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

Report Nos. 50-348/80-35 and 50-364/80-46

Licensee: Alabama Power Company
600 North 18th Street
Birmingham, AL 35202

Facility Name: Farley

License Nos. NPF-2 and NPF-8

Inspection at Farley Site

Inspectors: T A Peebles for — 12-5-80
W. H. Bradford — Date Signed

T A Peebles for — 12-5-80
J. P. Mulkey — Date Signed

Approved by: Kerr Martin — 12-5-80
R. D. Martin, Section Chief — Date Signed

SUMMARY

Inspection on October 1-31, 1980

Areas Inspected

This routine, announced inspection involved 220 inspector-hours onsite in the areas of plant tours, pre-operational testing, Unit No. 1 plant operations, open items, task action items, transmission line inspection, strike contingency plan, resumption of normal operation following work stoppage, non-routine event reports (LER's) unresolved item and fire protection system.

Results

Of the 10 areas inspected, no items of noncompliance 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
R. W. McCraken, Technical Superindent
D. E. Mansfield, Unit No. 2 Startup Superintendent
Charles Nesbitt, C&HP Supervisor
K. C. McAliley, Division Manager of Operations
J. J. Shaner, Supervisor of Line Clearing

Other licensee employees contacted included shift supervisor, shift forman, plant operators, security force members, and office personnel.

Other Organizations

J. E. Long, Vice President, Montgomery Aviation
S. M. Hall, Westinghouse Startup Services Manager

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized during management interviews 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 are matters about which more information is required to determine whether they are acceptable or may involve noncompliance or deviations. New unresolved items identified items identified during this inspection are discussed in paragraph 14.

5. Plant Tours

Tours of selected plant areas were conducted throughout the reporting period. The following items, as available were observed.

a. Fire Equipment

Operability and evidence of periodic inspection of fire suppression equipment.

b. Housekeeping

Minimal accumulations of debris and maintenance of required cleanliness levels in systems under or following testing.

c. Equipment Preservation

Maintenance of special preservative measures for installed equipment as applicable.

d. Component Tagging

Implementation and observance of equipment tagging for safety or equipment protection.

e. Communication

Effectiveness of public address system in all areas toured.

f. Equipment Controls

Effectiveness of jurisdictional controls in precluding unauthorized work on systems turned over for initial operations or preoperational testing.

g. Foreign Material Exclusion

Maintenance of controls to assure systems which have been cleaned and flushed are not reopened to admit foreign material.

h. Security

Implementation of security provisions for both units.

Within the above areas, no items of noncompliance or deviations were observed when compared to the applicable station programs and procedures.

6. Unit No. 2 Plant Testing Status

The status of the licensee's Phase II preoperational testing program was reviewed and is summarized below.

Testing completed - 77%
Testing in progress - 15%

Testing not started - 61%
Test data approved - 73%

The inspector reviewed the licensee's preoperational test program for testing of various systems and components which are required to be completed and approved prior to fuel loading. The results of this review is as follows:

Number of tests completed - 44
Number of tests in progress - 11
Number of tests not started - 2
Number of test data approved - 40

7. Unit No. 1 Plant Operation

The inspector reviewed plant operation to ascertain conformance with regulatory requirements, technical specifications and Administrative Procedure No. 16, "conduct of operation - Operation Group". The following areas were reviewed:

a. The licensee's adherence to the limiting conditions for operation.

b. Instrumentation and recorder traces were observed for abnormalities.

c. Approved procedures were adhered to by the operating staff.

d. Proper shift manning

e. Operating logs and records were reviewed.

f. The flow path for selected engineered safeguards trains were in the correct line up, electrically and mechanically, for components that must activate on an initiation signal.

g. The licensee's equipment tag out records for maintenance was in accordance with Administrative Procedure No. 14, "Safety and Clearance Tagging".

8. Open Items

a. Closed (364/80-32-01)

This item concerned the completion of thermal expansion measurement data review by the licensee.

The inspector has reviewed preoperational test procedure No. 100-5-009, "Reactor Coolant Loop Thermal Expansion Test Procedure" to confirm that a review of the test data had been reviewed and approved by the licensee.

The inspector had no further questions.

b. Closed (348/80-14-05, 364/80-16-05)

This item involved classification of proposed changes related to safety-related procedures, structures, systems or components in regard to Section 6.5.3.1 of the Unit No. 1 Technical Specifications.

This item is closed based on a letter of clarification from S. E. Bryan, Assistant Director of Field Coordination, dated October 1, 1980 and by discussion with the regional based inspector.

The inspector had no further questions.

9. Unit No. 2 Action Items Required to be completed prior to fuel loading.

The inspector reviewed and verified the following items had been completed:

These items are required to be completed by the licensee prior to fuel loading on Unit No. 2.

The items are identified by Task numbers and Safety Evaluation Report (supplement No. 4) section numbers.

Task No.
I.C.7 NSS Vendor Review of Low Power Test Procedures

The inspector confirmed that the licensee has received the low power test procedure review comments from Westinghouse Corporation. The licensee has reviewed these comments and is incorporating the comments into the appropriate test procedures.

