



December 20, 1976
L-76-426

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


Central File
50-335

Dear Mr. Moseley:

Re: IE:II:MSK
50-335/76-13

Florida Power & Light Company has reviewed the subject inspection report, and has found that it does not contain any proprietary information.

Very truly yours,


ROBERT E. UHRIG
Vice President

REU/MAS/cmp

cc: Robert Lowenstein, Esquire

VP
AO 2



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

NOV 30 1976

In Reply Refer To:
IE:II:MSK
50-335/76-13

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. M. S. Kidd of this office on November 2-5, 1976, of activities authorized by NRC Operating License No. DPR-67 for the St. Lucie Unit 1 facility, and to the discussion of our findings held with Mr. K. N. Harris 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, no items of noncompliance were disclosed.

One new unresolved item resulted from this inspection and is identified in Section III of the summary of the enclosed report. This item will be examined on subsequent inspections.

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

NOV 30 1976

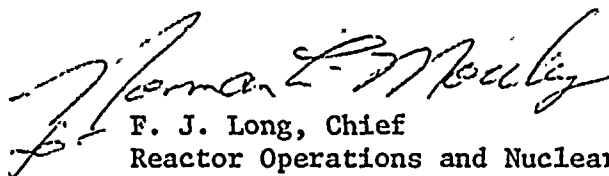
Florida Power and
Light Company

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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.

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

Very truly yours,


F. J. Long, Chief
Reactor Operations and Nuclear
Support Branch

Enclosure:
IE Inspection Report No.
50-335/76-13



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

IE Inspection Report No. 50-335/76-13

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

Facility Name: St. Lucie 1
Docket No.: 50-335
License No.: DPR-67
Category: B2

Location: Hutchinson Island, Florida

Type of License: CE, PWR, 2560 Mwt

Type of Inspection: Routine, Announced

Dates of Inspection: November 2-5, 1976

Dates of Previous Inspection: October 13-15, 1976

Principal Inspector: M. S. Kidd, Reactor Inspector
Reactor Projects Section No. 2
Reactor Operations and Nuclear Support Branch

Accompanying Inspectors: None

Other Accompanying Personnel: None

Principal Inspector: M. S. Kidd
M. S. Kidd, Reactor Inspector
Reactor Projects Section No. 2
Reactor Operations and Nuclear Support Branch

11-29-76
Date

Reviewed by: R. C. Lewis
R. C. Lewis, Chief
Reactor Projects Section No. 2
Reactor Operations and Nuclear Support Branch

11-29-76
Date

SUMMARY OF FINDINGS

I. Enforcement Items

None

II. Licensee Action on Previously Identified Enforcement Matters

Not inspected.

III. New Unresolved Items76-13/1 Hydrogen Sampling System Isolation Valves

These valves, discussed in Reportable Occurrence 50-335/76-28, are to be replaced by valves which have been demonstrated to withstand post accident environmental conditions. (Details, paragraph 4.a)

IV. Status of Previously Reported Unresolved Items

Not inspected.

V. Unusual Occurrences

None

VI. Other Significant FindingsA. Plant Status

Fuel reloading began November 3, 1976. The licensee predicted that the reactor would be returned to critical operations in late November. (Details, paragraph 3)

B. Westinghouse BF and BFD Relay Failures (IEC 76-02)

The licensee's response to this IE Circular, dated October 20, 1976, stated that no relays of this type are installed in any system at St. Lucie 1.

VII. Management Interview

A management interview was conducted November 5, 1976, with Mr. K. N. Harris to discuss the new Unresolved Item in Section III and other inspection findings. (Details, paragraphs 2-6)

DETAILS

Prepared by: M. S. Kidd
M. S. Kidd, Reactor Inspector
Reactor Projects Section No. 2
Reactor Operations and Nuclear
Support Branch

11-29-76
Date

Dates of Inspection: November 2-5, 1976

Reviewed by: R. C. Lewis
for R. C. Lewis, Chief
Reactor Projects Section No. 2
Reactor Operations and Nuclear
Support Branch

11-29-76
Date

1. Persons Contacted

Florida Power and Light Company (FP&L)

