

# UNITED STATES NUCLEAR REGULATORY COMMISSION

#### **REGION II**

101 MARIETTA ST., N.W., SUITE 3100 ATLANTA, GEORGIA 30303

Report No. 50-389/82-51

Licensee: Florida Power and Light

9250 West Flagler 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

P. A. Taylor

Date Signed

Signed

Approved by:

. Jape, Section Chief

Engineering Inspection Branch

Division of Engineering and Technical Programs

SUMMARY

Inspection on October 18-22, 1982

Areas Inspected

This routine, unannounced inspection involved 35 inspector-hours on site in the areas of preoperational test procedure review, preoperational test witnessing, preoperational program implementation, hot functional test witnessing, inspector followup items, and plant tour.

Results

Of the six areas inspected, no violations or deviations were identified.

### REPORT DETAILS

### 1. Persons Contacted

Licensee Employees

\*G. Boissy, Startup Superintendent

\*W. Windecker, Assistant Superintendent Planning and Scheduling

\*R. Dawson, Lead Mechanical Engineer

J. Garner, Lead I&C Engineer

R. Beecker, Mechanical Startup Engineer

E. Ordway, I&C Startup Engineer

R. Sherman, I&C Startup Engineer

Other licensee employees contacted included three technicians and three operators.

\*Attended exit interview

#### 2. Exit Interview

The inspection scope and findings were summarized on October 22, 1982, with those persons indicated in paragraph 1 above. The licensee acknowledged the inspection findings.

3. Licensee Action on Previous Enforcement Matters

Not inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

Preoperational Test Procedure Review (70303B)

The inspector reviewed the following preoperational test procedures:

2-1710080, Primary Sampling Initial Operation

2-0010080, Calibration and Functional Test of Plant Instrumentation and Control Equipment

2-0910088, 480V AC Pressurizer Load Centers and Power Panels

These procedures were reviewed to verify that they were consistent with FSAR Chapter 14 and Regulatory Guide 1.68 commitments and that the procedures contained the required committee reviews, management approval, precautions, and acceptance criteria.

Within the areas inspected no violations or deviations were identified.

6. Preoperational Test Witnessing (70312B) (70314B)

The inspector witnessed portions of the test listed below to verify that the tests were being performed in accordance with approved procedures, test data were being recorded properly and met acceptance criteria, and that procedure deviations, equipment problems, when applicable, were being handled in accordance with administrative controls.

 2-1400082, Reactor Regulating System Functional Test and 2-1400088, Engineered Safeguard Panel Functional Test

The inspector observed the proper operation of indicator lights and contacts when varying the TAVE potentiometer through a range of voltages. The inspector also observed safeguard cabinet functional test of the key lock bypass feature.

b. 2-2000085, Initial Fan Operation and HVAC Balancing

The inspector observed the operation of fan 21B which provides cooling in the area of the control element drive mechanisms. Fan vibrations were noted to be 4 to 5 mils and bearing temperatures reached 185°F after a half hour of operation. Normal vibration levels are 1 mil or less and maximum bearing temperature is 165°F. Fan 21B was secured so that a balancing weight could be mounted on one of the fan blades to reduce the vibrations and troubleshooting was started to determine the cause for the high bearing temperatures.

Within the areas inspected no deviations or violations were identified.

7. Preoperational Test Program Implementation (70302B) (70311B

The inspector selected seven control drawings and three technical manuals which are being used by startup test personnel to verify that they are current with respect to revisions as issued by document control. The inspector also reviewed three design packages to determine that previous testing had not been invalidated or proper retesting was assigned. The inspector also reviewed the temporary jumper logs in the control room along with the examination of installed temporary equipment to verify that these items are being tracked in accordance with administrative controls.

Within the areas examined no deviations or violations were identified.

Hot Functional Test Witnessing (70314B)

During this inspection the licensee was making final preoperations for commencing hot functional testing. The inspector noted that shift staffing had been established such that each shift had a test director, startup engineers, technicians, and plant operators. The inspector independently spot checked licensee preparations for hot functional testing in accordance with the sequencing document 2-0010180. Areas examined included prerequisites, alignment of plant systems, and the installation of test equipment.

Within the areas inspected no deviations or violations were identified.

# 9. Inspector Followup Items

The following inspector followup items were reviewed with licensee management.

- a. 389/82-48-01 (Closed) Specify criteria for the continuation of an interrupted test. The licensee has made revision to QI-11-PR/PSL-1, Test Control procedure which provides guidance for the continuation of an interrupted test.
- b. 389/82-49-01 (Closed) Comments on preoperational test 2-0010181, Pre-Core Hot Functional Sequencing Document. The licensee has incorporated those preoperational tests which are required to be sufficiently completed to support hot functional testing and the RTD Time Response test was added to section 10 of the acceptance criteria section.

## 10. Plant Tour (71302B)

The inspector toured the control room, reactor auxiliary building, containment building and the diesel generator building to observe work activities in progress, housekeeping and tag controls on equipment.

Within the area inspected no violations or deviations were identified.