



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA STREET, N.W.
 ATLANTA, GEORGIA 30323

JAN 15 1992

Report Nos.: 50-348/91-23 and 50-364/91-23

Licensee: Alabama Power Company
 600 North 18th Street
 Birmingham, AL 35291-0400

Docket Nos.: 50-348 and 50-364 License Nos.: NPF-2 and NPF-8

Facility Name: Farley 1 and 2

Inspection Conducted: December 9-13, 1991

Inspector: William Rankin 1/15/92
 for W. Sartor Date Signed

Accompanying Personnel: ... Cooden
 B. Haagensen (Sonalysts, Inc.)
 M. Stein (Sonalysts, Inc.)

Approved by: William Rankin 1/15/92
 W. Rankin, Chief Date Signed
 Emergency Preparedness Section
 Radiological Protection and
 Emergency Preparedness Branch
 Division of Radiation Safety and Safeguards

SUMMARY

Scope:

This routine, announced inspection was conducted in the area of emergency preparedness to assess the adequacy of the licensee's emergency response program, the implementation of the Emergency Plan and Implementing Procedures, and the training program by observing and evaluating the response to a simulated accident that escalated to a General Emergency with all emergency response facilities (ERFs) activated.

Results:

In the areas inspected, violations or deviations were not identified. In accordance with their plans and procedures, the licensee demonstrated the ability to staff their ERFs, to approximately classify the accident, to mitigate the accident, and to make protective action recommendations (PARs). However, two exercise weaknesses were identified. The offsite notification for the Notification of Unusual Event (NOUE) was not

made in accordance with procedures in that no verification of message receipt was initially made (Paragraph 6). The other exercise weakness was a failure to conduct accountability within thirty minutes (Paragraph 10).

JAN 15 1992

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *W. Bayne, Supervisor, Safety Audit and Engineering Review
- *P. Farnsworth, Radwaste Supervisor
- *S. Freeman, Safety Audit and Engineering Review Auditor
- *D. Hostetter, Emergency Planning Coordinator Assistant
- *R. Kuryla, Engineering Aide, Training Department
- *W. Lee, Emergency Planning Coordinator
- *R. Livingston, Environmental Supervisor (Acting)
- *M. Mitchell, Superintendent, Health Physics
- *D. Morey, General Manager, Nuclear Plant
- *C. Nesbitt, Manager, Operations
- *J. Osterholtz, Manager, Technical
- *J. Robinson, Foreman, Chemistry
- *R. Vanderbye, Plant Instructor
- *W. Warron, Supervisor, Technical Training

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

NRC Resident Inspector(s)

- *G. Maxwell, Senior Resident Inspector
- M. Morgan, Resident Inspector

*Attended exit interview

2. Exercise Scenario (82302)

The scenario for the emergency exercise was reviewed to determine that provisions had been made to test an integrated emergency response capability as well as the basic elements existing within the licensee, State and local Emergency Plans and organization as required by 10 CFR 50.47(b)(14), 10 CFR 50, Appendix E, Paragraph IV.F and specific criteria in NUREG-0654, Section II.N.

The scenario developed for this exercise was reviewed in advance of the scheduled exercise date and was determined to be adequate for the scope and objectives of this full participation exercise. The scenario data package contained relatively few data inaccuracies and provided a fair challenge to the players and an opportunity to evaluate the exercise objectives. The control of the exercise was conducted effectively by knowledgeable individuals who anticipated player actions and maintained consistency of the scenario data and the currentness of the timeline when required.

Appropriate free-play was allowed when the divergence of player actions from expected actions did not compromise the integrity of the data.

No violations or deviations were identified.

3. Onsite Emergency Organization (82301)

The licensee's onsite emergency organization was observed to assure that the following requirements were implemented pursuant to 10 CFR 50.47(b)(2), Paragraph IV.A of Appendix E to 10 CFR 50, and specific guidance promulgated in Section II.B of NUREG-0654: (1) unambiguous definition of responsibilities for emergency response; (2) provision of adequate staffing to assure initial facility accident response in key functional areas at all times; and (3) specification of onsite and offsite support organization interactions.

The Unit 2 Shift Supervisor assumed the duties of the Emergency Director (ED) with the Notification of Unusual Event (NOUE) declaration at 0550 hours. The Plant Manager assumed the ED responsibilities 48 minutes later following a turnover briefing. The ED then proceeded to the Technical Support Center (TSC) where response staff were initiating accident response procedures in key functional areas. The TSC staffing was complete at 0726 hours, two minutes after the Alert declaration. The ED also recommended that the Emergency Operations Facility (EOF) be ranned at 0726 hours. Throughout the exercise the responsibilities for emergency response were unambiguously defined and adequate staff was available onsite for response in the key functional areas. No problems were noted with the specification of onsite and offsite support organization interactions.

No violations or deviations were identified.

