UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION II - SUITE 818
230 PEACHTREE STREET, NORTHWEST
ATLANTA, GEORGIA 30303
TELEPHONE 404/526-4503

RO Inspection Report No. 50-302/74-6

Licensee: Florida Power Corporation
3201 34th Street, South
P. O. Box 14042
St. Petersburg, Florida 33733

Facility Name: Crystal River 3
Docket No.: 50-302
License No.: CPPR-51
Category: B1

Location: Crystal River, Florida

Type of License: B&W, PWR, 2452 Mwt

Type of Inspection: Routine, Unannounced

Dates of Inspection; March 26-29, 1974

Dates of Previous Inspection: January 30-31, 1974 and February 1, 1974

Principal Inspector: K. W. Whitt, Reactor Inspector
Facilities Test and Startup Branch

Accompanying Inspector: None

Other Accompanying Personnel: None

Principal Inspector: Frank Jape / for 4-29-74
K. W. Whitt, Reactor Inspector Date
Facilities Test and Startup Branch

Reviewed By: Frank Jape / for 4-29-74
R. C. Lewis, Acting Chief Date
Facilities Test and Startup Branch

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SUMMARY OF FINDINGS

I. Enforcement Matters

A. Violations

None

B. Safety Items

None

II. Licensee Action on Previously Identified Enforcement Matters

None identified.

III. New Unresolved Items

74-6/1 Containment Building Integrity

Information regarding measures taken to maintain containment integrity while the refueling canal is being drained was requested and obtained. This item is considered closed. (Details, paragraph 2)

74-6/2 PWR Main Steam Line Isolation Valves

Information was requested to permit the evaluation of the extent of a possible generic problem related to the failure of a number of main steam line isolation valves at various PWR facilities. The requested information has been provided. This item is considered closed. (Details, paragraph 10)

IV. Status of Previously Identified Unresolved Items

73-10/1 Preoperational Environmental Monitoring Program

This item was not inspected.

73-12/1 Preoperational Test Program Controls

The Transition Control Procedure and the Temporary Test Device Control Procedure have been approved. Copies of these documents were provided to the inspector at the management interview; but they have not been reviewed. (Details, paragraph 3)

73-12/2 Steam Generator and Pressurizer Safety Valves

The licensee has stated intentions to bench test the steam generator and pressurizer safety valves. The valves will be tested in accordance with appropriate approved test procedures. This item is considered closed. (Details, paragraph 7)

V. Unusual Occurrences

None

VI. Other Significant Findings

Project Status

There has been no significant change in the status of testing since the last inspection. No safety related systems have been turned over to the power testing group in their entirety and no preoperational testing has been performed.

VII. Management Interview

A management interview was held at the conclusion of the inspection on March 29, 1974. The following licensee personnel participated:

Florida Power Corporation (FPC)

P. G. Davis, Jr. - Manager, Power Testing
E. E. Froats - Manager, Nuclear Site Surveillance
R. W. Slater - Site Quality Engineer
J. Alberdi - Nuclear Plant Superintendent

A. New unresolved item 74-6/1, Containment Building Integrity was discussed. (Details, paragraph 2)

B. Previously identified unresolved items 73-12/1, "Preoperational Test Program Controls," and 73-12/2, "Steam Generator and Pressurizer Safety Valves," were discussed. (Details, paragraph 3 and 7)

C. The role of the Plant Review Committee in the review of test procedures was discussed. (Details, paragraph 5)

D. The method of recording and changing test data was discussed. (Details, paragraph 8)

E. The method of control of test procedure changes was discussed. (Details, paragraph 9)

F. The inspector stated that he had reviewed three generation quality and standards administrative instructions and had no comments. He said that he had no further questions regarding the quality assurance program for testing at this time. (Details, paragraph 4)

G. The inspector stated that he had reviewed one test procedure and had discussed his comments with a management member of power testing. He said that the comments had been resolved and that he understood the procedure would be revised. A licensee representative stated that this understanding was correct.

