

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

Report No.: 50-302/87-33 Licensee: Florida Power Corporation 3201 34th Street, South St. Petersburg, FL 33733 Docket No.: 50-302 Facility Name: Crystal River 3 Inspection Conducted: October 13-16, 1987

Mare Inspector: for Approved by: for Test Programs Section Division of Reactor Safety

License No.: DPR-72

SUMMARY

Scope: This routine, unannounced inspection was in the areas of the snubber surveillance program and the reactor building tendon surveillance program.

Results: No violations or deviations were identified.

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

*G. A. Becker, Manager, Site Nuclear Engineering Services
*J. Cooper, Superintendent Technical Support
*B. Crane, Principal Mechanical/Strut
*J. Lander, Manager, Nuclear Maintenance and Outages
*M. S. Mann, Nuclear Compliance Specialist
*P. F. McKee, Director, Plant Operations
S. J. Rainwater, IS³ Specialist
B. L. Serrano, Sic Nuclear Senior INC Procurement Engineer
L. Tiscione, Manager, Nuclear Procurement Engineering

Other Organizations

J. Bond, Project Superintendent, VSL Corporation

J. Herr, Structural Engineer, Gilbert Associates

NRC Resident Inspectors

*T. F. Stetka

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on October 16, 1987, 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

This subject was not addressed in the inspection.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Snubber Surveillance Program (70370)

The inspector examined snubber surveillance and test procedures and discussed the snubber functional testing program currently in progress with licensee engineers. Acceptance criteria utilized by the inspector are specified in Technical Specification 3/4.7.9.1. Procedures examined included the following:

- a. Surveillance Procedure Number SP-200, Hydraulic Snubber Functional Testing.
- b. Surveillance Procedure Number SP-201, Accessible/Inaccessible Hydraulic Snubbers Visual Inspection.
- c. Surveillance Procedure Number SP-458, Tabulation of Technical Specification Applicability to Hydraulic Snubbers.
- d. Performance Testing Procedure PT-130, Hydraulic Pipe Snubber Test Procedure.

Discussions with licensee engineers disclosed that the licensee plans to implement a maintenance program during the current outage to rebuild approximately 20 to 25 percent of the safety-related snubbers. The purpose of the rebuild program is to replace seals in these snubbers to extend the service and seal life of the snubbers and to preclude the necessity of rebuilding the entire population of safety-related snubbers at the same time.

Functional testing has been completed on a portion of the representative sample of snubbers selected in accordance with procedure SP-200. Due to an error in testing (test terminated too soon), one snubber failed the functional test. Testing will be completed in the remaining portion of the representative sample and a new sample of ten snubbers will be selected and tested per the requirement of TS 4.7.9.1 due to the functional test failure.

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

6. Containment Building Tendon Surveillance (61701)

The inspector examined procedures, work activities, and quality records relating to the Unit 3 containment building tendon surveillance program.

a. Review of Tendon Surveillance Procedure

The inspector examined FPC Surveillance Procedure SP-182, Revision 7, "Reactor Building Structura! Integrity Tendon Surveillance Program." This procedure specifies the requirements for inspection, testing, analysis and data reporting for the containment building post-tensioning system. Acceptance criteria examined by the inspector appear in Technical Specification 4.6.1.6.

b. Observation of Tendon Surveillance Work Activities

The inspector witnessed stressing operations for determination of the lift off forces in the buttress 1 end of horizontal tendons number 51 H26 and 51 H41. These operations were performed in accordance with the requirements stated in procedure SP-182. The inspector examined the anchorage assemblies on the above listed tendons and verified that inspections of the anchorage assemblies was conducted and documented in accordance with the procedure. The inspector toured the tendon gallery and examined the grease cans covering the lower end of the vertical tendons and verified that the tendon corrosion protection materials (grease) was not leaking from the grease cans.

c. Review of Quality Records Relating to Tendon Surveillance Activities

The inspector examined the following records relating to tendon surveillance activities:

- Stressing ram calibration records for ram number 1000-12-4 and 1000-12-5.
- (2) Records for anchorage assembly surveillance inspection for tendon 51 H26 and 51 H41.
- (3) Gilbert Associates report titled "Third Tendon Surveillance Lift-Off Force Evaluation."
- (4) Records of first, second, and third tendon surveillance inspections.

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

7. Repair of DC Motor Lead Wires on Limitorque Operators (92705)

During the course of MOVATS testing of limitorque valve operators, licensee personnel observed breakdown of insulation and arcing on the lead wires for one of the DC motors. As a result of this problem, the licensee inspected all eight safety-related valves supplied with DC motors and determined that the insulation material, which is an impregnated glass braid, was damaged. The damage was attributed to rubbing of the insulating material with the sides of the penetration into the limitorque limit switch compartment. The licensee determined that the damaged insulation material was not the Kapton insulated material described in IEN 87-08. The licensee also inspected insulation on the AC motor leads and determined that the silicon rubber insulation on the AC motor lead wires were not similarly damaged. The inspector examined Engineering Instructions dated October 6, 1987, titled Repair of Porter DC Motor Lead Wires on Limitorque Operators. This document provides detailed instructions for repair of the damaged insulation on the DC motor lead with Raychem splice materials. Implementation and adequacy of repair instructions will be examined by the Resident Inspector in followup on IFI 302/87-30-05. The licensee has documented the problem in nonconformance report numbers NCOR 87-157 and 87-158. The licensee will evaluate the applicability of Part 21 to this problem.

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