K. N. Harris - Plant Manager
C. A. Wells - Operations Supervisor
R. K. Ryall - Reactor Supervisor
P. D. Dillon - Technical Staff Supervisor
R. E. McQue - Technical Staff Engineer
R. R. Jennings - Technical Staff Engineer
P. L. Fincher - Training Supervisor
G. M. Vaux - Quality Control Supervisor
J. J. Walls - Quality Control Engineer
R. D. Brandt - Nuclear Plant Supervisor
N. D. West - Nuclear Plant Supervisor
L. W. Pearce - Nuclear Plant Supervisor
W. S. Windecker - Nuclear Plant Supervisor
Three Nuclear Watch Engineers
Four Nuclear Control Center Operators

Combustion Engineering, Inc. (CE)

P. A. Ferwerda - Supervisor, Quality Control Engineering, Nuclear
Products Manufacturing

2. Fuel Assembly Reconstitution

The program for replacement of burnable poison pins (BPP) in shimmed fuel assemblies is described in the "St. Lucie Unit 1 Repair Report" - GEN-38 (F), Revision 1, transmitted to the NRC by FP&L letter No.

L-76-368, dated October 25, 1976. Previous inspection efforts at the site with regard to the reconstitution program were discussed in IE Inspection Report No. 50-335/76-12, Details, paragraph 4.

Four work stations were in use during the current inspection, with General Maintenance Procedure M0915, "Reconstitution of a Fuel Assembly Using the Temporary Work Stations" (Revision 7), being used to conduct the various activities. Portions of the work in progress on November 3-4, 1976, were observed, including:

- a. Insertion of new BPP's into fuel assemblies,
- b. Deburring of cut sections on one assembly,
- c. Cleaning and inspections of reconstituted assemblies, and
- d. Movement of assemblies to and from spent fuel racks and the upper and lower work stations.

These operations were observed for conformance to procedural requirements and adherence to radiological, foreign materials, and general cleanliness controls. Additionally, QC information packages for selected assemblies were reviewed for completeness. Within these areas inspected, no discrepancies were identified.

During the installation of new BPP's into an assembly on November 3, 1976, it was found that one of the original ones had not been removed as indicated by records for the assembly. Discussions with FP&L and CE representatives revealed a high level of confidence that this was an isolated case and resulted solely from human error. The inspector had no questions on the corrective actions taken.

Licensee personnel informed the inspector that a step in M0915 had been changed inappropriately on October 30, 1976, in that a change in intent had been made without Facility Review Group (FRG) concurrence. Changes which involve intent must receive FRG review and Plant Manager approval before implementation per Technical Specification 6.8.2. The change involved deletion of a limit on the maximum force to be used in Step 9.3.10 of M0915 during the load pull test on the BPP after insertion into the lower retention grid. Corrective action included review of the matter by the FRG on the same date and reestablishment of an upper pull limit to prevent damage to the retention grid clips. The inspector had no questions on the corrective and preventive measures taken.

3. Fuel Loading

Reloading of the reactor vessel was started November 3, 1976, concurrent with the reconstitution efforts. Operating Procedure No. 1600022, Revision 3, "Unit 1 Refueling Operation," is the controlling document for this evolution. Portions of the fuel loading activities were witnessed on November 3-4, 1976. The inspection included examination of selected records, observation of activities relating to the preparation for fuel loading, and witnessing the loading of several fuel assemblies. Fuel loading activities were inspected for compliance with the Technical Specifications and the various procedures in use. The following documents were reviewed in addition to OP 1600022:

- a. OP 1600023, "Fuel Transfer System Operation"
- b. OP 1600024, "Refueling Machine Operation"
- c. OP 1210051, "Wide Range Nuclear Instrumentation Channels Functional Test"
- d. TP 1210082, "Neutron Response Check of Plant Wide-Range Nuclear Channels"

Through review of the above procedures plus operator logs, surveillance data sheets and various sections of AP 0010125, "Schedule of Periodic Tests, Checks and Calibration," the inspector verified that the licensee's conduct of activities complied with Technical Specification requirements. Selected prerequisites were verified to be met prior to fuel load. Surveillance requirements of the Technical Specifications were met during the conduct of fuel loading. Instrumentation calibration and operability requirements were met prior to the commencement and during the conduct of fuel loading.