DETAILS

Prepared by: Frank Jape for 4-29-74
K. W. Whitt, Reactor Inspector Date
Facilities Test and Startup Branch

Dates of Inspection: March 26-29, 1974

Reviewed by: Frank Jape for 4-29-74
R. C. Lewis, Acting Chief Date
Facilities Test and Startup Branch

1. Personnel Contacted

Florida Power Corporation (FPC)

H. L. Bennett - Director, Generation Construction
P. G. Davis, Jr. - Manager, Power Testing
J. Alberdi - Nuclear Plant Superintendent
P. F. McKee - Operations Engineer
D. W. Pedrick - Compliance Engineer
M. H. Klineman - Director, Generation Quality and Standards
E. E. Froats - Manager, Nuclear Site Surveillance
R. W. Slater - Site Quality Engineer
J. B. Barrett - Engineer II, Generation Quality and Standards

Gilbert Associates, Incorporated (GAI)

J. D. Green - Testing QA Coordinator

2. Containment Building Integrity

The Crystal River 3 (CR-3) spent fuel pool is divided into two sections designated as "A" and "B". The sections are separated by a permanent partition with a removable gate in the center which extends from the top of the pool down to a position 15'8" above the pool floor. Section "A" is adjacent to the fuel transfer canal. If the fuel transfer tube isolation valve was left open while the refueling canal was being drained, section "A" of the pool could be drained down to the bottom of the fuel transfer tube. This would expose the upper half of any fuel elements stored in section "A". If the gate was in position in the partition, section "B" would remain filled. If the gate was removed, section "B" could be drained down to the bottom of the gate (15'8" above the floor). This would leave approximately three and one-half feet of water over the top of the fuel elements stored in section "B". The minimum water level in section "A" would be controlled by the elevation of the bottom of the fuel transfer tube (about 6 feet above the pool

floor), and the minimum water level in section "B" would be controlled by the elevation of the bottom of the gate in the permanent partition (assuring the gate removed). Double isolation of the fuel transfer tube is obtained by an isolation valve on the spent fuel pool side and a blind flange on the refueling canal side. Double isolation is verified by administrative controls utilizing operating procedures. However, only single isolation is maintained during the draining of the refueling canal since the canal must be drained before the blind flange can be installed. The refueling canal is drained by pumping the water to the borated water storage tank (BWST). An alarm sounds in the control room if the spent fuel pool water level in either section "A" or "B" drops twelve inches below a pre-established level. There is also a spent fuel pool level indicator in the control room. The water from the refueling canal will almost fill the BWST. If additional water from the spent fuel pool is pumped to this tank, a high BWST level alarm will sound in the control room. If the BWST overflows, the excess water will drain to the auxiliary building sump. When the auxiliary building sump pump starts on high sump level, an alarm sounds in the control room to indicate the possibility of excessive amounts of water being released. No further inspection effort is planned for this item.

3. Preoperational Test Program Controls

This unresolved item was initially discussed in RO Report No. 50-302/73-12, Details I, paragraph 3. Draft copies of the procedures for transition control and temporary test device control were provided to the inspector at the conclusion of the previous Facilities Test and Startup Branch inspection on February 1, 1974. These procedures were reviewed and the following comments were submitted to a FPC management representative:

a. Transition Control Procedure (Appendix 3 to the Test Program Guide (TPG)

The second sentence of Section 6.2 charges the Director, Generation Construction, with the responsibility for approving the transition. The discussion of section 6.2 does not clearly define what transition is being discussed. The transition being referenced could be the transition from construction to the power testing group or it could be the transition from the power testing group to operations. The discussion of this section should be more clearly stated.

b. Temporary Test Device Procedure (Appendix 5 to TPG)

(1) The procedure does not address lifted leads. Lifted leads and jumpers should be controlled in a similar manner.

(2) "Jumpers" and "temporary alteration tags" should be defined.

(3) The procedure should require all jumpers to be serially numbered.

(4) No precautions or limitations have been provided in the procedure.

(5) The method of jumper control has not been adequately described. Step-by-step instructions for issuing, installing, removing and returning the jumpers and disconnect tags should be provided.

(6) Section 6.1.1 is written to allow an individual to use a jumper continuously without tagging and recording each action. If a jumper is attached so that it will remain in place without being held, it must be logged.

(7) The procedure does not require a periodic audit of the temporary test device control system. Such an audit by managerial personnel should be required.

As a result of the procedure review by the various FPC groups and by the inspector, the procedures were rewritten. The approved procedures were given to the inspector at the management interview. At this time, the licensee was advised that this item would remain open until the inspector had reviewed the approved procedures.

4. QA Program for Testing

This item was initially discussed in RO Report No. 50-302/73-12, Details I, paragraph 4, and subsequently in RO Report No. 50-302/74-2. During this inspection, the inspector reviewed the three required generation quality and standards administrative instructions and had no comments. The instructions were:

a. QOP 11.1, "Quality Program Surveillance of Transition From Construction to Test."

b. QOP 11.2, "Quality Program Surveillance of Test Results Documentation."

c. QOP 11.3, "Quality Program Surveillance of Test."

