



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

Report Nos.: 50-348/85-28 and 50-364/85-28

Licensee: Alabama Power Company
600 North 18th Street
Birmingham, AL 35291

Docket Nos.: 50-348 and 50-364

License Nos.: NPF-2 and NPF-8

Facility Name: Farley 1 and 2

Inspection Conducted: June 11 - July 10, 1985

Inspector: W. H. Bradford

7/19/85
Date Signed

Approved by: F. S. Cantrell, Section Chief
Division of Reactor Projects

7/19/85
Date Signed

SUMMARY

Scope: This routine, unannounced inspection entailed 172 inspector-hours on site in the areas of licensee action on previous enforcement matters, monthly surveillance observation, monthly maintenance observation, operational safety verification, licensee event reports, IE Bulletins, and onsite follow-up of events.

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

REPORT DETAILS

1. Licensee Employees Contacted

J. D. Woodard, Plant Manager
D. N. Morey, Assistant Plant Manager
W. D. Shipman, Assistant Plant Manager
R. D. Hill, Operations Superintendent
C. D. Nesbitt, Technical Superintendent
R. G. Berryhill, Systems Performance and Planning Superintendent
L. A. Ward, Maintenance Superintendent
L. W. Enfinger, Administrative Superintendent
J. E. Odom, Operations Sector Supervisor
B. W. Vanlandingham, Operations Sector Supervisor
T. H. Esteve, Planning Supervisor
J. B. Hudspeth, Document Control Supervisor
L. K. Jones, Material Supervisor
R. H. Marlow, Technical Supervisor
L. M. Stinson, Plant Modification Supervisor
W. G. Ware, Supervisor, Safety Audit Engineering Review

Other licensee employees contacted included technicians, operations 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 throughout the report period and on July 11, 1985, with the plant manager and selected members of his staff. The inspection findings were discussed in detail. 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 (92702)

(Closed) (Open Item 348/83-30-02) Qualifications of chemistry and health physics technicians not fully documented in Administrative Procedure - 17.

(Closed) (Open Item 348/84-03-02) 1A charging pump, discharge piping used to rig pump impeller.

(Closed) (Unresolved Item 348/84-20-05) Stainless steel bolt installed in carbon steel system.

(Closed) (Open Item 348/364/84-16-03) Temperature surveillance of auxiliary feedwater discharge check valves.

(Closed) (Open Item 348/84-32-02) Re-evaluation of smoking areas.

4. Monthly Surveillance Observation (61726)

The inspectors observed and reviewed Technical Specification required surveillance testing and verified that testing was performed in accordance with adequate procedures; that test instrumentation was calibrated; that limiting conditions were met; that test results met acceptance criteria and were reviewed by personnel other than the individual directing the test; that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel; and that personnel conducting the tests were qualified. The inspector witnessed/reviewed portions of the following test activities.

FNP-1-STP-20.0	-	Penetration Room Filtration System Operability and Valve Inservice Test.
FNP-1-STP-22.8	-	Auxiliary Feedwater Valve Inservice Test.
FNP-0-STP-53.0	-	CO ₂ Low Pressure System Operability Test.
FNP-1-U.O.P-1.2		
Appendix 1	-	Calculation of ECP.
FNP-0-STP-22.18	-	Auxiliary Feed System Automatic Valve Position Verification.
FNP-1-U.O.P.-1.3	-	Startup of Unit Following Reactor Trip.
FNP-0-STP-80.1		
and 80.2	-	Diesel Generator Operability Test.
FNP-1-STP-8.0	-	RCP Seal Controlled Leakage Test.
FNP-STP-70.0	-	Containment Sump Surveillance.
FNP-0-STP-52.2	-	1B Diesel Fire Pump Operability Test.
FNP-2-STP-201.11	-	Reactor Coolant System FT-425.
FNP-2-STP-123.4	-	Steam Generator 2B LT-485.
FNP-2-STP-213.17	-	High Steam Line Flow, Steam Line Isolation and P-13 Test.
FNP-1-STP-33.1	-	Safeguards Test Cabinet Train Functional Test.

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

5. Monthly Maintenance Observation (62703)

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 were in conformance with Technical Specifications.

