



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

DEC 10 1985

Report Nos.: 50-348/85-37 and 50-364/85-37

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

Docket Nos.: 50-348 and 50-364

License Nos.: NPF-8 and NPF-2

Facility Name: Farley 1 and 2

Inspection Conducted: September 24-26, November 8, and November 22, 1985

Inspector: W. M. Sartor, Jr.

11/27/85  
Date Signed

Accompanying Personnel: K. Clark, G. Arthur, G. Weale, J. MacLellan, and  
A.L. Smith

Approved by: Thomas R. Decker  
T. R. Decker Section Chief  
Division of Radiation Safety and Safeguards

11/27/85  
Date Signed

SUMMARY

Scope: This routine, unannounced inspection entailed 118 inspector-hours in the area of a small scale emergency exercise.

Results: One violation was identified in that the licensee failed to have the capability to notify responsible State and local governmental agencies within 15 minutes after declaring an emergency.

8512230422 851210  
PDR ADDCK 05000348  
Q PDR

## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*D. W. Morey, Assistant Plant Manager - Operations
- \*J. W. Beckham, Director, Farley Nuclear Plant Visitors Center
- \*J. F. Holloway, Shift Supervisor
- \*R. B. Wiggines, Supervisor Operation Training Section
- \*N. M. Maddox, Senior Plant Instructor
- \*R. P. McDonald, Senior Vice President
- \*K. W. McCracken, Manager, Nuclear Technical Support
- \*C. L. Buck, Supervisor - Nuclear Engineering
- \*J. E. Garlington, Manager Nuclear Engineering and Licensing
- \*J. W. McGowan, Manager Safety Audit and Engineering
- \*W. G. Ware, Supervisor SAER Review
- \*T. W. Cherry, Instrumentation and Control Supervisor
- \*B. L. Moore, Unit Supervisor
- \*B. P. Patton, Plant Health Physicist
- \*R. D. Hill, Operations Manager
- \*F. N. Wade, Manager Public Communications
- \*L. J. Maier, Senior Plant Instructor
- \*D. E. Grissette, Environmental Section Supervisor
- \*J. B. Kelly, Environmental Technician
- \*F. M. Jessup, Senior Engineer
- \*M. A. Treadwell, Specialist
- \*J. R. Robinson, Health Physics Technician
- \*J. F. Bouillon, Dosimetry Foreman
- \*W. T. Cooley, Training Coordinator
- \*P. E. Farnsworth, Health Physics Section Supervisor
- \*D. M. Varner, Manager Nuclear Administration
- \*T. R. Hawkins, Senior Engineer
- \*L. T. Jackson, Training Sector Supervisor

Other licensee employees contacted included engineers, technicians, operators, mechanics, security force members, and office personnel.

#### NRC Resident Inspectors

- \*W. H. Bradford
- \*B. Bonser

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on September 26, 1985, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed the inspection findings listed below.

Licensee representatives stated that they did not concur with the 15-minute notification requirement and referenced the outstanding unresolved item addressing same (50-348/84-26-01, 50-364/84-26-01). On November 8, 1985, the issue was further discussed via a conference call between representatives from Region II and Farley Nuclear Plant. Following the discussion, Region II management personnel reviewed the issues with NRC Headquarters inspection and enforcement management. On November 22, 1985, D. M. Verrelli, Chief Reactor Projects Branch 1 at Region II notified J. D. Woodard, Farley Nuclear Plant Manager, that a Notice of Violation was being issued. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspector during this inspection.

3. Licensee Action on Previous Enforcement Matters (92700)

This subject was not addressed in the inspection.

4. Exercise Scenario (82301)

The scenario for the emergency exercise was reviewed to determine that provisions had been made to test the integrated capability and a major portion of 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 was reviewed in advance of the scheduled exercise date and was discussed with licensee representatives both by telephone and in letters dated August 8 and September 6, 1985. As a result of the scenario review the licensee augmented the scenario with contingency messages to ensure that the Emergency Operations Facility (EOF) staff's dose assessment capability and engineering support capability could be adequately exercised. Additionally, the EOF dose assessment staff was pre-positioned in Dothan such that they could arrive at the site and demonstrate dose rate projection and plume tracking capability independent of the Technical Support Center (TSC) staff during the period of the effluent release.

