UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report Nos.: 50-335/85-32 and 50-389/85-32

Licensee: Florida Power and Light Company
9250 West Flagler Street
Miami, FL 33102

Docket Nos.: 50-335 and 50-389 License Nos.: DPR-67 and NPF-16

Facility Name: St. Lucie 1 and 2

Inspection Conducted: December 9 - 13, 1985

Inspector: J. J. Lenahan 1/15/86
Date Signed

Approved by: F. Jape, Section Chief 1/16/86
Date Signed
Engineering Programs Branch
Division of Reactor Safety

SUMMARY

Scope: This routine, unannounced inspection entailed 30 inspector-hours on site in the areas of followup on licensee action on previous inspection findings and a previously identified inspector followup item, the snubber surveillance program, and IE Bulletin 80-11.

Results: No violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*J. H. Barrow, Operations Superintendent
*T. A. Dillard, Maintenance Superintendent
*K. Harris, Vice-President
*P. W. Heycock, Inservice Inspection (ISI) Coordinator
J. Krumins, Site Engineering Supervisor
*N. G. Roos, Quality Control (QC) Supervisor
R. Simms, Quality Assurance (QA) Supervisor
*N. T. Weems, Site QA Superintendent
C. Wilson, Mechanical Maintenance Supervisor

Other licensee employees contacted included three engineers and two technicians.

NRC Resident Inspector

*H. Bibb

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on December 13, 1985, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection findings. No dissenting comments were received from the licensee.

The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspector during this inspection.

3. Licensee Action on Previous Enforcement Matters

a. (Closed) Violation Item (389/83-44-01), Inadequate NCR/IR Review Board Use-As-Is Disposition

The licensee's corrective actions for this violation are stated in the licensee's August 10, 1983, letter number L-83-442, to NRC Region II. This violation occurred due to the failure of the licensee to adequately document justification for the findings of the NCR Review Board. Corrective action for this violation involved review of ten percent of the approximately 2500 inspection reports (IR) dispositioned by the NCR Review Board as "Use-as-is". The review was performed by three task groups (Mechanical, Civil, and Electrical) composed of individuals who had not served on the NCR Review Board. The findings of the task groups were documented on a form titled "Task Group Review

of Use-As-Is Inspection Reports". The forms document determination of the adequacy of the NCR/IR review process and answers the following questions:

(1) Was information included in the IR sufficient for evaluation by the NCR Review Board?

(2) Did the inspection report include sufficient inspection data for evaluation by the NCR Review Board?

(3) Was there a deviation from a design or quality requirement?

(4) If there was deviation from design or quality requirement, was that deviation technically justifiable?

(5) Was "Use-as-is" the proper disposition?

The results of the licensee's review uncovered no significant hardware deficiencies, nor were the task group disposition of the individual IRs different from the original NCR Review Board dispositions.

The inspector reviewed the log of IRs disposition "Use-as-is" by the NCR Review Board and determined that those reviewed by the task groups were representative of the "Use-as-is" IRs.

A detailed examination of the review efforts of the task groups was made by an NRC inspector during an inspection documented in NRC Inspection Report 50-389/83-49. This item is closed.

b. (Closed) Violation Item (389/83-44-02), Bypassing Inspection Hold Points During Modifications of Masonry Walls.

The licensee's corrective actions for this violation are stated in the licensee's August 10, 1983, letter number L-83-442, to NRC Region II. The inspector previously inspected the licensee's corrective action for this violation during an inspection conducted September 26-29, 1983, which is documented in Inspection Report 50-389/83-60. During inspection 83-60, the inspector verified that the licensee's corrective action had been completed for all the masonry walls except for wall numbers 1, 24, and 162/163. The work remaining to be completed for these walls was documentation of QC inspection of the modifications. Subsequent to inspection 83-60, the licensee wrote Deviation Report (DR) number 1604G and nonconformance report (NCR) number NCR 1430C. DR 1604G was written to document missing inspection records for inspection of welds required to complete the modifications for wall numbers 162/163. The welds were cleaned and inspected by the licensee to disposition DR 1604G. The inspector reviewed Inspection report G-84-602 which documents inspections of the welds. NCR 1430C was written to document missing inspection records for modifications

completed to wall numbers 1 and 24 and since the modifications (thru-bolt installation) to the walls were not completed in accordance with requirements specified in the applicable design documents, Design Change Notice 513.2741. During a review of inspection documentation, the licensee determined that IR C-83-1485 documented inspection of grouting of thru-bolts for walls 1 and 24. This IR was incorrectly labeled when it was written and referenced an incorrect drawing and wall numbers. The licensee documented the as-built location of the thru-bolts installed of wall numbers 1 and 24 on inspection reports attached to NCR 1430C. The as-built locations were reviewed and approved by EBASCO to disposition the NCR. The inspector reviewed the inspection documentation and examined wall numbers 1 and 24 and verified that the as-built drawings accurately reflected the locations of the thru bolts as installed on the walls. This item is closed.

4. Unresolved Items

Unresolved items were not identified during the inspection.

5. Independent Inspection Effort

The inspector examined procedure number 0010433, Control of Heavy Load Lifts. This procedure provides guidance required by NUREG 0612, Control of Heavy Loads at Nuclear Power Plants, to control handling of heavy loads in proximity of spent fuel and safety-related equipment.

