



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

Report Nos.: 50-348/85-36 and 50-364/85-36

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: August 11 - September 10, 1985

Inspectors: W. H. Bradford for 9/19/85
Date Signed
B. R. Bonser for 9/19/85
Date Signed
Approved by: F. S. Cantrell for 9/19/85
Date Signed
F. S. Cantrell, Section Chief
Division of Reactor Projects

SUMMARY

Scope: This routine, unannounced inspection entailed 110 inspector-hours on site in the areas of licensee action on previous enforcement matters, monthly surveillance observation, monthly maintenance observation, operational safety verification, followup of events and licensee event reports.

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

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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 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 material reviewed by the inspector during this inspection.

3. Licensee Action on Previous Enforcement Matters (92702)

CLOSED (Violation 328/85-20-01) Violation of operable charging pump in the boron injection flow path required by Technical Specification. Based on the licensee letter of response dated July 2, 1985, and a review of the corrective action, this item is closed.

CLOSED (Violation 348/85-20-02) Violation of procedures which resulted in the loss of both residual heat removal loops. Based on the licensee letter of response dated July 2, 1985, and a review of the corrective action, this item is closed.

CLOSED (Violation 348/85-20-03) Violation of containment integrity required by Technical Specification. Based on the licensee letter of response dated July 2, 1985, and a review of the corrective action, this item is closed.

CLOSED (Violation 348/85-20-04) Violation of 10 CFR 50, Appendix B, Criterion II in regard to omission of installation of spacers in the service water batteries and turbine driven auxiliary feed pump uninterruptable power supply batteries. Based on the licensee letter of response dated July 2, 1985, and a review of the corrective action, this item is closed.

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&2-STP-1.0	- Operations Daily and Shift Surveillance Requirements.
FNP-1&2-STP-109.0	- Power Range Neutron Flux Channel Calibration.
FNP-2-STP-80.1	- Diesel Generator 2B Operability Test.
FNP-1&2-STP-70.0	- Containment Sump Surveillance.
FNP-2-STP-20.1	- Penetration Room Filter Alignment Verification.
FNP-2-SOP-2.6.C	- System Checklist and Boric Acid System Alignment Weekly Sample.
FNP-2-STP-3.1	- Borated Water Source Operability Test.
FNP-1&2-STP-41.4	- Power Range Functional Test, Channel 44.
FNP-1&2-STP-23.8	- Component Cooling Water Valve Inservice Test.
FNP-2-STP-35.1	- Unit Startup Technical Specifications Verifications.
FNP-1&2-STP-26.3	- Control Room Ventilation System.
FNP-1&2-STP-7.0	- Quadrant Power Tilt Ratio Calculation.
FNP-2-STP-29.1	- Cycle 4 Shutdown Margin Calculation (Tave 547 F).
FNP-1-STP-33.1B	- Safeguards Test Cabinet Train B Functional Test.
FNP-1-STP-22.0B	- Solid State Protection System Train B Operational 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:

- Unit 2 - New Fuel Monorial Hoist (PM).
- 1-2A Diesel Generator - TSRX relay replacement.
- Emergency Power Board ground detection.
- Unit 1 - Adjust timer on step 6 of LOSP sequencer.
- 2-B Diesel Generator - FNP-MP-14.12.
- Change out grease in MOV 3764B.
- 1-F and 1-G MCXC - Remove compartment door trip switches
PCN-B84-D-3020 and PCN B84-O-3021.
- Unit 2 LT-460.
- Change out lubricant in various MOV geared limit switches.

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

6. Operability 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, diesel, turbine buildings, service water structure, and other parts of the plant were conducted to observe plant equipment conditions, including fluid leaks and excessive vibrations.
- b. The inspectors verified compliance with selected Limited Condition for Operations (LCOs) 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 licensee's compliance with LCO action statements were reviewed as they happened.

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 component 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 foremen, 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. On September 1, 1985, at 7:05 p.m., the licensee declared a notification of unusual event due to proximity of hurricane Elena off the Florida coast. Abnormal Operating Procedure 21.0 "Severe Weather" was initiated. The Technical Support Center was manned by the emergency director and staff. Load was decreased to 75% on Units 1 and 2 for stability in case of loss of a transmission line. The notification of unusual event was terminated at 1:45 a.m. on September 2, 1985. The resident inspector was onsite during this time.
- f. On September 1, 1985, at 4:02 a.m., the #1 governor valve on Unit 2 main turbine failed closed. There was a resultant loss of load; the condenser steam dumps opened; a third condensate pump started; and the turbine DEH transferred to single valve control. At 4:04 a.m., the W I was outside the target band due to driving control rods into the core to control reactor temperature. W I was back in the target band at 4:19 a.m. and 15 penalty points were accumulated. The licensee is investigating the cause of the anomaly.
- g. On August 28, 1985, at 2:23 p.m., 2-C diesel generator received an inadvertent start signal. The diesel came up to speed and rated voltage but did not synchronize on to the buss. The diesel was shut down by the control room operator.

The diesel started when I&C maintenance personnel bumped a relay while troubleshooting a problem in the jacket water system.

The licensee reported the incident by red phone to NRC at 5 p.m. as an inadvertent actuation of ESF system.

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 LERs

- 85-09 - Reactor Protection System Actuation while in mode 4.
- 85-10 - Reactor trip.
- 85-11 - Control room emergency air cleanup systems inoperable.
- 85-12 - Reactor trip.
- 85-13 - Reactor trip.

Unit 2 LERs

- 85-10 - Reactor trip.
- 85-11 - Reactor trip.
- 85-12 - Reactor trip.