



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

Report Nos. 50-348/82-22 and 50-364/82-21

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: John F. Rogge, Jr. 10/1/82  
 W. H. Bradford Date Signed

Approved by: V. L. Brownlee 10/4/82  
 V. L. Brownlee, Section Chief, Division of Date Signed  
 Project and Resident Programs

SUMMARY

Inspection on August 16 - September 15, 1982

Areas Inspected

This routine inspection involved 190 inspector-hours on site in the areas of monthly surveillance observation, monthly maintenance observation, operational safety verification, independent inspection effort, licensee event reports, strike contingency plan, and plant trips.

Results

Within the areas inspected, no violations or deviations 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-1-2-STP-1.0 - Operations Daily and Shift Surveillance Requirement Modes 1, 2, 3, and 4.
- FNP-2-STP-3.1 - Borated Water Source Operability Tests, Modes 1, 2, 3, and 4.
- FNP-2-STP-109.0 - Power Range Neutron Flux Calibration.
- FNP-2-STP-70.0 - Containment Sump Surveillance.
- FNP-2-STP-9.0 - RCS Leakage Test.
- FNP-2-STP-41.2 - Intermediate Range Functional Check - Channel N-35.
- FNP-2-STP-151.1 - Main Turbine Bearing Oil Pumps Operability Test.
- FNP-2-STF-34.0 - Containment Inspection.
- FNP-2-STP-38.0 - Manual Reactor Trip Verificaiton.
- FNP-1-STP-12.0 - Boron Injection Tank Operability Test.
- FNP-1-STP-143.0 - Spent Fuel Pool Ventilation Radiation Monitor Functional Test.
- FNP-1-STP-149.0 - Visual Inspection of New or Repaired Fire Barrier Penetrations.

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 during 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.

The following maintenance activities were observed/reviewed:

- a. 1C diesel generator.
- b. #2 and 3 river water pumps.
- c. Unit 1 2 spent fuel pool bridge crane.
- d. 1C diesel generator "A" starting air compressor.
- e. 2C diesel generator jacket water pump.
- f. 1B and 1C charging pumps lube oil coolers.
- g. Unit 2A auxiliary feedwater pump.
- h. 1-2A diesel generator.
- i. 2A service air compressor.

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, turbine building and containment 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 non-safety-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.

#### 9. Implementation of Licensee Strike Contingency Plan

On August 31, 1982 at 12 midnight the International Brotherhood of Electrical Workers (IBEW) Union initiated a strike against Alabama Power Company. The licensee placed their strike contingency plan into effect.

The resident inspector and region based inspector initiated around-the-clock inspection coverage during the first three days of the strike to ensure that the licensee's strike contingency plan had been initiated.

The inspectors verified by observation, records, and discussions with various personnel of all classifications that plant staffing was fully qualified to perform their functions and that there was no deviations from regulatory requirements.

Striking personnel who were licensed, as well as non-licensed personnel, were relieved on station by the licensee's supervisory personnel. Immediately after the turnover the licensee initiated specific plant check lists where certain systems, portions of systems, and components were inspected and determined to be in the correct mode of operation.

As of the end of this report period the strike is still in effect and the plant is being operated and maintained by supervisory personnel.

#### 10. New Fuel Inspection and Storage

The inspector observed receipt, inspection and storage of new fuel assemblies for Unit No. 2 to ascertain the following:

- a. That approved procedures were employed and were technically adequate.
- b. That receipt, inspection and storage was accomplished in accordance with approved procedures.
- c. That personnel making the inspections were qualified.
- d. That resolution of any deficiencies found in the fuel during inspection was contained in the procedure.

The inspector had no further questions.

#### 11. Plant Trips

- a. On August 28, 1982, Unit No. 1 tripped from 100% power on low steam generator level signal. The low steam generator level was caused by a trip of a main feed water pump. All systems functioned as designed. Safety Injection signals were not initiated.
- b. On September 7, 1982 at 8:53 p.m., Unit No. 2 tripped from 100% power. The trip occurred while synchronizing 2-B diesel generator for surveillance testing. While synchronizing 2-B diesel generator, the supply breaker from 2-B start-up transformer feeder to 2-B bus opened. This deenergized 208V motor control center 2V, resulting in solar transformer 2E deenergizing and giving a reactor coolant pump breaker trip indication in the reactor protection system. The reactor tripped on loss of off-site power signal. All systems functioned as designed. Safety injection signals were not initiated.

The inspector reviewed the circumstances involved in each incident and, where appropriate, the actions taken by licensee management in response to the incident. The licensee's management action appeared to be timely and adequate in each case.

## 12. 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 setting, 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.

## 13. Unit 1 LER's

- 82-04 - Unsealed Fire Penetrations.
- 82-08 - Steam Flow Transmitter failed low.
- 82-26 - 1-2A Diesel generator inoperable.
- 82-32 - RCP-1A Underfrequency Relay inoperable.
- 82-33 - Chlorine Detector inoperable.
- 82-35 - "A" Chlorine Detector inoperable.
- 82-36 - BIT Flowpath - Train A heat tracing inoperable.
- 82-38 - Late surveillance test on portions of fire protection system.
- 82-40 - Chlorine Detector inoperable.

## Unit 2 LER's

- 82-05 - "B" Train 4160 Bolt feeder de-energized.
- 82-28 - Labeling error on service water valves to "B" charging pumps.
- 82-29 - No. 7 River Water Pump inoperable.
- 82-30 - SJAЕ Noble Gas Monitor R-15 inoperable.
- 82-31 - M. S. Flow Transmitter #476 inoperable.
- 82-34 - 2A Containment Spray Pump discharge valve inoperable.