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

Report Nos. 50-348/82-18 and 50-364/82-17

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

Inspectors: John F. Rogge for — 7/29/82
W. H. Bradford, Senior Resident Inspector — Date Signed

John F. Rogge for — 7/29/82
T. A. Peebles, Resident Inspector — Date Signed

Approved by: H C Dance for — 8/2/82
V. L. Brownlee, Section Chief, Division of Project and Resident Programs — Date Signed

SUMMARY

Inspection on June 16 - July 15, 1982

Areas Inspected

This routine inspection involved 160 inspector-hours on site in the areas of monthly surveillance observation, monthly maintenance observation, operational safety verification, independent inspection effort, review of nonroutine events, IEB Followup, IEC Followup, and Followup of plant incidents.

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, operating 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 inspectors 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-1-STP-7.0	-	Quadrant Power Tilt Ratio Calibration.
FNP-2-STP-7.0	-	Quadrant Power Tilt Ratio Calibration.
FNP-1-STP-27.1	-	A. C. Source Verification.
FNP-1-2 STP-3.1	-	Borated Water Source Operability Test Modes 1, 2, 3 and 4
FNP1-2-STP-22.16	-	Turbine Driven Auxiliary Feedwater Pumps Inservice Test (Tavg 547°F)
FNP1-2-STP-9.0	-	RCS Leakage Test
FNP-2-STP-29.2	-	Shutdown Margin Calculation
FNP-1-STP-11.6	-	RHR Valves Inservice Test
FNP-2-STP-22.18	-	Auxiliary Feedwater Automatic Valve Position Verification
FNP-2-STP-47.0	-	Miscellaneous Valves Inservice Test
FNP-2-STP-4.9	-	Charging Pumps 2C Operability Test

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, and 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.

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. 1B Service Water pump repair

b 2A Hydrogen recombiner rupture disc replacement

c. 2B BIT recirculation pump repair

d. 1B Waste Gas Compressor

e. 2B Diesel Generator starting air compressor

f. 1B, 2B, and 2C Charging pumps oil cooler cleaning

g. Clearing deposits from Unit 2 incores to meet Technical Specification requirements. All incores except 3 out of 50 are clear.

h. No. 7 River water pump repair

i. 1C Diesel Generator preventative maintenance

j. Certain modifications to fire protection systems

k. Fire door latches and closure repair

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

7. Operational Safety Verification

The inspectors 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 inspec-

tors, by observation and direct interviews, verified that the physical security plan was being implemented in accordance with the station security plan.

The inspectors observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection control. The inspectors 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 parts throughout the plant for proper electrical alignment.

b. Various instrument calibration and repair throughout the plant.

c. Certain accessible hydraulic snubbers.

d. Certain fire protection systems.

e. Certain portions of Units 1 and 2 service water and component cooling water systems.

f. Portions of Units 1 and 2 Auxiliary feed water suction and discharge systems.

g. Diesel generator support systems.

h. Portions of Units 1 and 2 charging/safety injection pumps suction and discharge piping 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 inspectors 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.

During the report period the licensee conducted aninformation meeting with the inspector on their new Automated Emergency Dose Calculational Method (AEDCM) computer. The licensee explained and demonstrated how the system functioned and its capabilities. The system was developed to meet the requirement of Appendix 2 of NUREG 0654, Rev. 1 for a class A near realtime, site specific Atmospheric transport and diffusion model.

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

9. Review of Nonroutine Events Reported by the Licensee

The following licensee event 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

82-19	"B' Train penetration room exhaust fan inoperable
82-21	Containment Spray pumps suction valves closed
82-23	'A' train chlorine detector tape drive inoperable
82-24	'A' Train Penetration Room Recirculation tamper inoperable
82-25	'A' train chlorine detector photocell inoperable
82-26	Diesel Generator 1-2A inoperable due to work on relay cabinet tripping relay
82-27	Turbine Driven Auxiliary Feedwater Pump inoperable as throttle valve tripped
82-28	Turbine Driven Auxiliary Feedwater Pump inoperable as steam supply valve limit switch faulty
82-29	Containment airlock outer door would not shut
82-30	Chlorine Detectors inoperable
82-31	Radiation Monitor surveillance late

Unit 2

82-18	Turbine Driven Auxiliary Feedwater Pump inoperable as inadvertently tripped
82-19	Pressurizer Spray Valve controller transmitter transient

82-20 Snubber inoperable on Main Steam Header

82-22 Charging Pump Inoperable as breakers would not close

82-23 Surveillance Test late

82-24 Radiation Monitor (R-11 and R-12) flow switch setpoint low

82-25 Radiation Monitor (R-11) high flow relay faulty

82-27 Radiation Monitor (RE-15) had faulty detector

10. IE Bulletin Followup

For the IE Bulletins listed below the inspector verified that the written response was within the time period stated in the bulletin, that the response included the information required to be reported, that the response included adequate corrective action based on information presented in the bulletin, that licensee management forwarded copies of the response to the appropriate management representatives, and that corrective action taken was as described in the response.

IEB-79-11 Faulty Overcurrent Trip Device in Circuit Breakers for Engineering Safety Systems.

IEB-81-01 Surveillance of Mechanical Snubbers

IEB-80-19 Failure of Mercury-Wetted Matrix Relays

IEB-81-02 Failure of Gate Type Valves to close against differential pressure

The inspectors had no further questions.

11. IE Circulars Followup

For the IE Circulars listed below the inspectors verified that the circular had been received by the licensee, a review for applicability had been performed and that appropriate corrective actions were taken.

IEC-81-12 Inadequate Periodic Test Procedure of PWR Protection System.

IEC-81-13 Torque Switch Electrical Bypass Circuit for Safeguard Service Valve Motors

IEC-81-14 Main Steam Isolation Valve Failure to close

IEC-80-04 Security of Threaded Locking Devices on Safety-Related Equipment

IEC-80-05 Emergency Diesel Generator Lubricating Oil addition and onsite supply.

The inspectors had no further questions.

12. Followup on Plant Incident

During the reporting period, the inspectors conducted followup activities on the following:

On July 7, 1982 at 1543 hours, Unit 2 reactor tripped on a negative rate trip. The trip was caused by shut down bank B, Group 2 control rods dropping into the core. Voltage to the stationary grippers for these rods was lost due to a bad card in the rod control system. The card was replaced and the reactor was returned to criticality at 2154 hours on the same date.

The inspectors reviewed the circumstances involved in the incident and where appropriate, the action taken by licensee management in response to the incident. The licensee's management activities appeared to be both timely and adequate.