The inspector determined that the licensee's fuel loading activities conformed to administrative and procedural requirements and were appropriately documented. Crew staffing and shift turnover requirements were met. Crew performance at the various fuel handling stations and in the control room was observed. Use of communication and fuel status boards was also observed. The instrument output was appropriately used and I/M plots were maintained in accordance with procedures.

Within the areas inspected, no discrepancies were identified.

4. Licensee Event Report Followup

a. Hydrogen Sampling System Isolation Valves (335-76-28)

This LER, submitted to the NRC by letter dated June 18, 1976, stated that the Unit 1 hydrogen sampling system containment isolation valves had not been tested for post-loss of coolant accident environmental conditions because of an error in the original purchase order. Interim corrective action described in the LER was verified to be complete. Step 5.3.12 of OP 0120042, "Loss of Reactor Coolant (LOCA)," was revised June 15, 1976, to require that the containment hydrogen recombiners be placed in service before suction for engineered safeguards pumps is switched from the refueling water tank to the containment sump. Previously, the recombiners were to be placed in service after the hydrogen concentration in containment increased to between one and two percent.

Licensee personnel stated that long-term plans involved replacement of the valves with ones which had been appropriately qualified, but that this could not be accomplished for several months. A followup report is to be submitted in the near future, as discussed in the LER. The inspector stated that this matter would be classified as an unresolved item pending completion of all corrective action.

b. Power Distribution Anomalies (335-76-35)

The flux anomalies discussed in this LER of July 23, 1976, were later discovered by FP&L and CE to be the result of BPP failures (see paragraph 2 of these Details). Among the various submittals to NRC was one of October 25, 1976, letter No. L-76-368 which included proprietary and non-proprietary versions of a repair report generated by CE and a safety evaluation to support the return of Unit 1 to power operation. During this inspection, documentation was reviewed to determine whether the necessary FRG and Company Nuclear Review Board (CNRB) reviews and evaluations had been completed.

Two Plant Change/Modifications (PCM) were associated with the fuel repair (176-76) and return to power operation with the repaired fuel (192-76). Review of these PCM packages and FRG minutes of October 23 and 27, 1976, plus others, revealed that the PCM's and repair reports and safety evaluation, referred

to above, had been evaluated by that group. Minutes of a CNRB meeting on October 1, 1976, documented their review of the repair report, safety evaluation, and PCM 176-76. Minutes of more recent meetings for the CNRB, wherein later documents were reviewed were not available at the site. The inspector was informed that the CNRB had formally reviewed all information associated with the return to power except for the PCM 192 package, and that this would be done in the near future. The FRG and CNRB concluded that the return to power operation did not involve an unreviewed safety question as defined by 10 CFR 50.59(a)(2). The inspector had no comments in this area, except for completion of review of PCM 192 by the CNRB.

5. Licensed Operator Retraining Program

The licensed operator and senior operator retraining program implemented per FSAR Section 13.2.2 and 10 CFR 55, Appendix A; was discussed with a licensee representative to assess the degree of implementation. These discussions plus review of various documents revealed the following:

- a. A record of lectures attended by all licensed personnel is being maintained.
- b. Records of exams and evaluations, documentation of review of emergency procedures, changes to procedures, facility changes, and other records are being maintained per FSAR Section 13.2.2.6.
- c. The annual lecture series and exams have been completed by four of the six operating shifts. The two remaining shifts lack a one week review period and final exam. This is to be completed prior to return of the unit to power operation.

Within the areas reviewed, no discrepancies were identified.

6. Operating Log Review

The Nuclear Plant Supervisor log and Nuclear Control Center Operator log were reviewed for the time periods of June 1 - July 10, 1976 and May 26 - July 10, 1976, respectively, to assure that no events defined as reportable to the NRC by RG 1.16, Revision 4, "Reporting of Operating Information - Appendix A Technical Specifications," had occurred and had not been reported. No instances of failure to report were identified.