



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

Report No. 50-348/80-27 and 50-364/80-39

Licensee: Alabama Power Company
600 North 18th Street
Birmingham, AL 35202

Facility Name: Farley

License No. NPF-2 and CPPR-86

Inspection at Farley near Dothan, Alabama

Inspectors: <u>DSP</u>	<u>9/29/80</u>
W. H. Bradford	Date Signed
<u>DSP</u>	<u>9/29/80</u>
J. P. Mulkey	Date Signed
Approved by: <u>R. D. Martin</u>	<u>9/29/80</u>
R. D. Martin, Section Chief, RONS Branch	Date Signed

SUMMARY

Inspection on August 1 - August 29, 1980

Areas Inspected

This routine, announced inspection involved 284 inspector-hours on site in the areas of Unit 1 plant operation, plant security, Unit 2 plant tour, open items, preoperational test witnessing, Unit No. 2 plant operational status, preoperational test status, near term operating licensee requirements, and plant maintenance.

Results

Of the nine areas inspected, no items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

Licensee Employees

W. G. Hairston, Plant Manager
J. D. Woodard, Assistant Plant Manager
D. Morey, Operations Supervisor
R. S. Hill, Operations Supervisor
W. D. Shipman, Maintenance Superintendent
R. W. McCracken, Technical Superintendent
D. E. Mansfield, Unit No. 2, Startup Superintendent
R. M. Coleman, Supervisory Engineer

Other licensee employees contacted included shift supervisors, shift foremen, technicians, plant operators, plant mechanics, security force members, and office personnel.

Other Organizations

S. M. Hall, Westinghouse Startup Services Manager and certain Westinghouse startup engineers.

NRC Resident Inspector

W. H. Bradford

2. Exit Interview

The inspection scope and findings were summarized on August 15 and 29, 1980 with the plant manager and selected members of his staff. The licensee acknowledged the inspection findings.

3. Licensee Action on Previous Inspection Findings

- a. (Closed) Noncompliance 348/79-37-01. The inspector reviewed the licensee response dated January 4, 1980. The inspector reviewed STP-33.0 "Solid State Protection System Train A (B) Operability Test" and STP.70 "Quadrant Power Tilt Ratio Circulation" to verify that the procedures had been revised.
- b. (Closed) Noncompliance 348/80-02-01. This item concerned the removal from service of 1A boric acid transfer pump for maintenance and the improper completion of the Maintenance Request Form. The inspector has reviewed the licensee's corrective action and deems the corrective action to be satisfactory.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Plant Operation

The inspector reviewed plant operation to ascertain conformance with regulatory requirements, technical specification and Administrative Procedure No. 16, "Conduct of Operation - Operation Group". Station logs, such as the shift supervisor, shift foreman, control room operators, shift turnover, the out of service equipment log, night order log book, and the limited condition of operation log, were reviewed. The inspector conducted tours of selected areas of the plant which included portions of the auxiliary building, diesel generator building, and the river water pump house. Observations were made of plant operation, monitoring instrumentation, radiation controls, fluid leaks, piping vibration, pipe hangers, certain valve positions, housekeeping, fire hazards, and equipment tagged out of service for maintenance. Discussions were held with plant operators throughout the plant concerning certain alarm functions and plant operations.

Within the areas inspected no items of noncompliance or deviations were identified.

6. Plant Security

The inspector verified that physical barriers were intact and that gates into the protected areas were closed and locked if not attended, that doors into vital areas were closed and locked or attended, and that isolation zones were free of visual obstruction.

The inspector verified that access into protected areas was controlled, that persons and packages were identified and authorized prior to entry into protected areas, and that all persons, packages and vehicles were searched prior to entry in accordance with regulatory requirements and security procedures.

Within the areas inspected, no deviations or items of noncompliance were identified.

7. Plant Tour - Unit No. 2

The inspector conducted tours of the Farley Unit No. 2 facility to determine the following:

- a. That welding, burning and cutting in areas turned over to operations had adequate fire protection and that protective measures for equipment in the area had been initiated and were observed.
- b. Housekeeping practices had been initiated and were observed.

- c. A method had been initiated for equipment preservation and that an equipment tagging procedure was being carried out on equipment not undergoing testing.
- d. That installed instrumentation was protected and had not been abused.
- e. That openings into systems were protected and that cleanliness control was observed.
- f. That deficiencies identified during testing were entered on a control punch list.

Within the areas inspected no items of noncompliance were observed.

8. Open Items

- a. Closed: Open Item 50-345/80-04-02 . This item concerned the licensee revising Administrative Procedure No. 13, "Bypass of Safety Functions and Jumper Control" and administering training on temporary alteration and associated control of alteration to operating personnel, instrument mechanics and craftsmen.
- b. Closed: Open Item 50-348/80-05-01. This item concerned changes to be made to emergency operating procedures to enhance operator action.
- c. Closed: Open Item 50-348/80-05-02. This item concerned additional training to be administered to operating personnel in the area of emergency operating procedures.

9. Witness of Preoperational Testing

Portions of the following tests were witnessed by the inspector. The performance of each test was evaluated against the requirements of ANSI N18.7-1972, Section 6.0, "Test and Inspection Procedures," ANSI N45.2-1971, Section 12, "Test Control," FSAR Chapter 14, "Initial Tests and Operations," and Regulatory Guides 1.6, 1.9 and 1.4i.

- a. 548-6-001 Plant Response to Integrated Safeguards Without Blackout.

