



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

Report No. 50-348/79-11

Licensee: Alabama Power Company
 Birmingham, Alabama 35291

Facility Name: Farley 1

Docket No. 50-348

License No. NPF-2

Inspection at Farley Site near Ashford, Alabama

Inspector:	<u>A. F. Gibson</u>	<u>3/29/79</u>
	C. M. Hosey	Date Signed
Approved by:	<u>A. F. Gibson</u>	<u>3/29/79</u>
	A. F. Gibson, Section Chief, FF&MS Branch	Date Signed

SUMMARY

Inspection on March 12-16, 1979.

Areas Inspected

This routine, unannounced inspection involved 37 inspector hours onsite in the areas of the radiation protection program associated with the refueling maintenance outage and followup on previously identified items.

Results

Of the 13 areas inspected, no apparent items of noncompliance or deviations were identified.

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DETAILS

1. Persons Contacted

Licensee Employees

- *W. G. Hairston, III, Plant Manager
- *J. Woodard, Assistant Plant Manager
- *K. W. McCracken, Technical Superintendent
- *C. D. Nesbitt, Chemistry/Health Physics Supervisor
- M. W. Mitchell, Assistant Chemistry/Health Physics Supervisor
- P. E. Farnsworth, Chemistry/Health Physics Foreman
- J. Walden, Chemistry/Health Physics Foreman
- B. H. Miller, Chemistry/Health Physics Foreman (Temporary)
- L. W. Enfinger, Document Control Supervisor
- P. Patton, ALARA Engineer
- M. Brown, Engineer
- H. Garland, Assistant Maintenance Supervisor

Other licensee employees contacted included 3 construction craftsmen, 6 technicians, 1 operator, 3 mechanics, and 3 office personnel.

Other Organizations

- J. K. Benedetto, Jr., Southern Space, Inc.
- T. Williams, Chem-Nuclear Company

*Attended exit interview.

2. Exit Interview

The inspection scope and findings were summarized on March 16, 1979 with those persons indicated in Paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

(Closed) Noncompliance (348/78-26-01) Failure to Have Written Procedures to Transfer Resin to Bulk Loading Platform.

The inspector reviewed revision 4 to plant procedure FNP-1-SOP-49.0, "Solid Waste Processing System," and verified that the procedure provides for the transfer of waste evaporator bottoms to the bulk loading platform. The operating procedures used by the waste solidification contractor have been incorporated into the licensee's "Process Control Program Manual-Solidification of Radioactive Waste." This Manual was reviewed by the Plant Operations Review Committee (PORC). Changes to the waste contractor's operating procedures must be approved by the licensee prior to implementation. The inspector had no further questions.

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(Closed) Unresolved (348/78-26-02) Safety Review of Mobile Solidification
02) Safety Review of Mobile Solidification
Units.

The inspector reviewed a number of safety evaluations of the mobile solidification units performed by the licensee. The evaluation concluded that the operation of the solidification units did not constitute an unreviewed safety question. The inspector had no further questions.

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 during this inspection are discussed in paragraph 9.

5. Separation of Contaminated Waste Systems from Noncontaminated Plant Systems

This item was originally discussed in IE Report No. 50-348/78-4 and concerns the elimination of cross-connections between contaminated water systems and noncontaminated plant systems identified by the licensee. The licensee's review of potential cross connections was performed in response to IE Circular No. 77-14. The licensee requested on May 12, 1978, that the designer of the system issue a modification to the plant to eliminate the potential contamination of the sanitary water system through a cross connection with the demineralized water system. A licensee representative stated that the plant would followup on this request. This item (348/78-04-04) will remain open pending completion of the plant modification.