The inspector has no further questions concerning this item at this time.

5. Role of Plant Review Committee in the Review of Test Procedures

The role of the Plant Review Committee, in the review of test procedures, was discussed with members of plant operations and power testing. Agreement has been reached between these two groups regarding the test procedures to be reviewed by the Plant Review Committee. The CR-3 FSAR requires that safety related test procedures be reviewed by the Plant Review Committee. A change is being initiated to the FSAR which will require the Plant Review Committee to review only functional and operational safety related test procedures. A licensee representative stated at the management interview that this change would be submitted to FPC management for approval by April 12, 1974. All Class I and Class II (safety related) test procedures that go through the review and approval process before the FSAR change is approved will be reviewed by the Plant Review Committee. Subsequent to approval of the FSAR change, Class I and Class II functional and operational test procedures will be reviewed by the Plant Review Committee. The TPC and the Plant Review Committee charter will be revised as necessary to conform with the requirements of the FSAR after the change is approved.

6. Test Procedure Review

Test Procedure 71 451 22 0, "D. C. Power System Functional Test," was reviewed and the following comments were discussed with a licensee representative:

Comment 1

Section 2.3 indicates that no data sheets are required for this test; but the body of the procedure requires data to be recorded and a data sheet is contained in the procedure.

Licensee Response:

Section 2.3 is in error and will be corrected before the procedure is used.

Comment 2:

Prerequisite tests listed in Section 5.1 and required to be completed before this test is started have not been provided with sign-off spaces.

Licensee Response:

This is an oversight and will be corrected.

Comment 3:

Section 9.2.1.B requires specified data to be recorded, but does specify where it is to be recorded and no data sheet has been provided for recording the data.

Licensee Response:

The appropriate data sheet will be added and the wording of Section 9.2.1.B will be revised to specify the number of the data sheet to be used.

Comment 4:

Sign-off requirements for procedure steps do not appear to be consistent throughout the body of the procedure.

Licensee Response:

This item has already been discussed by members of power testing. Sign-off will be made consistent throughout this and other test procedures.

7. Steam Generator and Pressurizer Safety Valves

This item was initially discussed in RO Report No. 50-302/73-12, Details II, paragraph 2.d. Discussion during this inspection with licensee representatives in the power testing group indicated that the licensee was undecided as to whether the valves would be tested in place (installed) bench tested and then installed. At the management interview, a licensee representative stated that FPC had made the decision to bench test the valves. He stated that the valves would be bench tested per approved test procedures in accordance with the FPC test schedule, and asked if the Commission had any concerns regarding bench testing of safety valves. The inspector replied that he would request Region II management guidance and would inform the licensee by phone of any problem that might exist. On April 2, 1974, the inspector advised a licensee management representative by phone that bench testing was considered to be an acceptable method of testing the safety valves. This item is considered closed.

8. Test Data

The inspector discussed the method of recording and changing test data with licensee representatives. He explained that he had not seen

any instructions addressing this topic in any of the test program documents. A licensee representative stated that appropriate instructions would be issued to assure that data was recorded legibly and in ink, and that when it was necessary to change data, it would be lined out, corrected, initialled, and dated. At the management interview, a licensee representative stated that some of the above instructions had been added to the TPG. It was further stated by licensee representatives at this time that appropriate and complete instructions would be provided, and that if those in the TPG were incomplete, they would be supplemented. The inspector has no further questions concerning this item.

9. Test Procedure Changes

The TPG allows minor changes to be made to test procedures by the test supervisor without any change from control. The test supervisor can line out the part being changed, make the correction, and initial it in the procedure and is not required to fill out a change sheet or addendum. The inspector stated that some formal change control should be initiated for all changes to test procedures. A licensee representative stated that this subject would be discussed with FPC management and resolved prior to the next inspection.

10. PWR Main Steam Line Isolation Valves

The information requested on this subject by Regulatory Operations letter, RO:II:NCM, 50-302, dated February 20, 1974, was transmitted to Region II and Headquarters by FPC letters dated March 18, 1974, and April 14, 1974. The data provided will be evaluated by Headquarters personnel. No further inspection effort is planned for this item.

RC

Ltr to Florida Power Corporation fm N. C. Moseley
dtd APR 30 1974

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