



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

Report Nos.: 50-348/88-07 and 50-364/88-07

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

Docket Nos.: 50-348/88-07 and 50-364/88-07

License Nos.: NPF-2 and NPF-8

Facility name: Farley 1 and 2

Inspection Conducted: February 11 - March 10, 1988

Inspection at Farley site near Dothan, Alabama

Inspectors: Les P. Modern
for W. H. Bradford

3/28/88
Date Signed

for Les P. Modern
for W. H. Miller

3/28/88
Date Signed

Approved by: Les P. Modern
for H. C. Dance, Section Chief
Division of Reactor Projects

3/28/88
Date Signed

SUMMARY

Scope: This routine on-site inspection involved a review of monthly surveillance observation, monthly maintenance observation, operational safety verification, engineered safety system inspection, radiological protection program and physical security program.

Results: No violations or deviations were identified.

REPORT DETAILS

1. Licensee Employees Contacted

J. D. Woodard, General Plant Manager
D. N. Morey, Assistant General Plant Manager
W. D. Shipman, Assistant General Plant Manager
R. D. Hill, Operations Manager
C. D. Nesbitt, Technical Manager
R. G. Berryhill, Systems Performance and Planning Manager
J. J. Thomas, Maintenance Manager
J. K. Osterholtz, Unit Supervisor, Administrative
L. W. Enfinger, Administrative Manager
J. E. Odom, Operations Unit Supervisor
B. W. Vanlandingham, Operations Unit 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 Manager
Scott Fulmer, 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 March 14, 1988, with the plant manager and selected members of his staff. The inspection findings were discussed in detail. The licensee acknowledged the inspection findings and did not identify as proprietary any material reviewed by the inspection during this inspection.

3. Licensee Action on Previous Enforcement Matters (92702)

This area was not inspected.

4. Monthly Surveillance Observation (61726)

The inspectors observed and reviewed Technical Specification (TS) required surveillance testing and verified that testing was performed in accordance with adequate procedures, test instrumentation was calibrated, limiting conditions for operation (LCO) were met, test results met acceptance criteria and were reviewed by personnel other than the individual directing the test, deficiencies identified during the testing were

properly reviewed and resolved by appropriate management personnel, and personnel conducting the test were qualified. Portions of the following test activities were observed or reviewed by the inspectors:

- 2-STP-11.9 RHR Pump 2A Monthly Operability Check.
- 2-STP-20.1 Penetration Room Filtration Alignment Verification.
- 1-STP-22.18 Auxiliary Feedwater Automatic Valve Position Verification.
- 1-STP-121 Incore/Excore Detector Calibration.
- 2-STP-33.2A Reactor Trip Breaker "A" Operability Test.
- 2-STP-47.0 Miscellaneous Valves Inservice Test.
- 0-STP-80.1 Diesel Generator 1-2A Operability Test.
- 0-STP-80.2 Diesel Generator 1C Operability Test.
- 2-STP-617.0 Penetration Room Filtration System Heater Test.

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 TS. Items considered during the review included: verification that limiting conditions for operations were met while components or systems were removed from service; approvals were obtained prior to initiating the work; approved procedures were used; completed work was 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; and, radiological and fire prevention controls were implemented. Work requests were also 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:

- MWR 116046A Repair fuel pump Leak on Diesel Generator 1B.
- MWR 119228 Terminate cable for Diesel Generator 1-2A lube oil heater.
- MWR 138284 Replace 2" service water piping to RHR Train A MCC-2A room coolers.
- MWR 138286 Replace 2" service water piping to MCC-2A room coolers.

- MWR 161626 Install pressure switch for breathing air system.
- MWR 163515 Test reactor trip breaker 2A.
- O-GM-7.0 Insulation resistance testing for rotating equipment (air compressors A and B and auxiliary jacket water pump for Diesel Generator 1-2A).
- O-MP-12.2 Diesel Air Intake and Exhaust Valve Visual Inspection (diesel V-B) Colt Model DC-2V Diesel Engine 1B, 18 Month Inspection.
- O-MP-14.1 Colt Model DC-2V Diesel Engine 1B, 18 Month Inspection.
- O-MP-14.6 Model DC-2V Diesel Generator Engine 1B, Quarterly Inspection.
- O-MP-28.114 Inspection and Testing of Reactor Trip Breakers (breaker for 2A).
- 2-IMP-259.2 P-4 Permissive Contact Verification (Unit 2 "A" train).