4. Emergency Response Support and Resources (82301)

This area was observed to determine that arrangements for requesting and effectively using assistance resources have been made, that arrangements to accommodate State and local staff at the licensee's near-site EOF had been made, and that other organizations capable of augmenting the planned response have been identified as required by 10 CFR 50.47(b)(3), and 10 CFR 50, Appendix E, Paragraph IV.A, and specific criteria in NUREG-0654, Section II.C.

State staff was accommodated at the EOF located in the downstairs portion of the Farley Nuclear Plant Training Center. Section II.C of the Emergency Plan described the interfaces and assistance resources that were capable of augmenting the planned response.

No violations or deviations were identified.

5. Emergency Classification System (82301)

This area was observed to assure that a standard emergency classification and action level scheme was in use by the nuclear facility licensee pursuant to 10 CFR 50.47(b)(4), Paragraph IV.C of Appendix E to 10 CFR 50, specific guidance promulgated in Section II.D of NUREG-0654, and guidance recommended in NRC Information Notice 83-28.

The licensee's emergency classification system was described in Section IV.A of the Emergency Plan. The criteria for classification and response required for each category of the emergency classification scheme was defined. The event classifications were declared correctly at each level and were made within a short period of time from when the events had occurred.

No violations or deviations were identified.

6. Notification Methods and Procedures (82301)

This area was observed to determine that procedures had been established for notification by the licensee of State and local response organizations and emergency personnel, and that the content of initial and follow-up messages to response organizations had been established; and means to provide early notification to the populace within the plume exposure pathway had been established as required by 10 CFR 50.47(b)(5), 10 CFR 50, Appendix E, Paragraph IV.D, and specific criteria in NUREG-0654, Section II.E.

Section VI of the licensee's Emergency Plan described the notification procedures and FNP-0-EIP-26, "Offsite Notifications," contained the initial message form that was used by the Emergency Director to notify the States of Georgia and Alabama. Provisions also existed for follow-up messages. With the exception of the notification message for the NOUE declaration and the first follow-up message, the notification and follow-up messages were accurate, timely and processed in accordance with FNP-0-EIP-26. An inspector noted the TSC communicators set high standards for offsite communications. They followed up all messages to ensure message receipt and posted each initial notification

and follow-up message where it was available to emergency response personnel.

The exception to the above good practices for notifications was the failure to provide a complete initial notification message and then to provide significant follow-up as conditions degraded while the Control Room staff was responsible for notifications. Specifically, the initial notification for the NOUE was made without completing the Initial Notification Message block 6. Block 6 contained the following information:

- a. authentication phone number,
- b. ED approval,
- c. the name of the person who performed the notification and the time of the notification, and
- d. the names of the offsite personnel who acknowledged the message with the date and time of receipt.

As a result, it was not known if the required NOUE notifications to offsite agencies were made. Although the block was filled out retroactively in the TSC and EOF, it contained inaccurate information. An inspector also noted that the Emergency Director/Shift Supervisor never informed the offsite authorities that he had diagnosed a small reactor coolant system (RCS) leak and one percent fuel damage as required by EIP-26, Section 7.2.1.1. It was also noted that the first follow-up message was not sent within one hour as required by EIP-26, Section 7.2.2. The above observations were identified as an exercise weakness.

Exercise Weakness 50-348,364/91-23-01: The Control Room shift failed to make the initial notifications in accordance with procedures.

No violations or deviations were identified.

7. Public Education and Information (82301)

This area was observed to determine that information concerning the simulated emergency was made available for dissemination to the public as required by 10 CFR 50.47(b)(7), 10 CFR 50, Appendix E, Paragraph IV.D, and specific criteria in NUREG-0654, Section II.G.

Information was provided to the media and the public in advance of the exercise. A News Media Center (NMC) was established at the Northview High School in Dothan, Alabama.

No violations or deviations were identified.

8. Emergency Facilities and Equipment (82301)

This area was observed to determine that adequate emergency facilities and equipment to support an emergency response were provided and maintained as required by 10 CFR 50.47(b)(8), 10 CFR 50, Appendix E, Paragraph IV.E, and specific criteria in NUREG-0654, Section II.H.

The inspector observed the activation and staffing of some of the emergency response facilities and evaluated equipment used by the emergency responders during the exercise.

- a. Control Room - An inspector observed that Control Room personnel acted promptly to initiate emergency response to the simulated emergency. Emergency procedures were readily available.
- b. Technical Support Center - The TSC was located immediately north of the Unit 2 Control Room area. Although the TSC was fully staffed just two minutes after the Alert declaration, this time was not representative of the time required for TSC activation because selective TSC activation had been ongoing for approximately 40 minutes. The facility staff appeared cognizant of their duties and responsibilities and demonstrated knowledge of the Emergency Plan and Implementing Procedures. The ED maintained a clear understanding of the plant status and ongoing events during the exercise and provided status updates to his staff at appropriate intervals. The following items were brought to the licensee's attention for analysis and possible program improvement:
 - ° The prioritization of emergency repair team efforts and resources was not closely coordinated between the ED and the Maintenance Manager. Specifically, the priorities specified by the ED were not retained or displayed in a formal manner, rather, the ED set priorities by stating them verbally to the Maintenance Manager. The Maintenance Manager then communicated the priorities verbally to the HP Manager. The priorities were never recorded and no system was noted for displaying them. Misunderstanding of priorities was apparent during the dispatch of teams at the Site Area Emergency level.