The following items were considered during the review: limiting conditions for operations 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 was assigned to safety-related equipment maintenance which may affect system performance. The following maintenance activities were observed/reviewed:

- 1-B Diesel Maintenance.
- 1-C Diesel Maintenance.
- 1-C Steam Generator Steam Flow Indicator FI-494 and LI-496.
- 1-B Charging Pump.
- Unit 2 Turbine Driven Auxiliary Feedwater Pump Steam Admission Valve.

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

6. Operational Safety Verification (71707)

- a. 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 building, diesel building, service water structure, river water structure and turbine buildings were conducted to observe plant equipment conditions including fluid leaks, excessive vibrations, general plant operations, equipment status, maintenance, surveillance fire protection, equipment tagged out of service for maintenance and adherence to technical specification requirements.
- b. The inspectors verified compliance with selected Limited Condition for Operations (LCO) and results of selected surveillance tests. The verifications were accomplished by direct observation of monitoring instrumentation, valve positions, switch positions and review of completed logs, records, and chemistry results.

The following systems and components were observed/verified operational:

- Station electrical boards in the control room and various electrical boards throughout the plant for proper electrical alignment.
- Certain accessible hydraulic snubbers.
- Accessible portions of service water and components cooling water systems.
- Units 1 and 2 suction and discharging piping and valves on auxiliary feedwater system.
- Diesel generators and support systems.
- Certain accessible portions of CVCS piping and valves to and from the charging/high head safety injection pumps.

- Certain portions of RHR and containment spray systems.
 - Portions of various other systems (safety-related and nonsafety-related).
- c. The inspectors routinely attended meetings with certain licensee management and observed various shift turnovers between shift supervisors, shift foreman, and licensed operators. These meetings and discussions provided a daily status of plant operating, maintenance, and testing activities in progress, as well as discussions of significant problems.
 - d. The inspector verified by observation and interviews with security force members that measures taken to assure the physical protection of the facility met current requirements. Areas inspected included the organization of the security force; the establishment and maintenance of gates, doors, and isolation zones; that access control and badging were proper; and procedures were followed.
 - e. The inspector reviewed the licensee's Westinghouse Electric Corporation drawings concerning the correct location of the manual trip breakers with a solid state protection system. Two solid state protection system schematic diagrams were reviewed. One drawing erroneously depicted the manual trip circuit for the reactor trip breakers as being upstream of output transistors Q3 and Q4. The other schematic drawing correctly shows the manual trip circuit to be downstream of transistors Q3 and Q4. The correct Westinghouse schematic drawing is used by instrument and control technicians.

The Safety Audit Engineering Review Group (SAER) is presently performing an audit of vendor drawings. The above Westinghouse drawings have been identified as a variance in this audit.

This is an Open Item 348-364/85-28-01 pending completion and review of the SAER audit and the corrective action.

7. Licensee Event Reports

The following Licensee Event Reports (LERs) were reviewed for potential generic problems to determine trends, to determine whether 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 LCOs were not exceeded. The inspector examined selected incidents reports, logs and records and interviewed selected personnel. The following reports are considered closed:

Unit 1-50-348

LER-85-03 - Actuation of engineered safety feature equipment.
LER-85-04 - Containment air lock doors open.
LER-85-05 - No operable charging pumps.
LER-85-06 - Steam generator tube plugging.
LER-85-07 - Inoperable fire door.
LER-85-08 - Isolation of A & B train RHR suction valves.

8. Onsite Followup of Events (93702)

On June 23, 1985, at 2:52 p.m., Unit 1 tripped on negative rate trip from 99% power. The trip resulted from rods E-11 and L-11 in shutdown bank B, Group 1 dropping into the core due to loss of stationary gripper voltage. The licensee investigation found shorted leads in power penetration B-037, Module A. This caused fuses FU-42 and FU-43 in rod control cabinet to blow.

The licensee is investigating the power penetration.

The inspector has reviewed the licensee trip reports, appropriate operator logs and interviewed operating personnel. Safety systems actuated as designed. The inspector judged the operators' response to be adequate.

The inspector had no further questions.

9. I&E Bulletins (IEB) (92701)

The inspector has observed the licensee investigative maintenance program on the diesel generator cooling water check valves described in licensee response dated April 5, 1985, for IEB 83-03.

The inspector observed the HFA relay replacement program in Units 1 and 2 and had reviewed the appropriate documentation for IEB 83-03 and IEB 84-02.

The licensee action on IEB 83-03 and IEB 84-02 are considered acceptable. These IEBs are closed for Units 1 and 2.