

# UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION II

101 MARIETTA ST., N.W., SUITE 3100

ATLANTA, GEORGIA 30303

Report Nos. 50-348/82-19 and 50-364/82-18

Licensee: Alabama Power Company

600 North 18th Street Birmingham, AL 35291

Facility Name: Farley

Docket Nos. 50-348 and 50-364

License Nos. NPF-2 and NPF-8

Inspection at Farley site near Dothan, Alabama

Inspector:

W. W. Peery

Approved by:

K. P. Barr, Section Chief

Technical Inspection Branch

Division of Engineering and Technical Programs

SUMMARY

Inspection on July 26-30, 1982

Areas Inspected

This routine, unannounced inspection involved 32 inspector-hours on site in the areas of Inspector Followup Items (IFI), Radiation Protection and Waste Management.

Results

Of the three areas inspected, no violations or deviations were identified in two areas; one item of noncompliance was found in one area (Form NRC-3, "Notice to Employees" was not posted in the new low level waste storage facility).

#### REPORT DETAILS

#### 1. Persons Contacted

Licensee Employees

\*W. G. Hairston, Plant Manager

\*J. D. Woodard, Assistant Plant Manager

\*C. D. Nesbitt, Technical Superintendent

\*W. C. Carr, Chemistry and Health Physics Supervisor

\*M. W. Mitchell, Chemistry and Health Physics Sector Supervisor

\*J. M. Walden, Waste and Effluent Sectors Supervisor

W. G. Gripentog, Counting Sector Supervisor

\*D. R. Culver, SAER Engineer \*J. F. Withrow, SAER Engineer

Other licensee employees contacted included two technicians.

NRC Resident Inspector

\*W. H. Bradford

\*Attended exit interview

#### 2. Exit Interview

The inspection scope and findings were summarized on July 30, 1982, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

Not inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Inspector Followups Items

(Closed) (IFI) 348/80-41-01, A licensee representative stated that nuclear operators are given no experience credit toward becoming ANSI N18.1 qualified. Radiation detection personnel may become ANSI N18.1 qualified, depending on previous experience and background and completion of the Qualification Records (QR) programs, as well as one year of experience assisting qualified personnel. The inspector had no further questions.

(Closed) (IFI) 348/80-41-02, A licensee representative stated that the academic training programs for technicians has been reorganized and revised to require six weeks of formal training. The inspector had no further questions.

(Closed) (IFI) 348/80-41-04, A licensee representative stated that the technician OJT and qualification programs have now been addressed by revision of the QR's program. The inspector had no further questions.

(Closed) (IFI) 348/80-41-06, A licensee representative stated that a formal quality assurance program has been instituted with Landauer to assure exposure measurements of record and that the program meets the suggestions of ANSI N13.11. The inspector had no further questions.

(Closed) (IFI) 348/80-41-07, A licensee representative stated that a formal program for investigation and documentation of TLD/self-reading dosimeter differences has now been placed in effect. The inspector reviewed the investigation documentation forms and had no further questions.

(Closed) (IFI) 348/80-41-08, Neutron exposure procedures. FNP-C-RCP-740, Personnel Monitoring, (supercedes FNP-0-RCP-8) was issued June 15, 1982. Paragraph 6.4, Neutron Dosimetry by Calculations Method, addresses the concern expressed in this item to review the procedures to reflect the calculational method rather than dependence on film badges. The inspector reviewed the procedure and had no further questions.

(Closed) (IFI) 348/80-41-09, Beta dose through respirator lens. The licensee made a study of the potential for eye exposure from beta particles using INPO report entitled Personnel Protection from Beta Particles. A licensee representative stated that although it was determined that one layer of lexan was adequate shielding for the eyes it has been decided that two layers of lexan will be used for eye protection, particularly during steam generator work. The licensee has also considered the needs for various types of clothing for Beta shielding. The inspector had no further questions.

(Closed) (IFI) 348/80-41-10, Nitrogen-16 (N-16) Exposures. A licensee representative stated that areas of the plant have been investigated to evaluate potentials for exposure to N-16 photons. INPO was consulted, survey measurements made, and comparisons made between TLD readings from various areas. The representative stated that the area inside the biological shield was identified as having the primary potential for N-16 exposure and this area is not entered during N-16 generation. Surveys were made with instruments considered capable of measuring N-16 energy levels. The inspector had no further questions.

