blasting, Excavation, Fill Placement

Since no structure has its foundation below elevation minus 60 no blasting for ease of excavation is anticipated. The contractor has removed the fill to approximately elevation plus 5 in order to commence with the driving of the intake structure sheet piles. No other excavation nor backfill operations have begun.

(4) QC Inspection and Laboratory Testing Facilities

The IE inspector observed the QC coverage being implemented for the above earthwork activities and conducted conversations with several QC inspectors during the course of their surveillances. These discussions indicated the inspectors were knowledgeable with their respective quality control procedures and they were found to be satisfactorily implementing them. An inspection was made of the FP&L soils laboratory facilities, noting particularly their testing capabilities, checking for up-to-date calibration of equipment, and the experience of its personnel.

No items of noncompliance were identified in any of the above areas of inspection.

5. Record Review

The following quality records were selected for review to ascertain that the work was being accomplished and documented in accordance with applicable codes, commitments and procedural requirements:

- a. Reactor Containment Building Cofferdam Report Package containing QC surveillance inspection reports for pile driving and associated nonconformance reports for the period 6/3/76 to 7/27/76
- b. Main Yard Dewatering System Testing Records conducted 7/27/76

- c. Certifications and personnel qualification records for various soil inspectors
- d. Inspector training records
- e. Sheet Piling Welding
 - (1) Welding procedure qualifications
 - (2) Welder performance qualifications
 - (3) Welding materials control records

No items of noncompliance were identified in any of the above areas of record inspection.

6. Nondirected Inspection Activities

The IE inspector made a cursory inspection of the concrete batching facilities. The inspector also observed the sampling and testing of a non-safety related pour (warehouse foundation) for slump, air content, temperature, yield, and the molding of concrete cylinders for compressive testing. All testing is similar to safety related pours.

No items of noncompliance were identified.