



UNITED STATES
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REGION II
101 MARIETTA STREET, N.W.
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Report Nos.: 50-348/92-22 and 50-364/92-22

Licensee: Alabama Power Company

Docket Nos.: 50-348 and 364

License Nos.: NPF-2 and
NPF-8

Facility Name: Farley Nuclear Plant

Inspection Conducted: August 17-21, 1992

Inspector: A. Gooden
A. Gooden

09-16-92
Date Signed

Approved By: W. Rankin
W. Rankin, Chief
Emergency Preparedness Section
Emergency Preparedness and Radiological
Protection Branch
Division of Radiation Safety and Safeguards

9/21/92
Date Signed

SUMMARY

Scope:

This routine, unannounced inspection involved an assessment of the operational readiness status of the emergency preparedness program. Specific areas reviewed were: training, independent audits, key program changes (equipment, personnel, organizational, etc.), maintenance of emergency response equipment and facilities, distribution of changes to the Emergency Plan and Emergency Plan Implementing Procedures (EIPs), and a review of the licensee's corrective action tracking system.

Results:

Within the areas reviewed, no violations or deviations were identified. During the exit, the inspector discussed with the licensee plans to conduct a limited scope unannounced exercise (Paragraph 5). In addition, several items were discussed with the licensee for consideration as improvement items. The licensee was actively pursuing resolutions to past problems identified with notifications to on-call staff. Two aspects of the licensee's program were considered as program enhancements: 1) a full-time Emergency Planning Coordinator had been assigned to the plant organization; and 2) an auto-dialer system was implemented for providing notification to on-call personnel during off hours.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- S. Freeman, Lead Auditor
- *S. Fulmer, Superintendent, Operations Support
- *R. Hill, Plant General Manager
- *W. Jaasma, Senior Engineer
- W. Lee, Corporate Emergency Planning Coordinator
- W. Lisenby, Shift Aide
- R. Lulling, Unit I Shift Supervisor
- R. Martin, Unit II Shift Supervisor
- J. McGowan, Manager, Safety Audit and Engineering Review
- J. McGriff, Emergency Preparedness Technician
- *R. Vanderbye, Site Emergency Preparedness Coordinator
- *W. Warren, Supervisor, Technical Training
- *L. Williams, Manager, Training and Emergency Preparedness

Other licensee employees contacted during this inspection included engineers, operators, security force members, technicians, and administrative personnel.

NRC Resident Inspector

- *G. Maxwell

- *Attended exit interview

2. Emergency Plan and Implementing Procedures (82701)

Pursuant to 10 CFR 50.47(b) (16), 10 CFR 50.54(q), and Appendix E to 10 CFR Part 50, this area was reviewed to determine whether changes were made to the Plan and EIPs since the last routine inspection (May 1991), and to assess the impact of these changes on the overall status of emergency preparedness at the facility.

The inspector verified that changes to the Emergency Plan and selected EIPs were reviewed and approved by management. As evidenced by the transmittal dates, those Plan changes determined by the licensee not a decrease in the effectiveness of the program were distributed to the NRC within 30 days of the approval date. Since the May 1991 inspection, five Plan revisions (19, 20, 21, 22, and 23) were submitted for NRC review and approval. By letter dated January 16, 1992, the aforementioned revisions were approved. The distribution of randomly selected EIP changes to the NRC were reviewed for verification that changes were submitted within 30 days of

the approval date. No problems were noted, and distributions were generally made within 24 hours of the approval by plant management. According to discussions with licensee representatives, one major change procedurally since the last inspection involved the implementation of an auto-dialer system for providing notification to on-call personnel during off-hours. The inspector verified that the communications procedure (EIP-8) had been revised to reflect the auto-dial and manual call-out for staff activation. In addition, the inspector interviewed a member of the Control Room staff with the responsibility for activating the auto-dialer system. Personnel demonstrated excellent familiarity with the activation procedures for both manual and auto-call. The inspector noted during the review of the Emergency Plan that data regarding the evacuation time estimates was based on 1984 data. Consequently, the inspector discussed with licensee representatives for consideration as an improvement item, review current census data for providing updates to evacuation time estimates. The inspector was informed by members of the licensee's staff that coordination was underway with the Alabama authorities to review evacuation time estimates based on recent Census Bureau data and data provided by Houston County authorities. The inspector discussed with a member of the licensee's staff the periodic review of agreements between the licensee and offsite authorities. Documentation was provided to show that a memorandum of understanding (MOU) between the licensee and Georgia authorities, dated 1984, had been reviewed during calendar year 1991 by offsite representatives and no problems were noted.