No violations or deviations were identified.

6. Operational Safety Verification (71707)

The inspectors observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the report period. Also, the operability of selected emergency systems was verified, tagout records were reviewed and proper return to service of affected components was verified. Tours of the auxiliary building, diesel building, turbine building and service water structure were conducted to observe plant equipment conditions, including fluid leaks and excessive vibrations and general housekeeping efforts. The inspectors verified compliance with selected limiting condition for operation (LCO) and results of selected surveillance tests. The verifications were accomplished by direct observation of monitoring instrumentation, valve positions, switch positions, accessible hydraulic snubbers, and review of completed logs, records, and chemistry results. The licensee's compliance with LCO action statements were reviewed as events occurred.

The inspectors routinely attended meetings with certain licensee management and observed various shift turnovers between shift supervisor, shift foremen and licensed operators. These meetings and discussions provided a daily status of plant operations, maintenance, and testing activities in progress, as well as discussions of significant problems.

On March 3, 1988, the licensee notified the NRC resident inspectors that an accumulation of gas had been discovered in the piping of the "A" trains on Units 1 and 2 in the RHR discharge to the charging pumps suction piping. This gas was analyzed and was found to contain the same

composition of H₂ volume control tank overpressure of hydrogen. The RHR to charging pump suction is used during the recirculation phase during accident conditions. The licensee vented the gas from Unit 1 "A" train on February 26, 1988. The amount of gas vented was equivalent to 450 gallons of water. No gas was found on Unit 1 "B" train. Unit 2 "A" train was vented on February 29, 1988. The equivalent of 310 gallons of gas was removed. No gas was found on "B" train. Successive venting was conducted on March 1 and 2 with decreasing amounts of gas accumulation. The licensee went to a 8 hour venting schedule and no more accumulation of gas was found. The immediate concern was the safety significance in regard to the high pressure charging pump operation during accident conditions. The licensee contacted Westinghouse Corporation and was informed by Westinghouse and Pacific Pump (Manufacturer) that the gas volume be limited to less than 6 cubic feet. However, the licensee has initiated a program to not allow any gas build up. This program consists of regular venting and charging pump operation which will preclude the gas buildup. The licensee is investigating certain modifications and alternatives as a permanent fix to the gas accumulation. For further information refer to Inspection Report No. 348-364/88-05.

No violations or deviations were identified.

7. Radiological Protection Program (71709)

Selected activities of the licensee's Radiological Protection Program were reviewed by the inspectors to verify conformance with plant procedures and NRC regulatory requirement. The areas reviewed included: organization and management of the plant's health physics staff, "ALARA" implementation, Radiation Work Permits (RWP's) for compliance to plant procedures, personnel exposure records, observation of work and personnel in radiation areas to verify compliance to radiation protection procedures, and control of radioactive materials.

No violations or deviations were identified.

8. Physical Security Program (71881)

Licensee's compliance to the approved security plan was reviewed by the inspectors. The inspectors 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: organization of the security force, establishment and maintenance of gates, doors, and isolation zones, access control, and badging procedures.

No violations or deviations were identified.

9. Engineered Safety Systems Inspections (71710)

The inspectors performed inspections of portions of various safety related systems during this inspection period. Major components were checked for leakage and any general conditions that would degrade performance or prevent fulfillment of functional requirements.

The following Unit 2 systems were inspected in detail:

Auxiliary Building Ventilation System.

Penetration Rooms Filtration System.

Containment spray System Including Chemical Additive System.

Residual Heat Removal System.

Items inspected included: confirmation that licensee's system line-up procedures matched plant drawings; surveillance procedures included the surveillance requirements of the Technical specifications; system valves and electrical breakers were in correct alignment or position; instrumentation was inservice and calibration was current; hangers and supports were aligned and in service; equipment was properly labeled; and, general housekeeping and cleanliness were properly maintained.

The components inspected were found inservice/operable or if not inservice were covered by applicable "Tag Out" procedures to meet the requirements of the TS.

No violations or deviations were identified.