6. Temporary Shielding

This item was originally discussed in IE Report No. 50-348/78-26 and concerns the installation and removal of temporary shielding on safety-related piping. The licensee's architectural engineering (AE) consultant has provided the licensee with isometric drawings of the residual heat removal system (RHR) piping indicating when temporary supports should be added to accommodate specified amounts of temporary shielding on the piping. The AE also specified the design load of the temporary supports and the RHR system temperature specifications which must be met before temporary shielding can be added. The licensee will request similar evaluations for other systems prior to placing temporary shielding on the piping. The inspector commented that a written procedure for the installation and removal of temporary shielding still was not available. A licensee representative stated that a written procedure would be prepared as soon as practicable. The procedure will include: (1) criteria for installing temporary shielding; (2) consideration of loading effects on piping; and (3) an accountability program for installed

shielding. The inspector stated that this item (348/78-26-04) would remain open pending issuance of the temporary shielding procedure.

7. Testing of Air Filtration Systems

This item was originally discussed in IE Report No. 348/78-31-01, and concerns the prerequisite testing of air filtration systems. The inspector reviewed a letter from the licensee's ventilation system consultant. The consultant stated that additional testing was not necessary and that this plant is in compliance with ANSI-N510. The inspector had no further questions.

8. Radiation Protection Procedures

The inspector reviewed a proposed revision to the Plant's Health Physics Manual, which incorporates an ALARA program into plant procedures, establishes management commitment to keeping exposure ALARA, describes the procedures for bringing problems to the attention of management and adds a review process to ensure that exposure is kept ALARA. The inspector also reviewed plant procedure FNP-1-MP-4.1, "Steam Generator Primary Manway Removal and Installation" and various radiation work permits (RWP's) associated with major maintenance in containment. During the review of plant procedures, the inspector noted the procedures failed to address several important items. For example, plant procedure FNP-1-MP-4.1 did not include a precaution that large volumes that water are possible when removing the diaphragms nor did the procedure include as a prerequisite that the Chemistry/Health Physics group designate a storage location for the diaphragms and the appropriate group have temporary shielding available for shielding the diaphragms when removed. The diaphragms for steam generator 1C primary manways each read approximately 8 R/hr on contact. During a discussion of plant procedures with a licensee representative, the representative stated that maintenance procedures do not routinely receive health physics review prior to issuance. The inspector commented that all procedures involving work on radioactively contaminated systems, handling of radioactive material or work in radiation areas should be reviewed by the Chemistry/Health Physics group as far in advance of the work as possible. This review is necessary to ensure that adequate consideration is given to health physics aspects of the work, including staffing, availability of health physics equipment and supplies and to keep exposure ALARA. A licensee representative stated that the Chemistry/Health Physics group would review and concur on all maintenance procedures and changes. The inspector identified this as an open item (348/79-11-01). During tours of Containment and the Auxiliary Building, the inspector verified that the radiation protection requirements contained in plant procedures and RWP's were being complied with. The inspector had no further questions concerning radiation protection procedures.

9. Advanced Planning and Preparation

- a. A licensee representative stated that 20 contract health physics technicians had been added to the health physics staff for the refueling/maintenance outage. He stated that it became evident within the first few days of the outage that additional health physics technicians were going to be required. The licensee representative informed the inspector on March 16, 1979 that an additional 13 technicians had been requested from the contractor. The contract health physics technicians completed a one week training course on the licensee's procedures and methods of controlling radiation and contamination. The inspector reviewed the qualifications of the contract health physics technicians. Two of the technicians apparently did not have the minimum of two years of working experience in their speciality. One technician had approximately 22 months experience and the other had approximately 19 months experience. A licensee representative stated that the technicians may have experience which was not included on the resumes and that he had requested the supplying company to provide the additional information, if available. The inspector stated that using technicians in responsible positions who have less than two years of working experience in their speciality would be in noncompliance with Technical Specification 6.3. The inspector stated that this item would be unresolved (348/79-11-02) pending receipt and evaluation of additional information concerning the working experiences of the technicians.
- b. A licensee representative stated that the increased need for contamination control supplies and equipment, anti-contamination clothing, etc., had been anticipated and the necessary supplies and equipment were available for use. The licensee representative further stated a contract mobile laundry facility was brought onsite for this outage. Procedures for the operation of the mobile laundry were being incorporated into the licensee's process control program manual and thus reviewed by the Plant's Operations Review Committee. The inspector toured the mobile laundry facility and discussed the operation of the facility with a contractor's representative. The inspector had no further questions.

