



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA ST., N.W., SUITE 3100
 ATLANTA, GEORGIA 30303

Report Nos. 50-250/81-29 and 50-251/81-29

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

Facility Name: Turkey Point

Docket Nos. 50-250 and 50-251

License Nos. DPR-31 and DPR-41

Inspection at Turkey Point site near Homestead, Florida

Inspector: J. J. Blake 12/22/81
Date Signed

Approved by: A. R. Herdt 12/23/81
Date Signed
 A. R. Herdt, Section Chief
 Engineering Inspection Branch
 Engineering and Technical Inspection Division

SUMMARY

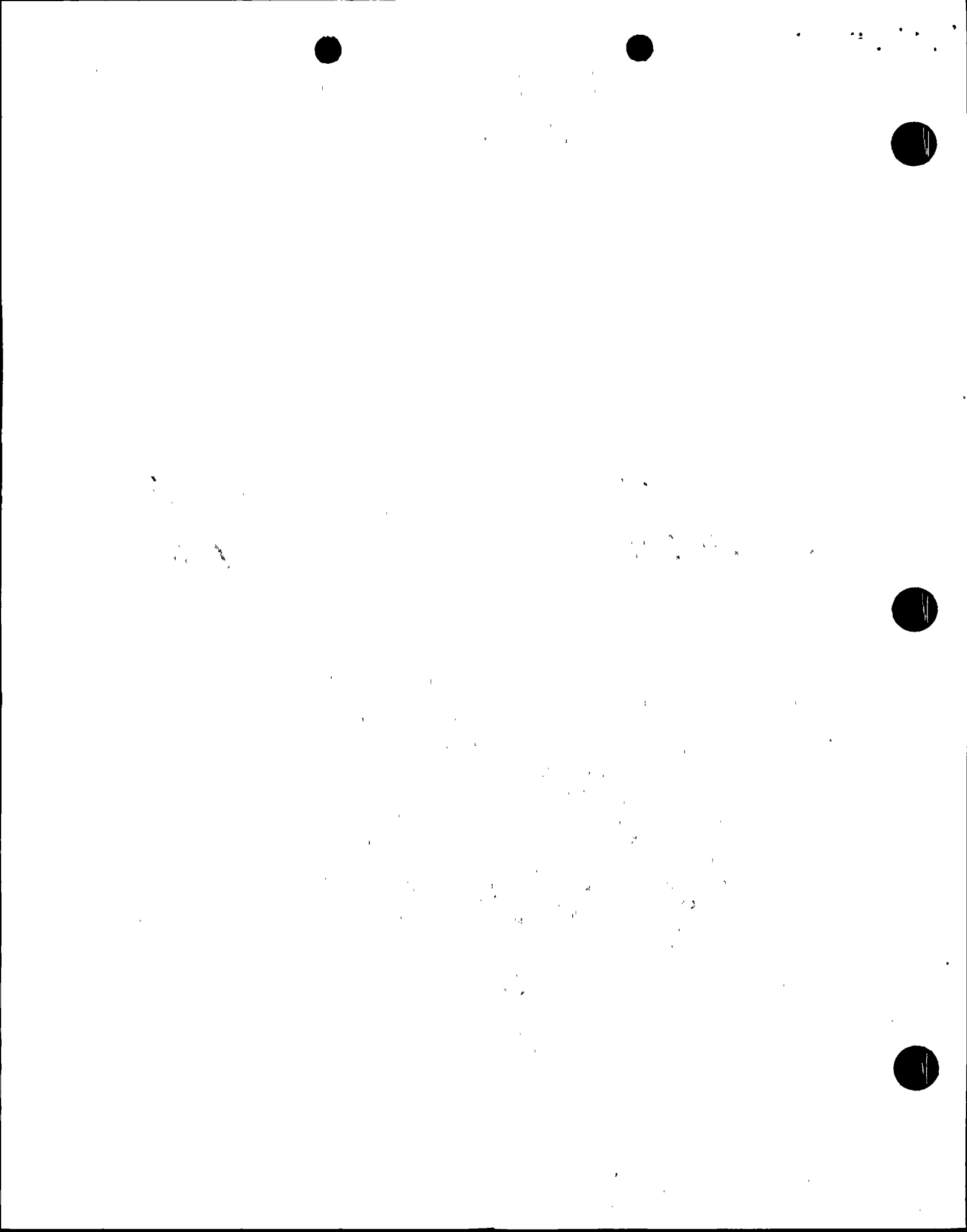
Inspection on December 1-4, 1981

Areas Inspected

This routine, unannounced inspection involved 29 inspector-hours on site in the areas of Inservice Inspection Preparations (Unit 3); Licensee Event Reports (Unit 4); Steam Generator Repair (Unit 3); and Maintenance (Units 3 & 4).

Results

Of the four areas inspected, no violations or deviations were identified in three areas; one violation was found in one area (Violation - Lack of clear identification of safety related boundaries, Paragraph 7).



REPORT DETAILS

1. Persons Contacted

Licensee Employees

H. E. Yaeger, Site Manager
*J. K. Hays, Plant Manager Nuclear
G. R. Gram, Site Project Manager
*T. Essinger, Assistant Manager - PTP QA
*D. W. Jones, QC Supervisor, Operations
*L. B. Wilson, Construction QC Area - Supervisor
*M. J. Crisler, Construction QA Supervising Engineer
*R. E. Tucker, Operations QA, QA Engineer
*J. D. Ferrare, Operations QA, QA Engineer
*R. B. Cook, QC Engineer
*T. Roberts, Engineering Site Representative
*J. A. Labarraque, Technical Department Supervisor
*E. L. Anderson, ISI Engineer
E. Hartman, ISI Engineer

Other licensee employees contacted included several construction craftsmen, and QC technician.