The inspector had no further questions.

Task No.
II.E.1.2 Auxiliary Feedwater Initiation and Indication

The inspector has verified by review of the appropriate drawings and records that the licensee has installed circuitry which meets the requirements set forth in NUREG - 0578, section 2.1.7 for the auxiliary feed-water system.

The inspector verified that the auxiliary feed water flow transmitters are seismically and environmentally qualified.

The above is documented in Operating Change Request No. 2-3524, dated 11/21/79; Change Notice No. 2BN-3216, dated 1/15/80; and Change Notice No. 2BN-3279-1, dated 1/29/80

Task No.
III.A.1.2 Upgrade Emergency Support Facilities

The inspector has reviewed the emergency support facilities. The areas reviewed consisted of the operational support center, technical support center, and the emergency operation facility.

The inspector reviewed the appropriate Emergency Implementing Procedures and the Emergency Plan.

The inspector had no further questions.

Task No.
II.F.2 Core Sub-Cooling Monitor

The inspector verified that the licensee had installed the sub-cooling monitoring system in a previous inspection.

The inspector has reviewed test procedure No.464-3-018, "Core Sub Cooling Monitor Calibration and Functional Test" to verify the operability of the monitor. This test procedure was completed on October 1, 1980.

SER-Section 6.2.3 - Containment Purge Valves

The inspector has verified that the licensee has installed blocks in the 18-inch containment purge valves to limit the opening to no more than 50 degrees. This work is documented on Startup Work Request No. 2-60-55, dated October 24, 1980.

SER-Section 15.3.3 - Seismic Qualification of the Containment Purge Filters

The inspector has reviewed licensee records to confirm that the containment purge system filters installed on Farley Unit No. 2 were seismically qualified.

This work is documented on Purchase Order No. FNP-2-101, Specification No. SS-1102-80 and TPNS file No. 02A18.05

Task No.
II.E.3.1 Emergency Power for Pressurizer Heaters

The inspector confirmed by review of records, appropriate drawings and discussion with licensee representatives that the pressurizer heaters have the capability of being powered from the emergency section of the 600 volt load centers 2A and 2C respectively. The pressurizer heaters are automatically shed when engineered safeguards actuation occurs. The

heaters are not reenergized by action of the sequence but can be energized by operator action in the control room.

Station emergency operating procedures identify under what conditions the heaters groups are to be reenergized and under what conditions other emergency loads may be shed from the buses in order to provide sufficient capacity for the heaters.

The licensee has included this subject in their operator training program.

Task No.
II.E.4.2 Containment Isolation Dependability

The inspector has reviewed test documentation to verify that the containment isolation system will function when (1) phase A isolation is initiated by safety injection signals or manual initiation, and (2) phase B isolation is initiated by containment pressure or manual initiation. Resetting of the isolation signals will not reopen the containment isolation valves. Manual action is required to open each valve. All containment isolation valves have individual control switches.

Unit No. 2 testing is documented on test procedure No. 548-6-001." Plant Response to Integrated Safeguards Without Blockout".

The unit No. 1 test has not been performed. This test will be performed under FNP-1-ETP-173, "Engineered Safety Feature (ESF) Reset Controls Test." This test is scheduled to be performed on November 8, 1980 during the upcoming refueling outage.

10. Alabama Power Company Transmission Line Inspection

On October 20, 1980, the inspector performed an aerial survey of the Alabama Power Company Farley-Pinchard, Farley-Webb-Pinchard, and the Farley Snowden high voltage transmission right-of-ways and the supporting transmission tower structures. The inspector was accompanied by members of the Alabama Power Company and by Mr. J. E. Long, Vice President of Montgomery Aviation, pilot of the aircraft.

The inspector observed the transmission lines right-of-ways and tower structure for erosion control, vegetation control and right-of-way encroachment.

Within the areas inspected the inspector observed no environmental deficiencies.

The inspector had no further questions.

11. Implementation of Licensee Strike Contingency Plan

A walk out was initiated by certain employees of Alabama Power Company at the Farley Unit No. 1 operating unit. This action resulted in Alabama Power Company initiating the Strike Contingency Plan.

The inspector verified by observation, records, and discussion with various personnel that plant staffing during the interim period of operation was fully qualified to perform their functions and that there was no deviation from regulatory requirements.

12. Resumption of Normal Operation Following Work Stoppage

The return to work and shift turnover following the work stoppage and resumption of normal duties of regular operating personnel to their work stations was an orderly and preplanned activity.

The turnover for licensed personnel consisted of a systematic control board walk down on a component by competent basis.

Previous plant operation and plant logs were reviewed completely and in detail with the oncoming operators to assure that all previous operations and maintenance activities were understood. Plant operating personnel who had operated the plant during the contingency period stayed on station with the regular plant operators for two to three hours before completing the turnover. The turnover of the operating station outside the control room was conducted in a similar manner.

