



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

Report Nos. 50-348/82-27 and 50-364/82-27

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

Facility Name: Farley Nuclear Plant

Docket Nos. 50-348 and 50-364

License Nos. NPF-2 and NPF-8

Inspection at Farley site near Dothan, Alabama

Inspector: W. H. Bradford

12/13/82
Date Signed

Approved by: F. S. Cantrell
F. S. Cantrell, Section Chief, Division of
Project and Resident Programs

12/13/82
Date Signed

SUMMARY

Inspection on October 25 - November 26, 1982

Areas Inspected

This routine inspection involved 140 inspector-hours on site in the areas of monthly surveillance observation, monthly maintenance observation, operational safety verification, independent inspection effort, Unit 2 containment spray valves, Unit 2 refueling, licensee event report and organization and administration.

Results

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

DETAILS

1. Persons Contacted

Licensee Employees

W. G. Hairston, Plant Manager
J. D. Woodard, Assistant Plant Manager
D. Morey, Operations Superintendent
R. S. Hill, Operations Supervisor
W. D. Shipman, Maintenance Superintendent
C. Nesbitt, Technical Superintendent
L. Williams, Training Superintendent
R. G. Berryhill, Systems Performance and Planning Superintendent
L. A. Ward, Planning Supervisor
W. C. Carr, Chemistry and Health Physics Supervisor
M. W. Mitchell, Health Physics Supervisor
R. D. Rogers, Technical Supervisor
J. Odom, Operations Section Supervisor
T. Esteve, Operations Section Supervisor
R. Bayne, Chemistry Supervisor
J. Thomas, I&C Supervisor
J. Hudspeth, Document Control Supervisor
K. Jones, Material Supervisor
R. H. Graham, Security Supervisor
L. W. Enfinger, Administrative Superintendent
W. G. Ware, Supervisor, Safety Audit Engineering Review

Other licensee employees contacted included technicians, operation personnel, maintenance and I&C personnel, security force members, and office personnel.

2. Exit Interview

The inspection scope and findings were summarized during management interviews held throughout the reporting period with the plant manager and selected members of his staff. The licensee acknowledged the inspection findings.

3. Licensee Action on Previous Inspection Findings

Not inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Monthly Surveillance Observation

The inspector observed Technical Specification required surveillance testing and verified that testing was performed in accordance with adequate procedures, that test instrumentation was calibrated, that limiting conditions for operation were met, that test results met acceptance criteria requirements and were reviewed by personnel other than the individual directing the test, and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

The inspector witnessed/reviewed portions of the following test activities:

- FNP-2-STP-40.0 - Safety Injection with Loss of Off-site Power Test.
- FNP-2-ETP-1002 - 2B Component Cooling Water Pump SI-LOSP Auto Start Test.
- FNP-2-ETP-1003 - Charging/HHSI Adequate Flow Verification for SI-LOSP.
- FNP-2-ETP-1004 - RHR to RCS Cold Leg Verification.
- FNP-1-STP-109.0 - Power Range NEutron Flux Channel Calibration.
- FNP-1/2-STP-70.0 - Containment Sump Surveillance.
- FNP-2-STP-10.3 - Emergency core cooling valves Inservice Test and PORV Block Valve Stroke Test.
- FNP-2-STP-23.8 - Component Cooling Water Valve Inservice Test.
- FNP-2-STP-11.7 - Verifying RHR Relief Valve Isolation Open.
- FNP-2-STP-45.0 - Refueling Valve Inservice Test.
- FNP-1/2 STP-1.0 - Operations Daily and Shift Surveillance Requirements.
- FNP-Z-STP-1.0 - Operations Daily and Shift Surveillance Requirements (Mode 5).
- FNP-1-STP-9.0 - RCS Leakage Test.
- FNP-1-STP-20.1 - Penetration Room Filtration Alignment Verification.
- FNP-0-STP-80.2 - Diesel Generator 2C Operability Test.
- FNP-1-STP-3.1 - Borated Water Source Operability Test Modes 1, 2, 3 and 4.

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

6. Monthly Maintenance Observation

Station maintenance activities of safety-related systems and components were observed/reviewed to ascertain that they were conducted in accordance with approved procedures, regulatory guides, industry codes and standards, and in conformance with Technical Specifications.

The following items were considered during this review: limiting conditions for operation were met while components or systems were removed from service; approvals were obtained prior to initiating the work; activities were accomplished using approved procedures and were inspected as applicable; functional testing and/or calibrations were performed prior to returning components or systems to service; quality control records were maintained; activities were accomplished by qualified personnel; parts and materials were properly certified; radiological controls were implemented; and fire prevention controls were implemented.

Work requests were reviewed to determine the status of outstanding jobs to assure that priority is assigned to safety-related equipment maintenance which may affect system performance.

The following maintenance activities were observed/reviewed:

- a. Miscellaneous maintenance on diesel generators.
- b. Unit 2 steam generator tubes eddy current testing and tube plugging.
- c. Unit 2 steam generator sludge lancing.
- d. Unit 2 turbine driven auxiliary feed pump steam valve.
- e. Various instruments located throughout the plant.