No violations or deviations were identified.

5. Assignment of Responsibility (82301)

This area was observed to determine that primary responsibilities for emergency response by the licensee were specifically established and that adequate staff was available to respond to an emergency as required by 10 CFR 50.47(b)(1), 10 CFR 50, Appendix E, paragraph IV.A, and specific criteria in NUREG 0654, Section II.A.

The inspectors observed that specific emergency assignments had been made for the licensee's emergency response organization. Adequate staff was available to respond to the simulated emergency. The initial response organization was augmented by designated licensee representatives and

planning for long term or continuous staffing of the emergency response organization was demonstrated.

No violations or deviations were identified.

6. Onsite Emergency Organization (82301)

The licensee's onsite emergency organization was observed to determine that the responsibilities for emergency response were unambiguously defined, that adequate staffing was provided to insure initial facility accident response in key functional areas at all times, and that the interfaces were specified as required by 10 CFR 50.47(b)(2), 10 CFR 50, Appendix E, paragraph IV.A, and specific criteria in NUREG 0654, Section II.B.

The inspectors determined that the licensee's onsite emergency organization was effective in dealing with the simulated emergency. Adequate staffing of the emergency response facilities was provided for the initial accident response and the interfaces between the onsite organization and the limited participating offsite support agencies appeared to be adequate. Although the responsibilities for emergency response appeared to be unambiguously defined, it was not apparent when responsibilities were transferred to the Emergency Director from the shift supervisor. When the EOF was staffed, it was again not apparent as to when responsibilities and which responsibilities were transferred from the Emergency Director in the TSC to the Emergency Coordinator in the EOF.

No violations or deviations were identified.

7. Emergency Response Support and Resources (82301)

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

State and local staff could have been accommodated at the near-site Emergency Operations Facility. Licensee contact with offsite organizations was limited in this small scale exercise.

No violations or deviations were identified.

8. Emergency Classification System (82301)

This area was observed to determine that a standard emergency classification and action level scheme was in use by the nuclear facility licensee as required by 10 CFR 50.47(b)(4), 10 CFR 50, Appendix E, paragraph IV.C, and specific criteria in NUREG 0654, Section II.D.



An inspector observed that the emergency classification system was in effect as stated in the Radiological Emergency Plan and in the Implementing Procedures. The system appeared to be adequate for the classification of the simulated accident.

No violations or deviations were identified.

9. 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 followup 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.

An inspector reviewed the notification methods and procedures established by the licensee to provide information to Federal, State and the licensee's augmented emergency response organization. During the exercise, the inspector observed that the initial notification of an emergency classification to the Alabama Bureau of Radiological Health and the Georgia Emergency Management Agency was not completed until approximately 25 minutes after the emergency declaration. This notification failed to meet the standard of 10 CFR 50, Appendix E, Section IV.D.3 which specifies that the licensee have the capability to notify responsible State and local governmental agencies within 15 minutes after declaring an emergency. This failure to make the notifications within 15 minutes to the States of Alabama and Georgia was also observed in the 1984 Farley Emergency Exercise (reference Inspection Report Nos. 50-348/84-30 and 50-364/84-30). There was an unresolved item addressing prompt notification from a previous inspection report (50-348/84-26, 50-364/84-26) which was based on the finding that the licensee did not have procedures requiring notification of offsite authorities within 15 minutes of declaring the emergency, except for a General Emergency, and likewise did not train the staff to make such notifications except for General Emergencies. The licensee stated that their understanding of 10 CFR 50, Appendix E was that the capability to notify State and local governmental agencies within 15 minutes was fulfilled by the existence of the communication equipment. The issue was left unresolved pending further review by NRC. The unresolved item has now been determined to be a violation in that:

1. The licensee's Emergency Plan does not specify that the Emergency Director, in the event of an emergency, is to make required notifications within 15 minutes to the States of Alabama and Georgia.
2. Licensee's notification procedure FNP-0-EIP-26, Offsite Notification, does not specify the 15-minute time requirement for notifying responsible State and local response organizations

following declaration of Unusual Event, Alert and Site Area Emergency classifications.