Copies of the Emergency Plan, EIPs, Technical Specifications, Abnormal Operating Procedures (AOP), and other resource documents were audited in the Control Room, Technical Support Center (TSC), and Emergency Operations Facility (EOF). With one exception, the selected documents were all current and up-to-date. The one exception involved a superseded on-call schedule (notification roster) in the TSC controlled copy of an EIP. The referenced document was immediately replaced. The inspector verified that the Control Room copy used by the individual with responsibility for activating response personnel was current and up-to-date. Consequently, the inspector informed the licensee that the referenced item appeared to be an isolated incident and was not indicative of a programmatic breakdown in the maintenance of facility reference or emergency documents.

No violations or deviations were identified.

3. Emergency Facilities, Equipment, Instrumentation, and Supplies (82701)

Pursuant to 10 CFR 50.47(b) (8) and (9), Section IV.E of Appendix E to 10 CFR Part 50, and Section III of the licensee's Emergency Plan, this area was inspected to determine whether the licensee's emergency response facilities and other essential emergency equipment, instrumentation, and supplies were maintained in a state of operational readiness.

Discussions were held with licensee representatives concerning modifications to facilities, equipment, and instrumentation since the last inspection. The inspector toured the Control Room, TSC, and EOF and noted that facilities were in accordance with Section III of the Emergency Plan. Regarding equipment and/or facility changes, the inspector was informed by members of the licensee's staff as follows:

- The NRC FTS-2000 system had been installed and the 30 day test period ended August 21, 1992.
- For notification to augmentation staff during off hours, an automated pager system known as the "Community Alert Notification System" (CANS) had been implemented. Although the referenced system is considered a program enhancement, the current configuration is limited by the inability to perform a call-out of home phone numbers. An upgrade to the existing system was planned for completion during August. According to a licensee contact, the system upgrade will provide the capability for activating both pagers and/or home phone numbers.

In assessing the operational status of the emergency response facilities (ERFs), the inspector examined protective equipment, and supplies to determine if the licensee was periodically performing operational checks and inventories of emergency kits and cabinets. In addition, completed checklists to procedure EIP-16 covering the period August 1991 through August 1992 were reviewed for verification that periodic audits were performed on health physics equipment and supplies. Records reviewed indicated that problems identified during audits were corrected in a timely manner. Reference documents and emergency kits and/or cabinets were inventoried, and randomly selected equipment was checked for operability. The selected equipment displayed current calibration stickers and a successful battery check was obtained. The inspector

conducted an operability test of the following communications equipment: Health Physics Network (HPN) from the EOF to the NRC Operations Center, and the Emergency Notification Network (ENN) from the Control Room to offsite authorities (State and local). No problems were noted. Transmission via both communications system were noted as loud and clear. During the Control Room tour, the inspector noted that the monitoring instrumentation (e.g., plant vent monitor, containment monitor, air ejector monitor, and meteorological parameter) for post accident assessment and dose projection was operational. The EOF emergency ventilation system (HVAC) operation were observed by the inspector, and it appeared as though the air handling units and dampers worked in accordance with the activation procedures described in EIP-27 regarding transfer from normal mode to the outside air filtration mode.

The licensee's management control program for the public Alert Notification System (ANS) was reviewed. According to licensee documentation and discussions with licensee representatives, the system consisted of sirens installed at three locations in Alabama, and tone-alert radios for residents within the 10-mile EPZ but outside the siren coverage areas. The inspector reviewed siren test records for the period February 1992 to August 1992. Records indicated that ANS tests were performed in accordance with procedural requirements.