The purpose of this test was to verify that all engineered safeguards components respond to a Loss of Coolant Accident (LOCA) in the as-designed manner without loss of offsite power. This test was attempted three times before the required results were achieved. Minor procedural and equipment problems were encountered and corrected prior to the final successful demonstration that all safeguards components responded as required.

- b. 548-6-002 Plant Response to Integrated Safeguards With Blackout

The purpose of this test was to demonstrate the diesel generator capability when responding to a LOCA and to verify that all engineered safeguards components respond to a LOCA signal in the as-designed manner.

The inspector witnessed the major portions of this test and observed no failure of any major safeguard system components. The diesel generators started and assumed their assigned loads as required. Several minor equipment problems were encountered and corrected prior to the final successful demonstration.

Within the areas inspected there were no discrepancies identified.

10. Plant Operational Status

The status of Phase I and II testing programs was reviewed and is summarized below:

Testing Completed 59%
Testing in Progress 18%
Testing not Started 21%
Test Data Approved by the Licensee 30%

Followup on the integrated punch list was continued during this inspection. Revisions to the punch list are issued weekly and periodically licensee' representatives review the status of each open item on the list. When an item is reported as complete, a systems completion engineer verifies the item status before it is removed from the integrated punch list.

11. Preoperational Test Status

The status of the preoperational test procedures is listed below. These procedures are required to be completed and properly approved prior to initial fuel load.

a. Tests which have been completed but test data approval has not been completed:

303-5-001- Startup Aux Transformer Preop.
004-5-001- 4160 VAC System Preop.
015-5-001- Regulated AC System Preop.
024-5-001- Diesel Load Sequencing Preop. (Train A)
024-5-003- Diesel Generator Load Sequencing Preop.
(Train B)
040-5-015- CVCS Letdown Preop.
048-5-001- Safeguards Slave Relay Preop.
052-5-008- Safety Injection Hi Head Preop.
059-5-003- Integrated Leak Rate Test
059-5-004- Structural Integrity Test
064-5-013- Reactor Coolant Drain Tank Preop.
067-5-005- Reactor Cavity Filtration
077-5-001- Vital Instrumentation AC Preop.
078-3-001- Nuclear Instrumentation Calibration and
Functional Test

548-6-001- Plant Response to Integrated Safeguards
Without Blackout

b. Testing in Progress

002-5-001- Auxiliary Building 125 VDC Preop.
002-5-002- D. C. System Cooling and Ventilation
005-5-001- 600 VAC Load Centers Preop.
005-5-002- 600 VAC Load Centers Cooling Systems
006-5-001- Motor Control Center Preop.
006-5-002- Motor Control Center Cooling System
013-3-006- CO2 System Calibration and Functional
014-4-001- Lighting Acceptance
040-5-016- CVCS Makeup and Blending
049-5-003- RHR Preop.
062-1-001- Inspection of Reactor Vessel Internals
062-5-001- Reactor Vessel Internals Checkout Functional
Test Inspection
079-5-004- Radiation Monitoring Detector Preop.
081-5-003- Fuel Transfer System Preop. with Dummy
Assembly

c. Tests which have not been started

010-5-002- Polar Crane Preop.
013-3-005- Dry and Wet Sprinkler System
079-5-005- Radiation Monitoring Actuation Preop.
081-5-004- Manipulator Crane Preop.
097-5-001- Security System Preop.

12. Unit No. 2 Near Term Operation License (NTOL) Requirements

The inspector reviewed plant documentation for the following NTOL requirements which are required to be completed prior to fuel load.

a. I.A.1.2- Shift Supervisor Administrative Duties.

This item is addressed in section 3.1.6 of Administrative Procedure No. 16 "Conduct of Operations-Operations Group."

b. I.C.2- Shift Relief and Turnover Procedures

This item is addressed in section 4.2 and Appendix D of Administrative Procedure No. 16- "Conduct of Operation-Operation Group."

c. I.C.3- Shift Supervisor Responsibilities.

This item is addressed in section 3.1.6 of Administrative Procedure o. 16 - "Conduct of Operation-Operations Group."

- d. I.C.4- Control Room Access - This item is addressed in Administrative Procedure No. 16 - "Conduct of Operation-Operation Group."
- e. I.C.5- Procedures for Feedback of Operating Experience to the Plant Staff.

This item is addressed in Administrative Procedure No. 63. "Conduct of Operations-Systems/Performance Group."

13. Plant Maintenance

Review of administrative controls for corrective plant maintenance following system turnover from construction revealed the following:

- a. Plant maintenance is required to be performed in accordance with defined administrative controls.
- b. Methods have been established for initiating, reviewing, approving and scheduling maintenance.
- c. Methods have been established for controlling replacement materials and parts that are designated for use in safety-related maintenance activities.
- d. Controls have been established which require that only qualified personnel will perform maintenance activities.
- e. Maintenance administrative controls have been established which include the following:
 - Criteria for determining when maintenance procedures will be provided.
 - Methods for preparing maintenance procedures.
 - Requirements for reviewing and approving maintenance procedures.
 - Methods of determining when training of personnel in the use of maintenance procedures is required.
 - A formal method to assure that appropriate approvals will be obtained prior to performing any maintenance activity.
 - Inspection of maintenance work including final inspection of a completed task.
 - Testing of structures, systems or components following maintenance to reestablish the validity of preoperational tests.

- Control of test and measurement equipment utilized in maintenance activities.
- f. Controls have been established which require preparation and retention of maintenance records.

Controls for preventive maintenance were under review at the conclusion of the inspection period.