3. Training records, interviews with training program personnel and selected emergency organization personnel revealed that the licensee's training program did not address notification time constraints to offsite response organizations.

These findings are identified as a violation of 10 CFR 50.54(q) which requires licensees to follow and maintain in effect emergency plans which meet the standards of 10 CFR 50.47(b) and 10 CFR, Appendix E. 10 CFR 50.47(b)(5) requires that the licensee's emergency plan includes provisions for notification of State and local response organizations; and 10 CFR 50, Appendix E, Section IV.D.3 specifies that the licensee have the capability to notify responsible State and local governmental agencies within 15 minutes after declaration of an emergency (50-348/85-37-01, 50-364/85-37-01).

An inspector observed the content of initial and followup notifications and/or messages provided to offsite authorities, and noted the initial notification of the Site Area Emergency to the States of Alabama and Georgia was not made in accordance with the Farley Emergency Plan. Specifically, Section VI.A of the plan requires the initial message to contain as a minimum:

1. Class of Emergency
2. Actual or potential release information
3. Potentially affected population
4. Advisability of protective measures

Contrary to this requirement, the communicator providing the initial notification gave only the class of emergency although more information was available from the Emergency Director. This failure to make offsite notification in accordance with the Emergency Plan is identified as an exercise weakness and will be reviewed during subsequent inspections. (50-348/85-37-02, 364/85-37-02).

One violation was identified.

#### 10. Emergency Communications (82301)

This area was observed to determine that provisions existed for prompt communications among principal response organization and emergency personnel as required by 10 CFR 50.47(b)(6), 10 CFR 50, Appendix E, paragraph IV.E, and specific criteria in NUREG 0654, Section II.F.

Communications among the licensee's emergency response facilities and between the licensee's emergency response organization and offsite authorities were adequate with one noted exception. Specifically, the Recovery Manager was not informed of the Emergency Director's

reclassification of the Site Area Emergency to an Alert until 16 minutes after the reclassification had been announced over the Emergency News Network (ENN). This exercise weakness was identified by the licensee as a need to make provisions to ensure that the Recovery Manager is notified of all significant ENN announcements including those originating from the TSC. Licensee corrective action on this exercise weakness will be reviewed during subsequent inspections (50-348, 364/85-37-03).

No violations or deviations were identified.

11. 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. The licensee established a near-site Emergency News Center (ENC) and provided accurate and timely news information that was properly coordinated. It appeared that the primary telephone response point for the news media would be better located at the near-site ENC rather than from the company's Birmingham headquarters. A rumor control program was in place and extensively exercised by the licensee.

No violations or deviations were identified.

12. 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 inspectors observed this activation, staffing and operation of the emergency response facilities and evaluated equipment provided for emergency use 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 and the response was prompt and effective.
- b. Technical Support Center (TSC) - The TSC was activated and staffed promptly upon notification by the Emergency Director of the simulated emergency conditions. The TSC staff appeared to be knowledgeable concerning their emergency responsibilities, however status boards were either not maintained or inadequately maintained to provide timely and accurate information. The Emergency Director did not routinely brief the TSC personnel nor were site personnel kept informed of significant plant events.



- c. Operations Support Center (OSC) - The OSC was staffed promptly upon activation by the Emergency Director. An inspector observed that teams were formed promptly, briefed and dispatched efficiently. No status boards were available for OSC personnel information. A Post Accident Sampling System (PASS) sample was obtained under normal operating level conditions.
- d. Emergency Operations Facility - The EOF was located in the Training Building at the reactor site. The facility appeared to be adequately designed, equipped and staffed to support an emergency response. The EOF staff arrived onsite at 1116 hours and assumed the responsibilities of the radiological monitoring teams at 1232 hours.