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

6. Snubber Surveillance Program - Unit 1 (Module 61729)

The inspector reviewed procedures and quality records related to the snubber surveillance program. Acceptance criteria examined by the inspector appear in Unit 1 Technical Specification 3/4.7.10.

a. Review of Snubber Surveillance Procedures

The inspector examined the following procedures which control snubber surveillance and inspection activities:

(1) FP&L quality instruction number QI 10-PR/PSL-6, Control, Inspection, and Monitoring of Mechanical and Hydraulic Shock Arrestors (Snubbers)

(2) Paul Munroe procedure QSS-QAP 2.4, Qualification of Technicians

(3) Paul Munroe procedure QSS-QAP 9.1-1, Removal and Reinstallation of Mechanical Shock Arrestors

(4) Paul Munroe procedure QSS-QAP 9.3-1, Procedure for Disassembly of PSA Mechanical Shock Arrestors

(5) Paul Munroe procedure QSS-QAP 10.2-1, Limited Functional Examination (VT-4) of Mechanical Shock Arrestors

(6) Paul Munroe procedure QSS-QAP 10.4-1, Visual Exam of Hydraulic Snubber

(7) Paul Munroe procedure QSS-QAP 11.1-1, Functional testing of PSA Mechanical Shock Arrestors

(8) Paul Munroe procedure QSS-QAP 12.1-1, Control of Measurement and Test Equipment

b. Review of Quality Records

The inspector reviewed the results of surveillance inspections performed November-December, 1984 on Unit 1 snubbers. These records included the following:

(1) Results of visual inspections performed on the 20 hydraulic snubbers installed on the steam generators and reactor coolant pump motors

(2) Results of visual inspection performed on mechanical snubber numbers 1-021 through 1-025, 1-039, 1-045, and 1-106, through 1-110

(3) Results of functional tests performed on hydraulic snubber numbers 1-001 and 1-002, installed on steam generator 1A

(4) Results of functional tests performed on various mechanical snubbers

(5) Service life records for hydraulic snubber seals

Review of the results of functional tests performed on the hydraulic snubbers disclosed that both snubbers tested failed to meet the functional test acceptance criteria. The test failures were documented on Deficiency Report numbers DR-25-PSL-1-85-16 and DR-26-PSL-1-85-17. Examination of the snubbers disclosed that the test failures were due to debris blocking the lock-up valve bleed orfices. The problem was corrected by modification of the lock-up valves on all 16 steam generator snubber bleed valves in accordance with the recommendations of the snubber manufacturer, ITT Grinnell. The modifications were accomplished under plant change/modification package 180-185, and were being completed as of the inspection date. Final adjustment of the 16 steam generator snubber bleed valves was in progress. The reactor coolant pump motor snubbers were not affected by this particular problem since they are smaller capacity. However, other problems with the four RC pump motor snubbers resulted in rebuilding/replacement of all four snubbers.

Review of the functional tests results performed on the mechanical snubbers disclosed that due to a high failure rate, one hundred percent of the mechanical snubbers were functionally tested. The test failure was documented on 68 deficiency reports. Disposition of the DRs was to replace the snubbers with new snubbers and perform an investigation into the cause. The investigation into the cause of the snubber failures, which includes disassembly and examination of the snubbers; metallurgical examination of the snubber parts; and review of functional test methods (to determine if functional test methods may have caused snubber failures) was ongoing at the time of this inspection. The licensee will submit a special report to the NRC Region II when the investigation is completed.

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

7. (Closed) IE Bulletin 80-11, Masonry Wall Design - Unit 1.

The licensee responded to IE Bulletin 80-11 in letters to the NRC Region II dated July 24, 1980 and February 11, 1981. In letters dated October 4, 1982 and June 14, 1984, to the NRC Office of Nuclear Reactor Regulation (NRR), the licensee responded to requests for additional information concerning masonry wall design.

The inspector examined the licensee's action to complete IEB 80-11 requirements during inspections documented in Report numbers 50-335/81-10, 82-01, 82-24, and 82-35. Final acceptance of the licensee's criteria used for design analysis of masonry walls is documented in a Safety Evaluation Report (SER) dated June 26, 1985, titled FP&L St. Lucie Plant Unit 1, Masonry Wall Design IE Bulletin 80-11. This SER was provided to the licensee in a letter dated June 26, 1985 from E. J. Butcher, Division of Licensing, NRR, to J. W. Williams, JR, FP&L.

8. Previously Identified Inspector Follow-up Item

(Closed) IFI 389/83-08-01, Review of Piping and Component Thermal Expansion.

The inspector reviewed completed procedure numbers 2-0010184, Reactor Coolant System Component Expansion Measurement - Pre-Core, and 2-0010185, Piping Thermal Expansion and Restraints (Pre-Core).

The thermal expansion data (measurements), preoperational test summary, deviations to the procedures, and the problem log were reviewed. The problem log noted interferences, other unacceptable conditions which had to be corrected, and other data points which had to be observed during Hot Ops II (Post-core heatup). The inspector reviewed various EBASCO and Combustion Engineering letters documenting acceptance of test results or approving corrective actions, if necessary, to be accomplished prior to Hot Ops II.

The inspector examined completed procedure numbers 2-0010189, RCS Component Thermal Expansion Measurement - Post Core and 2-0010194, Piping Thermal Expansion and Restraints (Post Core). Data observations/measurements were taken at points identified as problem areas during the Pre-Core tests. Various documents confirming acceptance by design engineers of thermal expansion tests results were reviewed by the inspector. The inspector concluded that the tests complied with design and FSAR requirements. Inspector Foffowup 389/83-08-01 is closed.

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