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on December 4, 1981 with those persons indicated in paragraph 1 above. The violation and new unresolved item were discussed in detail. The new items are as follows:

Violation (50-250, 251/81-29-01) "Lack of Clear Identification of Safety Related Boundaries."

Unresolved Item (50-250, 251/81-29-02) "Repair and Replacement Requirements of ASME Section XI."

3. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item (50-250, 251/81-26-04) "Non-Retrievable CMTR." The licensee had located the certified material test reports (CMTR) and the receiving inspection reports for the welding materials identified in RII Report No. 50-250, 251/81-26. This item is closed.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or devia-

tions. New unresolved items identified during this inspection are discussed in paragraph 7.

5. Inservice Inspection Preparations

The inspector met with the licensee's inservice inspection (ISI) engineers to review the preparations for the ISI to be conducted prior to Unit 3 returning to service. Items discussed included tentative scheduling for the radiographic inspection of a main coolant pump body, the remaining inspections on the reactor vessel and the pre-service inspections which will be done on steam generator shell and piping welds.

There were no violations or deviations in this area of the inspection.

6. Steam Generator Repair (Unit 3)

The inspector reviewed the status of the repair program and observed welding and heat treatment work activities.

At the time of this inspection the replacement sections of steam generator had been installed and welding was nearly complete. Preparations were under way to start re-installation of feedwater and main steam piping and shield concrete.

The inspector observed repair welding activities on the lower shell weld of Steam Generator A; stress relief heat treatment of the upper shell weld of Steam Generator A; and the welding of the inside of the upper shell weld on Steam Generator B.

The inspector also reviewed a portion of the information radiographs which CBI had taken of the steam generator welds.

There were no violations or deviations in this area of the inspection.

7. Maintenance Activities

The inspector reviewed the following maintenance activities:

- a. Concrete Repair - (Unit 4) - During installation of anchor bolts for a new support base plate, the licensee found an area of unsound concrete. (LER No. 50-251/81-14 Reported on November 16, 1981) The exploration and repair of this condition was documented on FP&L Construction QC Nonconformance Report No. 306-81.

The inspector reviewed the documentation for the repairs and discussed the matter with the licensee's construction QA and QC personnel.

There were no violations or deviations in this area of the inspection.

- b. Valve Replacement - Unit 4 Feedwater System. During discussion with the licensee, the inspector learned that the licensee's maintenance



group was replacing a valve body for the motor operated valve in one of the 4-inch diameter by-pass loops in the Unit 4 feedwater system. The licensee also stated that the valve in question was not considered to be safety related in that it was outside the containment isolation valve for this system.

The inspector reviewed the drawings for the feedwater system and suggested that rather than being outside of the containment isolation valve, the valve being replaced was the isolation valve.

The feedwater system for the Turkey Point Plants does not contain any valves inside of containment. Outside of containment the main feedwater line contains a manual valve, a motor operated check valve, a motor operated control valve, and another motor operated valve in series; in parallel with the main feedwater valves is a 4-inch by-pass line which contains a manual valve, a check valve, a motor operated valve and another manual valve in series (All of these valves are normally open during operation with the exception of the 4-inch motor operated valve which is normally closed during operation).

The licensee's site personnel showed the inspector the quality instruction which is provided by the licensee's Power Plant Engineering Department EPP-Q1 2.3A Classification of Structures, Systems and Components - Turkey Point Plant. This instruction provides the following guidance for the safety related boundary of the feedwater system:

"Mechanical Systems & Components.

12.1 Feedwater piping and valves inside containment structure up to and including first isolation valve outside containment structure.

It was further explained to the inspector, that historically the first valve outside containment, which is a manual valve, has been considered to be the "first isolation valve" referred to by the QI. This interpretation was supported by the original fabrication documentation which showed a change from ASME Section I to USAS B31.1 fabrication requirements at that valve.

The question of where the safety related boundary should be for the feedwater system was discussed with other members of the licensee's staff. During these discussions the inspector was shown drawings or other documents which showed the main feedwater boundary valve to be the manual valve, the check valve and the control valve (The drawings included inservice inspection and test submittals).

The licensee's Topical QA Manual Procedure No. QP 2.7 "Identification of Safety-Related Structures, Systems and Components" states that the controlling document for identification of safety-related items is the FSAR, but where the FSAR is not definitive for a specified plant, power plant engineering shall develop and maintain documents identifying



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those structures, systems, and components which are nuclear safety related. These documents shall clearly identify the boundaries of safety-related system."

The inspector informed the licensee that the fact that the safety-related boundaries of the feedwater system had not been clearly identified was in violation of the Topical QA Program Procedures. This will be Enforcement Item No. 50-250, 251/89-21-01 "Lack of Clear Identification of Safety Related Boundaries"; a violation of 10 CFR 50 Appendix B Criterion V.

Subsequent to the identification of the violation, the subject of how repairs such as the replacement of a safety-related valve in the feedwater system could be accomplished if the licensee's quality assurance program requires more documentation on safety related replacement items than the original fabrication specification. The inspector pointed out that the replacement of these type of items was covered by the replacement rules of ASME Section XI which allows the use of original installation rules and requirements. This aspect of factoring in the requirements of ASME Section XI was left as an unresolved item by the inspector. This item No. 50-250, 251/81-29-02 "Repair and Replacement Requirements of ASME Section XI", will be reviewed in detail at a later date.