No violations or deviations were identified.

### 13. Accident Assessment (82301)

This area was observed to determine that adequate 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 50.47(b)(9), 10 CFR 50, Appendix E, paragraph IV.B, and specific criteria in NUREG 0654, Section II.I.

The accident assessment program included both an engineering assessment of plant status and an assessment of radiological hazards to onsite and offsite personnel resulting from the accident. During the exercise, the engineering accident assessment team functioned effectively in analyzing the plant status so as to make recommendations to the Emergency Director concerning mitigating actions to reduce damage to plant equipment, to prevent release of radioactive materials and to terminate the emergency condition.

Radiological assessment activities involved several groups. A group in the TSC effectively estimated the radiological impact in the plant based on inplant monitoring and onsite measurements. Radiological effluent data was received in the TSC. Because the EOF staff activated after the effluent release, the EOF dose assessment personnel were pre-positioned and independently demonstrated dose rate projection and plume tracking capability. An inspector noted that plant personnel provided a cadre for the corporate dose assessment personnel and that the basis of this was not included in the emergency implementing procedures. This exercise weakness was also noted by the licensee and the incorporation of the Safety Audit and Engineering personnel to provide EOF dose assessment support into appropriate implementing procedures will be reviewed during a subsequent exercise. (50-348/85-37-04, 364/85-37-04).

No violations or deviations were identified.

### 14. Protective Responses (82301)

This area was observed to determine 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 specific criteria in NUREG 0654, Section II.J.

The simulated accident did not necessitate protective action recommendations for offsite populations. However, it was noted that no protective actions were taken onsite during and following plume passage. The licensee also identified this exercise weakness and recommended reviewing training and procedures to ensure adequate consideration is given during emergencies to contamination control and employee radiological protection necessary due to plume passage or deposition outside the Radiation Control Area. Licensee corrective action will be reviewed in a subsequent inspection. (50-348/85-37-05, 364/85-37-05)

No violations or deviations were identified.

#### 15. Radiological Exposure Control (82301)

This area was observed to determine that means for controlling radiological exposures, in an emergency, were established and implemented for emergency workers and that they included exposure guidelines consistent with EPA recommendations as required by 10 CFR 50.47(b)(11), and specific criteria in NUREG 0654, Section II.K.

An inspector noted that radiological exposures were controlled throughout the exercise by issuing emergency workers supplemental dosimeters and by periodic surveys in the emergency response facilities. Exposure guidelines were in place for various categories of emergency actions and adequate protective clothing and respiratory protection were available and used as appropriate. Although habitability checks were routinely conducted in the EOF, no habitability checks were observed in the control room, TSC, and the Operations Support Center.

No violations or deviations were identified.

#### 16. Exercise Critique (82301)

The licensee's critique of the emergency exercise was observed to determine that deficiencies identified as a result of the exercise and weaknesses noted in the licensee's emergency response organization were formally presented to licensee management for corrective actions as required by 10 CFR 50.47(b)(14), 10 CFR 50, Appendix E, paragraph IV.E, and specific criteria in NUREG-0654, Section II.N.

A formal licensee critique of the emergency exercise was held on September 26, 1985, with exercise controllers, key exercise participants, licensee management and NRC personnel attending. Many but not all of the weaknesses in the emergency preparedness program, identified as a result of this exercise were presented by the licensee. NRC also presented a summary of exercise findings. Followup of corrective actions will be accomplished through subsequent NRC inspections.

17. Inspector Followup (92701)

(Closed) The previous unresolved item (50-348,364/84-26-01) addressing the failure of the licensee to develop and fully use required prompt notification capability for emergency action classification is closed and reclassified as a violation (50-348/85-03-01,364/85-37-01). See paragraph 9 of this report.