During a previous inspection (50-348,364/92-07), the inspector reviewed the licensee's implementation of an automated call-out service (February 1992). However, at the time of the inspection, sufficient operating data was not available to assess the effectiveness. As a result, the inspector reviewed in detail the "CANS" testing program and observed an unannounced pager test to assess the effectiveness of the system in contacting on-call TSC personnel. Documentation was reviewed covering the period January 1992 to July 1992 involving communications drills. Drills are limited to pager or telephone contact and documentation of the person contacted availability to respond, and the estimated time of site arrival (ETA). The following results were noted:

During the first quarter of 1992 (January - March), problems were encountered during the initial notification attempts and resulted in delays. However, on average, total time from the start of drill to the ETA was one hour twenty minutes

to one hour thirty-five minutes which meets the licensee's current plan commitment of two hours activation time for the TSC.

- * Continual delays were noted on the part of personnel filling the position of Reactor Engineer.
- * From a total of 16 tests that were performed during the referenced period, only three tests were performed during the weekend.
- * During May 1992, drastic improvements were noted in the results.
- * During the unannounced pager test, although delays resulted, the response by the Control Room Communicator to implement the manual call-out for non-responders to the auto-dialer resulted in the required staffing levels being met in accordance with the Emergency Plan.

Based on the above review, the inspector considered the automated dialer system as a program enhancement which appears to provide adequate administrative and physical means to augment the emergency organization in accordance with the current Plan requirements. The inspector discussed with a licensee contact a pager drill during the evening hours on the weekend as an improvement item to provide additional data on the effectiveness of the "CANS". Regarding the acceptability of ERF staffing and activation times, the inspector was informed that significant changes were planned in this program area and were discussed in a meeting during July 1992 with NRC representatives. However, formal commitments and a Plan change to address the revised program were in the developmental stage at the time of the inspection. The inspector was informed by a licensee contact that the anticipated date for implementation of a revised program was October 31, 1993.

No violations or deviations were identified.

4. Organization and Management Control (82701)

Pursuant to 10 CFR Part 50, and Section II of the licensee's Emergency Plan, this area was inspected to determine the effects of any changes in the licensee's emergency organization and/or management control

systems on the emergency preparedness program, and to verify that any such changes were properly factored into the Emergency Plan and EIPs.

The inspector discussed with members of the licensee's staff key organizational changes since the May 1981 inspection. Key changes were as follows:

A full-time Emergency Preparedness Coordinator (EPC) and Emergency Preparedness Technician had been appointed to the plant organization. The assignment of full-time personnel is viewed as a program enhancement in view of the additional attention available to EP on a day-to-day basis. The inspector was informed by the EPC that past involvement with Emergency Preparedness included that of Lead Controller during the past three exercises; attendance at a FEMA workshop in Atlanta; attendance at a Southeastern utilities EPC counterpart meeting; and the previous assignment to operations training staff included the responsibility for providing emergency preparedness retraining to operations personnel. According to a licensee contact, additional training has been identified and as appropriate will be pursued.

As a result of promotions and/or reassignments, several changes had occurred to the normal organization. The most significant change involved the position General Manager, Nuclear Plant. The former General Manager, Nuclear Plant was assigned to a position at the corporate office and the newly appointed General Manager, Nuclear Plant was previously assigned as an Assistant General Manager, Plant Support. The referenced change has no immediate impact on Emergency Preparedness or the effectiveness of the emergency response organization in that the recently appointed General Manager, Nuclear Plant received similar emergency preparedness training as the previous individual.

Regarding changes to the emergency organization, as a result of promotions discussed above, personnel filling positions to the corporate and site emergency organization were changed. However, personnel changes did not result in a decrease in the number of available responders. Further, when personnel training records were reviewed, personnel training was current and up to date.

The inspector was informed that changes to the offsite emergency organization were limited to the Alabama Department of Public Health. The Director, Department of Public Health had resigned since the last inspection.

No violations or deviations were identified.

5. Training (82701)

Pursuant to 10 CFR 50.47(b) (2) and (15), Section IV.F of Appendix E to 10 CFR Part 50, and Section VIII.B of the Emergency Plan, this area was inspected to determine if the licensee's key emergency response personnel were properly trained and understood their emergency responsibilities.