(Closed) (IFI) 348/80-42-11, Quality control test of vendor TLD evaluations. Licensee procedure FNP-0-RCP-740, Personnel Monitoring, paragraph 6.7, provides for vendor TLD QA Monthly and Quarterly. The inspector reviewed the procedure and equipment and had no further questions.

(Closed) (IFI) 348/80-41-12, Bioassay for beta emitters. A licensee representative stated that samples are submitted to a vendor. The inspector had no further questions.

(Closed) (IFI) 348/80-41-23, Safety evaluation of new solidification system. The inspector previously observed the solidification system in it's place of use. The Hittman description and process procedures were previously reviewed. A Hittman representative has been onsite during processing of wastes. The system operation has been satisfactory and effective for quality. There are no unreviewed safety questions and the inspector had no further questions.

(Closed) (IFI) 348/80-41-25, Waste reduction training for plant personnel. A licensee representative stated that waste reduction has been included in personnel training and is followed on a day-to-day basis. The inspector participated in licensee training sessions and noted that training in waste reduction was included. Good housekeeping was noted to be in effect throughout the plant. The inspector had no further questions.

(Open) (IFI) 348/80-41-13, Internal dose assessment. If a bioassay sample results shows greater than 10% maximum permissible body burden, a consultant evaluates the intake and calculates the dose. License Procedure FNP-RCP-743 addressed this area. The representative stated that plans are to send site personnel to Oak Ridge for training as training becomes available. This item will remain open until the training is completed.

(Open) (IFI) 348/80-41-20, Connections with the demineralized water system. The licensee previously instituted administrative controls for the demineralized water system with further provisions to install check valves in existing cross connects with the system. All but one check valve has been installed in Unit 1 and none of the valves have been installed in Unit 2. Licensee representatives stated that the remaining check valves will be installed at the time of outages for the respective units.

## 6. Organization

A licensee representative stated that there are over twenty-one permanent Health Physics employees and five contract Health Physics personnel. Of the total of twenty-six Health Physics personnel, seventeen are ANSI N18.1 qualified. The inspector reviewed licensee documentation verifying that the contract personnel are ANSI qualified. No deviations or violations were identified. The licensee representative stated that there are also twenty-one permanent employees in Chemistry and thirteen in the Environmental and Counting Room plus one contract individual. There are three openings to be filled in Health Physics. The licensee representative stated that there may be thirty to forty Health Physics contract personnel onsite during an outage. The inspector review of documentation by the licensee of qualifications of contract personnel revealed thorough screening.

#### 7. Licensee Audits

The inspector reviewed the results of licensee audits of the radiation protection program. The audits appeared to be in depth and timely. It was determined that followup on any problem areas has been pursued to satisfactory resolution.

## 8. Training

The inspector reviewed changes made in the training program, many of which were made in response to the findings of the Health Physics Team Appraisal (see closed items 348/80-41-01, 348/80-41-02, 348/80-41-03, 348/80-41-04, and 348/80-41-24). The inspector participated in the licensee's radiation worker training program. Contractor personnel are required to complete the licensee's training course. The training program was determined to be satisfactory and consistent with requirements.

# 9. Radiological Protection Procedures

Changes made in the radiological protection procedures in response to the Health Physics Team Appraisal were reviewed and found to be satisfactory (see closed items 348/80-41-12, 348/80-41-11, and 348/80-41-08). Also, about twenty additional radiation protection procedures were reviewed for changes and all were found to be satisfactory and consistent with requirements.

## 10. Waste Handling

The inspector observed the loading and preparation of a truck shipment of low level solid waste. The operation of the Hittman demineralizer and solidification systems were reviewed with a licensee representative and it was determined that operation of both systems has been satisfactory. The licensee's new waste storage facility is an excellent improvement. No deviations or violations were observed.

### 11. Posting

During inspection of the new waste storage building it was noted that the Form NRC-3, "Notice to Employees" was not posted. Licensee management was informed that failure to post the Form NRC-3 constituted a violation with 10 CFR 19.11, Posting of Notices to Workers. The Form NRC-3 was posted during the inspection and this was verified by the inspector.