The ED stated that PASS sampling was the number one priority and investigation of the TDAFW pump failure was number two. The priority of other teams which had already been requested was not specified. One of these teams was to support analysis of RCS samples, some of which had already been obtained. The TSC staff knew the first priority was PASS sampling, so they planned to send the team to pull the PASS sample first, the team to analyze RCS (PASS) samples second, and the team to investigate the TDAFW pump third. The actual priority desired by the ED was (1) pull the PASS sample, and (2) investigate TDAFW. Although no serious consequences were experienced due to this misunderstanding, it was apparent that the practice of communicating priorities informally and not displaying them resulted in confusion in this case.

- ° The ED was not fully aware of the protective action recommendations (PARs) that had been implemented by the State authorities. For example, he recommended an evacuation of additional zones in Alabama in response to a wind shift when these zones were already in the process of being evacuated.
- c. Operational Support Center (OSC) - The Control Room, Central Security Control, Service Building Auditorium, and Maintenance Shop served as OSCs. Since the OSCs are not manned until evacuation is conducted, and activation of the OSCs is not required by procedure until a General Emergency is declared, a pool of personnel is not assured through a formal, progressive sequence of facility activations tied to increasing classification levels.
- d. Emergency Operations Facility - The EOF was staffed in a separate pre-exercise activation drill the day before the full-scale exercise. During the exercise the following day an inspector observed that status boards were not always maintained current.

No violations or deviations were identified.

9. Accident Assessment (82301)

This area was observed to assure that methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition were in use as required by 10 CFR 50, Appendix E, Paragraph IV.b, and the specific criteria in NUREG-0654, Section II.I.

The accident assessment program included an engineering assessment of plant status and an assessment of radiological hazards to both onsite and offsite personnel resulting from the simulated accident. Core damage assessment calculations were produced by the TSC at appropriate intervals and the results were within appropriate tolerances of the scenario data.

Dose assessment activities were observed in both the TSC and the ECF. The inspector observed good interface between the Dose Assessment Director and his support staff. The offsite monitoring teams (OMTs) were initially controlled by the TSC and then turned over to the EOF after its activation. The inspector noted that the TSC staff provided more frequent status updates to the OMTs than the EOF staff. It was also observed that the OMTs were familiar with their equipment and procedures, promptly located their monitoring locations, and maintained a logbook documenting their activities.

No violations or deviations were identified.

10. Protective Response (82301)

This area was observed to verify that guidelines for protective actions during the emergency, consistent with Federal guidance, were developed and in place, and protective actions for emergency workers, including evacuation of nonessential personnel, were implemented promptly as required by 10 CFR 50.47(b)(10), and the specific criteria in NUREG-0654, Section II.J.

At the General Emergency declaration, PARs were made within 15 minutes in accordance with Paragraph IV.C.2, "Offsite Protective Actions," of the Emergency Plan.

Accountability of onsite personnel was directed with the Site Area Emergency declaration. The accountability was not completed within the required 30 minutes time frame in accordance with EIP-10, Section 3.1.3.

The initial accountability list contained 14 names of individuals who actually remained inside the protected area after 30 minutes. Of these 14 people, 4 people had been exempted from the exercise and 10 people were players who had proceeded to their assembly area. In addition, two people should have been listed on the initial accountability list but were inadvertently omitted by security.

The accountability was finally reported to have been completed to the ED over one hour after assembly had been directed. The reconciliation of the location of sixteen missing people took over one-half hour to resolve. This would have delayed the search and rescue effort should one of these people have been actually missing inside the plant. This was identified as an exercise weakness.

Exercise Weakness 50-348,364/91-23-02: Failure to conduct accountability of personnel in the protected area within 30 minutes.

No violations or deviations were identified.

11. Action on Previous Inspection Findings (92702)

(Closed) 50-348,364/90-30-01: Exercise Weakness: Failure of the ED to perform all steps of the EPIP for General Emergency. The ED performed the steps of the General Emergency procedure.

12. Exit Interview

The inspection scope and results were summarized on December 13, 1991, with those persons indicated in Paragraph 1. The inspector described the areas inspected and discussed in detail the inspection results listed below. Proprietary information is not contained in this report. Dissenting comments were not received from the licensee.

<u>Item Number</u>	<u>Description and Reference</u>
50-348,364/91-23-01	Exercise Weakness - Failure of the Control Room Staff to make initial notifications in accordance with the emergency procedures (Paragraph 6).
50-348,364/91-23-02	Exercise Weakness - Failure to perform an accountability of personnel within 30 minutes (Paragraph 10).