The inspector conducted a very limited review of this programmatic area in view of the fact that a very detailed review was performed during March 31, 1992, and documented in Report Nos. 50-348,364/92-07. The review focused primarily on the offsite support training and training for those individuals reassigned within the emergency organization. The inspector interviewed the personnel with responsibility for activation of the emergency organization during off-hours. The interviewee demonstrated excellent familiarity with the procedures and operations for the "CANS", and the backup manual methodology. An unannounced pager activation drill was observed by the inspector to further assess the effectiveness of training for response personnel on the activation procedures and the adequacy of the auto-dialer system in staff activation and augmentation. The inspector noted that approximately 28 minutes after system activation, on-call personnel had been contacted and a response regarding an estimated site arrival time (ETA) was provided. The results of the referenced pager drill indicated that the existing program (training, procedurally, administratively, and equipment) was adequate for staff augmentation notification.

The inspector observed portions of a licensee conducted drill involving site and corporate personnel. The referenced drill was conducted in a manner to allow on-the-spot correction of improper response. Consequently, the inspector observed limited activity in the EOF. One aspect of the drill observed included the setup and activation of the EOF. Although certain activity was pre-staged, the inspector noted that activation and setup was in accordance with EIP-27 "Activation of the Emergency Operations Facility". The

inspector observed the transfer of the emergency ventilation system from the normal air handling mode to the air filtration mode. No problems were noted.

Training was reviewed for individuals recently assigned to the organization and/or reassigned to other response positions. No problems were noted. Personnel training was current and up to date. The inspector reviewed training modules for medical support and offsite fire department personnel. According to documentation, fire, medical, and ambulance personnel were trained during July and August 1992.

The inspector discussed with the licensee contact the current exercise program to ensure that periodic drills and exercises were being conducted in accordance with Section VIII.A of the Emergency Plan. According to the licensee's Plan, "one exercise may be performed every six (6) years which is unannounced, except as required for effective coordination with the management of the various agencies and for the evaluation of the health and safety of the general public". The inspector questioned members of the licensee's staff regarding the last exercise conducted unannounced. In response, the licensee contact informed the inspector that an unannounced exercise had not been conducted; however, an actual incident occurred during March 1990 (Notification of Unusual Event) which required implementation of the Emergency Plan. The inspector reviewed the appropriate documentation resulting from the referenced incident and informed the licensee that the degree of Plan implementation did not appear to meet the intent of an unannounced exercise. The licensee expressed concern regarding the conduct of an unannounced exercise due to impact on plant operations and the required coordinations and interface with the offsite State/local agencies for their participation. The inspector discussed this matter with regional management and the licensee was informed that an unannounced exercise would be considered as follows: identify the time period but not the specific date for an exercise (i.e., week); and participation may include licensee only and/or licensee and offsite authorities; and very limited plant management awareness of the exercise. During the exit interview, the Manager of Training and Emergency Preparedness discussed plans to conduct an unannounced exercise during the calendar year 1993 in accordance with the Region II guidance (as discussed above). The inspector informed the licensee that this item involving the performance of an unannounced exercise would be tracked as an Inspector Followup Item (IFI).

IFI 50-348, 364/92-22-01: Conduct an unannounced exercise during calendar year 1993.

The inspector discussed with the licensee contact the current exercise program for ensuring that the major elements of the Plan and emergency organization are tested every five years. When questioned regarding a five year exercise plan, the licensee contact indicated that a matrix or tracking plan did not currently exist. The inspector discussed with the licensee for consideration as an improvement item:

Establish a five (5) year exercise tracking plan to ensure that major elements of the Emergency Plan as discussed in NUREG-0654 are being exercised at least once every five years.

No violations or deviations were identified.

6. Independent Review/Audits (82701)

Pursuant to 10 CFR 50.47(b) (14) and 10 CFR 50.54(t), this area was inspected to determine whether the licensee had performed an independent review or audit of the emergency preparedness program, and whether the licensee had a corrective action system for deficiencies and weaknesses identified during exercises and drills.