The evening and night shift turnover was conducted in a manner consistent with the turnover of relieving personnel who had been on extended off days or vacation.

The inspector observed the return to operation by regular operating personnel and verified that the shift was manned with qualified operators in accordance with the requirement of the Technical Specifications.

13. 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 was reviewed to verify that the events were reviewed and evaluated by the licensee as required by the Technical Specifications, 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, incident reports, logs and records, and interviewed selected personnel.

		Plant Incident Report
LER-80-09	Diesel Generator 1/B inoperable due to output breaker failure to close during "Loss of offsite power" surveillance test.	IR-1-80-7[illegible]
LER-80-10	"A" motor operated auxiliary feed pump flow path inoperable during "Loss of offsite power" surveillance test.	IR-1.80-70
LER-80-12	Failure of 1B component cooling water pump to start during "Loss of off site power" surveillance test.	IR-80-80
LER-80-20	Inoperable steam generator pressure transmitter.	IR-80-113
LER-80-23	Boron Injection Tank inoperable due to no recirculation flow.	IR-80-146
LER-80-25	Diesel Generator 1-C inoperable due to failure to reach rated speed.	IR-1-80-174 IR-1-80-173 IR-1-80-198
LER-80-34	Diesel Generator 1-C inoperable due to failure to reach rated speed.	IR.1-80-243
LER-80-35	Diesel Generator 2-C inoperable.	IR-1-80-250
LER-80-36	1A-RHR heat exchanger discharge valve inoperable.	IR-1-80-257
LER-80-37	Potential damage to centrifugal charging pumps due to inadequate flow.	IR-1-80-267
LER-80-38	Inoperable pressurizer pressure transmitter.	IR-1-80-298
LER-80-39	River Water train A inoperable.	IR-1-80-297
LER-80-40	Diesel Generator 2-C inoperable.	IR-1-80-308 IR-1-80-309
LER-80-41	Surveillance test requirement inadequate during plant mode change (Mode 5 to 4).	IR-1-80-303
LER-80-42	Undervoltage relays 1B-RCP-3 and 1C-RCP-27-3 and 1C-RCP-27-3 trip values less than Technical Specification requirement.	
LER-80-43	Diesel Generator 1-C inoperable.	IR-1-80-300

LER-80-44	Diesel Generator 1-C inoperable	IR-1-80-304
LER-80-45	Containment Monitors R-11 and R-12 inoperable.	IR-1-80-305
LER-80-46	Steam flow transmitter No. 475 inoperable.	IR-1-80-326
LER-80-47	Service Water "B" battery charger inoperable.	IR-1-80-336 IR-1-80-342
LER-80-48	Containment Monitors R-11 and R-12 inoperable.	IR-1-80-333 IR-1-80-334 IR-1-80-335
LER-80-49	Reactor trip instrumentation channel associated with RCS Loop 1-C flow transmitter 434 inoperable.	IR-1-80-359
LER-80-50	Service Water train B, D.C. distribution system inoperable due to charger No. 4 high voltage shutdown relay.	IR-1-80-345
LER-80-51	Diesel Generator 1-C inoperable.	IR-1-80-347 IR-1-80-354
LER-80-52	ESS sequencer B1H failed to meet time requirement for picking up styss 2 and 3 during surveillance test. Due to set point drift.	IR-1-80-378
LER-80-53	Containment spray automatic actuation logic inoperable during surveillance testing due to integrated circuit failure in a universal card.	IR-1-80-373
LER-80-54	Over torquering of containment equipment hatch bolts.	IR-1-80-377
LER-80-55	1A RCP bus train "B" undervoltage relay inoperable.	IR-1-80-390
LER-80-56	Service Water building "A" train battery system inoperable due to low battery cell specific gravity.	IR-1-80-282

14. Unresolved Item

During a Performance Appraisal Inspection (50-348/80-28), the inspector reviewed a Unit No. 1 work request concerning Unit No. 2A charging pump. The maintenance group had removed the rotating assembly from the 2A charging pump to correct a oil leak. The maintenance personnel found a one inch long by 0.026 inch deep longnitudal groove in the pump shaft. The groove apparently resulted from grinding the sleeve to

remove the sleeve from the shaft. A Field Deficiency Report was prepared and the entire rotating assembly was returned to the pump vendor.

The inspector was concerned that the defective shaft had been reinstalled without the defect being found and evaluated during the inspection following the origional rework. This is considered a unresolved item pending location and review of documentation concerning this work. 50-364/46-01.

15. Fire Protection System

The inspectors reviewed the status of the smoke detection systems in the Unit No. 2 Auxiliary building and the fire hose stations in the Unit No. 2 cable tunnels between the diesel generator building and the auxiliary building.

The smoke detection systems had not been completed due to relocation requirements of some of the detectors in 3 of the 27 systems. System testing to verify operability had not been completed but is scheduled to be completed prior to fuel loading.

Hose stations had been installed in the cable tunnels. Flushing of the systems had not been completed. These systems will be completed prior to fuel loading.