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

MAY - 8 1980

Report Nos. 50-348/80-09 and 50-364/80-09

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

Facility: Farley

Docket Nos. 50-348 and 50-364

License Nos. NPF-2 and CPPR-86

Inspection at Farley Nuclear site near Dothan, Alabama

Inspectors: G. L. Troup — 5/7/80 Date Signed

for J. R. Wray — 5/7/80 Date Signed

Approved by: J. Philip Stohr, Chief, FFMS Branch — 5/8/80 Date Signed

SUMMARY

Inspection on April 21-25, 1980

Areas Inspected

This routine, unannounced inspection involved 70 inspector hours on site in the areas of radioactive waste management for Unit 2 including the installation of the liquid and gaseous waste systems, review of preoperational test procedures, installation of process and effluent monitors, chemistry and health physics procedures and health physics and security training for new employees and contractors.

Results

Of the areas inspected, no items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

Licensee Employees

*W. G. Hairston, III, Plant Manager
J. D. Woodard, Assistant Plant Manager
*K. W. McCracken, Technical Services Superintendent
*D. E. Mansfield, Startup Superintendent
*C. D. Nesbitt, Chemistry/Health Physics Supervisor
*M. W. Mitchell, Health Physics Sector Supervisor
J. M. Walden, Waste and Effluent Sector Supervisor
W. R. Bayne, Chemistry Sector Supervisor
B. P. Patton, ALARA Health Physicist
P. E. Farnsworth, Chemistry/Health Physics Foreman
B. H. Miller, Training Instructor

Other licensee employees contacted included three technicians, two operators, and four security force members.

Other Organizations

*J. N. Charlton, Lead Startup Engineer, Westinghouse

NRC Resident Inspector

*W. H. Bradford

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on April 25, 1980, with those persons indicated in paragraph 1 above. The inspectors discussed the purpose of the inspection and their observations. Regarding the installation of the laundry system (paragraph 6), a licensee management representative stated that the type and capacity of the laundry was being evaluated but will be finalized in the near future.

3. Licensee Action on Previous Inspection Findings

Not inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Radiation Worker Training

a. 10 CFR 19.12 specifies the information which must be included in the radiation worker training program. The inspectors reviewed the radiation worker training program by participating in the plant's badging process. Training material inspected included video tapes covering general health physics practices, site security, rights and responsibilities of a radiation worker and applicable provisions of the Commission's regulations. No items of noncompliance or deviations were identified.

b. In RII Report No. 50-348/79-42, paragraph 10c, the licensee notified an inspector that additional training incorporating suggestions contained in RII Report No. 50-348/79-21, concerning practical exercises in self-frisking and contamination clothing dressing/undressing procedures would begin January 1, 1980. The inspectors verified that a practical exercise in contamination clothing dressing/undressing and self-frisking techniques has been incorporated into the radiation worker training program and had no further questions.

6. Installation of Liquid Radioactive Waste System-Unit 2

a. FSAR Section 11.2 describes the liquid radioactive waste processing system, including design objectives, and system design and operation. FSAR Table 11.2-3 lists the design parameters of the major components in the liquid waste processing system.

b. An inspector toured the Unit 2 auxiliary building and observed that most major components of the liquid radwaste system were installed in accordance with FSAR Section 11.2 and that piping and electrical installation was progressing.

The inspector compared nameplate data of equipment with the design parameters listed in FSAR Table 11.2-3 making estimates of tank capacities where necessary. The inspector noted, however, that the cubicle reserved for the laundry and hot shower tank (10,000 gallon capacity) was empty even though instrumentation for the tank was installed on the operating panel. A licensee representative stated that an evaluation of the Unit 2 laundry system requirements is in progress and a decision will be forthcoming. The inspector informed the licensee that he will be following the status of the Unit 2 laundry system very closely as this area has proven to be a source of voluminous amounts of liquid radwaste at operating plants during outages. The inspector had no questions on the installation of the remainder of the liquid waste processing system.