According to documentation, two audits were performed by the Safety Audit and Engineering Review group (SAER) since the last routine inspection. The inspector reviewed audit documentation for an audit conducted during the period July 21-24, 1991, and October 17, 1991 through February 5, 1992. The most recent audit documented in a report dated February 6, 1992, identified 3 noncompliances and 20 comments. The inspector interviewed personnel with lead responsibility for conducting the audit and reviewed the audit findings and checklist. The inspector noted that the portion of the audit involving the offsite interface, was based on assessments and observations made during the annual exercise. Consequently, the inspector reviewed documentation for the previous 50.54(t) audit and noted that the audit was conducted as part of the exercise evaluation. The inspector discussed with members of the licensee's staff the benefits of performance based inspections as well as the benefits of performance combined with periodic contact. That is, by varying the technique (personnel interviews and observation of organizational interface during exercises) from one year to the next provides a more comprehensive review. The licensee contact with responsibility in this area informed the inspector that there was no benefit associated with contacting the

offsite authorities directly. The inspector discussed during the exit interview for consideration as an improvement item:

Vary the 50.54(t) audits to include personnel interviews and observation of organizational interface during exercises.

The licensee's program for followup action on audit, drill, and exercise findings was reviewed. The findings were tracked via a system known as the "Emergency Planning Punchlist" (EPPL). The inspector reviewed a printout of the EPPL and noted that the referenced system was effectively implemented for tracking items to conclusion.

No violations or deviations were identified.

7. NRC Information Notice (92701)

The inspector reviewed the licensee's response to the following Information Notices (IN) :

IN 91-33 "Reactor Safety Information For States During Exercises and Emergencies". Documentation was provided the inspector to show that the licensee had reviewed the referenced IN for its appropriateness and applicability to determine if additional actions were warranted. The licensee determined that no additional actions were necessary.

IN 91-43 "Recent Incidents Involving Rapid Increases In Primary-To-Secondary Leak Rate". According to documentation and discussion with the licensee contact, the referenced IN was reviewed for site applicability. It was determined that Abnormal Operating Procedure (AOP) 2.0 entitled "Steam Generator Tube Leakage" provides guidance on what actions to take in response to leakage of primary coolant into the secondary system. No additional actions were necessary.

IN 91-72 "Issuance Of A Revision To The EPA Manual Of Protective Action Guides And Protective Actions For Nuclear Incidents".

The inspector reviewed documentation which disclosed that the licensee had reviewed the referenced IN and determined that the information would be applicable to their site and procedures. The licensee intends to implement the revised guidance before January 1, 1994 with the implementation of the revised 10 CFR Part 20 regulations.

8. Action On Previous Inspection Findings (92701)

- a. (Open) Exercise Weakness 50-348, 364/91-23-01:
Control Room staff failed to make initial notifications in accordance with procedures.

The inspector reviewed proposed changes to the licensee's notification procedures for the offsite notifications. The proposed changes had not been formally implemented at the time of the inspection. The revised procedures appears to simplify the notification process due to consolidation of information.

- b. (Closed) IFI 50-348, 364/92-07-01:
Implementation of provisions which would prevent consecutive challenge of exam in lieu of attending training.

All on-call Emergency Directors were informed by memo from the Plant General Manager that Emergency Directors are expected to attend all license retraining activities associated with Emergency Director retraining. The inspector reviewed documentation which disclosed that all key management personnel assigned as Emergency Director attended calendar year 92 Emergency Director training during operator licensing retraining.

9. Exit Interview

The inspection scope and results were summarized on August 21, 1992, with those persons indicated in Paragraph 1. The inspector described the areas inspected and discussed in detail the inspection results listed below. No dissenting comments were received by the licensee. Proprietary information is not contained in this report.

<u>Item Number</u>	<u>Description/Reference</u>
50-348, 364/92-22-01	IFI - Conduct an unannounced exercise during calendar year 1993 (Paragraph 5).

Licensee management was informed that two open items from previous inspections were reviewed and one item is considered closed (Paragraph 8).