10. Training

By review of records and discussions with licensee representatives, the inspector verified that visitors and temporary employees were apparently provided the information required by 10 CFR 19.12. The inspector had no further questions.

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11. Exposure Control

- a. The inspector reviewed the "personnel exposure report" posted at the access control point to the Radiation Controlled Area (RCA) for March 15, 1979. Two NSSS vendor employees had exceeded 1250 mrem for the calendar quarter. The inspector verified that the radiation exposure history records (NRC Form 4) were on file as required by 10 CFR 20.102.
- b. In an effort to make each individual entering the RCA aware of the radiation exposure he has received, he is required to review the personnel exposure report posted at the entrance to the RCA and initial the printout acknowledging that he has reviewed the printout and the information is correct.

12. Respiratory Protection Program

- a. By review of records, observations, and discussions with licensee representatives, the inspector evaluated the program for air sampling, bioassay, engineering controls, MPC-hour controls, medical qualifications to wear a respirator, training, maintenance and issuance controls and determined that the respiratory protection program appeared to be in compliance with 10 CFR 20.103 and plant procedures. The inspector surveyed several respirators in the ready-for-issue bin. The radioactive contamination levels on all respirators surveyed were less than the limits specified in plant procedure FNP-0-RCP-29, "Contamination Guidelines." During the review of the respiratory protection program, the inspector noted that the ready-for-issue respirators were stored in large boxes and piled seven or eight respirators deep. The inspector commented that NUREG-0041, Section 9.3, recommends that respirators be "stored so that they are not damaged by adjacent equipment or twisted out of their normal configuration by improper storage." A licensee representative stated that the storage of respirators would be changed to follow the recommendations of NUREG-0041. The inspector identified this as an open item (348/79-11-03).
- b. The inspector discussed with a licensee representative an event which occurred at another facility involving the contamination of the plant source of breathing air when contamination leaked from the radwaste system into the plant's service air system. The licensee representative stated that a separate breathing air system had been installed and would be made fully operational during the outage. This system uses a bank of compressed air bottles as the primary source, however, plant service air is used as the backup air supply. The licensee representative further stated that the service air system is not connected to any potentially contaminated systems. The breathing air system has been made partially operational,

using service air as the source to support eddy current testing of the steam generator. The service air system consisted of water-cooled compressors. The inspector reviewed the most recent analyses of service air performed in 1977. Prior to the current outage, certified bottled air had been used for breathing air. The inspector commented that the analysis recommended in NUREG-0041 should be performed periodically to ensure that air of approved quality is being provided to respirator users. The licensee representative acknowledged the inspector's comments. The inspector identified this item as an open item (348/79-11-04).

13. Radioactive and Contaminated Material Control

By review of records, observations, and discussions with licensee representatives, the inspector evaluated the licensee's program for radioactive material control, including handling of radioactive material, intra-site transfers, identification and labeling, accountability, and storage and disposal of waste and determined the radioactive material control program appeared to be in compliance with 10 CFR 20.203(e) and (f) and licensee procedures. The inspector had no further questions.

14. Posting and Control

The inspector observed the licensee's posting and control of radioactive material areas, high radiation areas, airborne radioactivity areas and contamination areas. The inspector performed independent radiation surveys. No items of noncompliance or deviations were identified.

15. Surveys

The inspector selectively reviewed records of radiation contamination and airborne radioactivity surveys performed between March 5, 1977, and March 15, 1979, discussed the survey results with licensee representatives and observed the work in several active work areas to verify that the licensee was following the regulatory requirements in 10 CFR 20.103, 10 CFR 20.201(b) and 10 CFR 20.401(b). The inspector had no further questions concerning surveys.

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