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

7. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the report period. The inspectors verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of the auxiliary, diesel, and turbine buildings were conducted to observe plant equipment conditions, including potential fire hazards, fluid leaks, and excessive vibrations. The inspector verified by observation and direct interviews, that the physical security plan was being implemented in accordance with the station security plan.

The inspector observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection control. The inspector walked down accessible portions of the following safety-related systems on Units 1 and 2 to verify operability and proper valve alignment:

- a. Station electrical boards in the control rooms and various boards throughout the plant for proper electrical alignment.
- b. Various instrument calibration and repair throughout the plant.
- c. Certain accessible hydraulic snubbers.
- d. Accessible portions of service water systems and component cooling water systems.
- e. Units 1 and 2 auxiliary feedwater suction and discharge and steam supply to the turbine driven auxiliary feedwater pumps.
- f. Certain portions of flow paths of the boric acid systems.
- g. Portions of Units 1 and 2 charging/safety injection pumps suction and discharge piping systems.
- h. Portions of residual heat removal and containment spray systems.
- i. Portions of various other systems (safety-related and nonsafety-related) were observed for proper alignment and operation on various plant tours throughout the report period.

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

8. Independent Inspection Effort

The inspector routinely attended meetings with certain licensee management and observed various shift turnovers between shift supervisors, shift foreman and licensed operators during the reporting period. These meetings and discussions provided a daily status of plant operating and testing activities in progress as well as discussion of significant problems or incidents.

The inspector had no further questions.

9. Organization and Administration

The inspector examined the licensee's Administrative Procedures (AP) and FSAR to verify compliance with Technical Specifications and applicable standards. The areas inspected included onsite and offsite organization, onsite and offsite review committee membership and organization, and minimum shift crew composition. The licensee met all applicable Technical

Specification and standard requirements. Changes in offsite organization have been reported to NRC via a Technical Specification change request.

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

10. Unit 2 Refueling

The inspector reviewed the licensee's refueling procedure prior to start of refueling activities. The inspector verified that the procedure had been reviewed and approved.

Pre-refueling activities were observed to verify that technical specification and administrative requirements had been met; indexing of the refueling machine had been completed and interlocks had been set; radiation monitoring was in place and operable; crane testing had been completed; and communication systems were adequate.

Refueling activities were observed to verify that the following operations were in accordance with the technical specifications:

- a. Core monitoring was in effect.
- b. Containment integrity was maintained.
- c. Fuel movement was done in accordance with an approved procedure.
- d. Fuel accountability was maintained.
- e. RCS boron concentration was maintained.
- f. A licensed senior reactor operator was present on the refueling floor and directed all refueling activities and a licensed reactor operator was present in the control room at all times and was in constant direct communication with the refueling crew.

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

11. Review of Nonroutine Events Reported by the Licensee

The following licensee events reports were reviewed for potential generic problems, to determine trends, to determine whether the information included in the report meets the NRC reporting requirements, and to consider whether the corrective action discussed in the report appears appropriate. Licensee action with respect to selected reports were reviewed to verify that the event had been reviewed and evaluated by the licensee as required by the technical specification, that corrective action was taken by the licensee, and that safety limits, limiting safety settings, and limiting conditions of operation were not exceeded. The inspector examined selected Plant

Operations Review Committee minutes, incidents reports, logs and records, and interviewed selected personnel.

Unit 1 LER's

- 82-24 "A" Penetration room filter recirculation damper inoperable.
- 82-28 Turbine driven auxiliary feed pump inoperable.
- 82-33 Chlorine detector inoperable.
- 82-37 Overpower DT instrumentation inoperable.
- 82-39 Hydrogen recombiner inlet analyzer inoperable.
- 82-41 Containment atmosphere monitors R-11 and R-12 inoperable.
- 82-42 Containment isolation valve CCW-MOV-3052 inoperable.
- 82-45 RCS activity (Dose equivalent Iodine -131 above technical specification limit)
- 82-46 High energy line break instrumentation inoperable.
- 82-47 Containment air lock inoperable.
- 82-49 Inoperable diesel generator (1-2A and 1-B).
- 82-50 Chlorine detector inoperable.
- 82-51 "B" train control room emergency air clean-up system inoperable
- 82-52 "B" train control room emergency air clean-up system inoperable.
- 82-55 "B" train chlorine detector inoperable.

Unit 2 LER's

- 82-27 Containment monitor R-11 inoperable.
- 82-33 Containment isolation valve CVC-MOV-8108 inoperable.
- 82-35 RCS subcooling monitor inoperable.
- 82-36 2B auxiliary feed water pump inoperable.
- 82-37 "A" train steam generator differential pressure trip logic inoperable.

82-38 Containment monitors R-11 and R-12 inoperable.

82-40 B2F sequence phase 2-3 inoperable.

The inspector has no further questions concerning the above items.