7. Installation of Gaseous Radioactive Waste System-Unit 2

a. FSAR Section 11.3 describes the gaseous radioactive waste processing system, including design objectives, and system design and operation. FSAR Table 11.3-4 lists the design parameters of the components in the gaseous waste processing system.

b. An inspector toured the gaseous radioactive waste system with a licensee representative and observed the major components installed in the system. The inspector compared nameplate data of equipment with the design parameters listed in FSAR Table 11.3-4 making component capacity estimates where necessary. The inspector had no questions on the installation of the system.

8. Process and Effluent and Monitoring System-Unit 2

a. FSAR Table 11.4-2 describes the radiation monitors for the liquid and gaseous process streams. The description includes channel, function, type, indicating device and alarm, and alarms and their basis.

b. An inspector observed the radiation monitoring panel, on which the monitoring system modules are mounted, and verified that the monitors listed in the FSAR table are installed, that the nameplates and markings agree with the FSAR identification and the modules contain the alarms listed. Table 11.4-2 lists the sensitivity range of each detector in uCi/cc whereas the meters are marked on counts per minute (cpm). The relationship between uCi/cc and cpm will be reviewed when the monitor calibrations are complete. The range of the meters was observed to be as stated in FSAR 11.4.2.2.

c. An alarm on the radioation monitoring panel alarms an annunciator window on panel 2-ALB-6. An operator informed the inspector that this window is "locked" on an alarm and does not reflash if another alarm activates. However, each module has an "alarm" and "acknowledge" window on the monitoring panel, which also activates an audible alarm. As the alarm window is visible to the operator and an audible alarm is provided, the lack of reflash on 2-ALB-6 does not prevent the operator from being appraised of a high alarm or failure alarm. The inspector had no further questions.

9. Preoperational Test Procedures-Unit 2

a. Section 14.1 of the FSAR describes the testing program, including development of the preoperational test program per Regulatory Guide 1.68 and review and approval requirements. FSAR Section 14.1.3 lists the preoperational tests and synopses of the objectives, prerequisites, test methods, and acceptance criteria.

b. An inspector reviewed six preoperational test procedures to determine that they meet the test objectives and criteria of FSAR Section 14.1.3, include the appropriate requirements listed in Appendix C of Regulatory Guide 1.68 and were reviewed and approved as specified in FSAR Section 14.1. Procedures reviewed were:

(1) 069-5-022, "Waste Holdup Tank PreOp", Rev. 0

(2) 069-5-023, "Waste Evaporator PreOp", Rev. 0

(3) 069-5-024, "Waste Evaporator Condensate PreOp", Rev. 0

(4) 069-5-025, "Chemical Drain Tank PreOo", Rev. 0

(5) 069-5-026, "Floor Drain Tank PreOp", Rev. 0

(6) 069-5-028, "Waste Monitor Tank and Demineralizer PreOp", Rev. 0

The inspector noted that procedures 069-5-024 and 069-5-026 did not require a prerequisite sign-off for the construction exception list review and procedure 069-5-024 did not require the completion and sign-off for test 069-9-003, "Waste Condensate Flush". The cognizant test engineer acknowledged that these prerequisites should have been incorporated. On April 24, 1980, modifications to the procedures were issued to incorporate these prerequisites to the procedures. The inspector had no further questions.

c. The inspector also noted that none of the procedures reviewed included a prerequisite for completion of a hydrostatic test. The cognizant test engineer informed the inspector that hydrostatic tests will be performed as part of the construction of the system and the records will be part of the documentation when the system is turned over by Construction for startup testing. The inspector had no further questions pending review of the documentation for the system.

10. Chemistry and Health Physics Procedures-Unit 2

An inspector discussed the preparation and implementation of procedures for Unit 2 with cognizant licensee representatives. Existing procedures applicable to both units are designated FNP-0-XXXX. Those procedures applicable only to a specific unit are designated FNP-1-XXXX or FNP-2-XXXX for units 1 and 2, respectively. The licensee representative stated that the procedures for Unit 2 are presently being prepared but are not yet completed. These procedures will be reviewed during subsequent inspections.