



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

AUG 07 1989

Report Nos.: 50-424/89-21 and 50-425/89-25

Licensee: Georgia Power Company
P. O. Box 1295
Birmingham, AL 35201

Docket Nos.: 50-424 and 50-425

License Nos.: NPF-68 and NPF-81

Facility Name: Vogtle 1 and 2

Inspection Conducted: July 25-27, 1989

Inspector: W. M. Sartor, Jr.

8/3/89
Date Signed

Accompanying Personnel: B. Haagensen (PNL)
F. Kantor (NRR)

Approved by: Eldon D. Tatum for
W. H. Rankin, Chief

8/4/89
Date Signed

Emergency Preparedness Section
Emergency Preparedness and Radiological
Protection Branch
Division of Radiation Safety and Safeguards

SUMMARY

Scope:

This routine, announced inspection was the observation and evaluation of the annual emergency exercise. Offsite participation consisted of the States and counties participating for communications only, with the exception of Burke County which participated fully for training purposes only. Three NRC inspectors observed selected portions of the staffing and response of emergency organization personnel in the simulator, Technical Support Center, Operational Support Center, and the Emergency Operations Facility.

Results:

Based upon the scenario used and the response observed thereto, the licensee successfully demonstrated the capability of the staff to perform in accordance with the Emergency Preparedness Plans and Procedures to adequately provide for the health and safety of the public. An exercise weakness was identified for failure to make timely General Emergency classification and Protective Action Recommendations. Additional shortcomings addressed inaccurate and incomplete notifications and the failure of the exercise staff to conduct a sufficiently critical critique of licensee performance during the exercise.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *V. Agro, Plant Administration Supervisor
- *J. Aufdenkampe, Manager, Technical Support
- *J. Badgett, Emergency Planning Coordinator
- *G. Bockhold, General Manager
- *H. Butterworth, Operations Supervisor
- *G. Frederick, Quality Assurance Site Manager
- *H. Handfinger, Maintenance Manager
- *K. Holmes, Manager, Training and Emergency Preparedness
- *C. Kitchens, Security Department Supervisor
- *I. Kochery, Health Physics Superintendent
- *R. Leiland, Manager, Health Physics/Chemistry
- *L. Mayo, Senior Emergency Preparedness
- *A. Mosbaugh, Assistant General Manager Plant Support
- *R. Odom, Plant Engineering Supervisor
- *J. Petro, Senior Quality Assurance Field Representative
- *J. Roberts, Emergency Preparedness Supervisor
- *J. Swartzwelder, Manager, Operations
- *D. Warren, Security Specialist

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

Oglethorpe Power Corporation

- *E. Toupin, Superintendent, Nuclear Operations

NRC Resident Inspectors

R. Aiello
J. Rogge

- *Attended exit interview

2. Exercise Scenario (83202)

The scenario for the emergency exercise was reviewed to determine that provisions had been made to test the licensee's integrated emergency response capability as well as to test a major portion of the basic elements within the licensee's Emergency Plan as required by 10 CFR 50.54(t), 50.47(b)(14), and Section IV.F of Appendix E to 10 CFR 50.

The scenario was reviewed in advance of the scheduled exercise date and discussed briefly with licensee representatives at the Controller Briefing on July 25, 1989. There were no major problems identified with the scenario. A few inconsistencies were noted during the exercise because of minor simulator problems, but these did not detract from the overall exercise performance. The use of the simulator for the Control Room emergency organization was an asset to the emergency exercise.

No violations or deviations were identified.

3. Onsite Emergency Organization (82301)

The licensee's organization was observed during the simulated emergency to ensure the requirements of Paragraph IV.A of Appendix E to 10 CFR 50 were implemented addressing the descriptions, responsibilities, and assignments of the onsite emergency response organization.

The inspector observed that the initial onsite emergency organization was adequately defined and that staff was available to fill key functional positions within the emergency organization. The On-Shift Operations Supervisor promptly assumed the duties as the Emergency Director upon initiation of the simulated earthquake and directed the response until relieved by the General Manager. The onsite Technical Support Center (TSC) and Operations Support Center (OSC) were promptly staffed and assumed emergency responsibilities in accordance with the Emergency Plan and Implementing Procedures.

The inspector observed a problem that occurred addressing the responsibilities of emergency classification and coordinating offsite emergency measures when the loss of three fission product barriers necessitated a General Emergency declaration. Specifically, Implementing Procedure No. 91102-C, Duties of the Emergency Director, lists the following general responsibilities of the Emergency Director which cannot be delegated:

- ° Classifying and declaring the emergency including upgrading, downgrading, and termination.
- ° Recommending protective actions to offsite authorities and content of messages.

During the exercise, the events that warranted upgrading to a General Emergency occurred during the time (approximately 15 minutes) that the Emergency Director was enroute from the TSC to the Emergency Operations Facility (EOF). As a result, both the General Emergency classification and the recommended protective actions were delayed until the Emergency Director arrived at the EOF and was briefed regarding the degrading events.

The above finding was identified as an exercise weakness as follows: the General Emergency classification and protective action recommendations

(PARs) were unnecessarily delayed because the Emergency Director did not turn over his emergency authority when he proceeded to the EOF from the TSC. Corrective action will be tracked as an Inspector Followup Item (IFI) 50-424/89-21-01 and 50-425/89-25-01.

No violations or deviations were identified.

4. Emergency Classification System (82301)

This area was observed to verify that a standard emergency classification and action level scheme was in use by the licensee as required by 10 CFR 50.47(b)(4) and Paragraph IV.C of Appendix E to 10 CFR 50.

The licensee's Procedure No. 91001-C, Emergency Classification and Implementing Instructions, provided instructions in the classification of off-normal events into one of the four emergency classification levels. The procedure was effectively used by the Emergency Director and his staff to correctly classify the simulated emergency situations during the exercise.

No violations or deviations were identified.

5. Notification Methods and Procedures (82301)

This area was observed to assure that procedures were established for notification of State and local response organizations and emergency personnel by the licensee, and that the content of initial and followup messages to response organizations were established. This area was further observed to assure that means to provide early notification to the population within the plume exposure pathway were established pursuant to 10 CFR 50.47(b)(5), Paragraph IV.D of Appendix E to 10 CFR 50, and specific guidance promulgated in Section II.E of NUREG-0654.

The inspector observed that notification methods and procedures were established and available for use in providing information regarding the simulated emergency conditions to Federal, State, and local response organizations, and to alert the licensee's emergency response organization. Several inaccuracies that had the potential to cause confusion and an omission were noted in the offsite notifications.

These included:

- ° Message #003 at 0751: The Alert had just been declared. The notification message had block #8 (Plant Condition:) left blank. The offsite authorities noted the omission and questioned the shift clerk. The Operations Supervisor then filled in this block stating that plant conditions were "stable." This was not an accurate description because plant radiation levels were increasing and operators were still assessing the damage caused by the earthquake.

The plant was still being brought into a stable condition and safety injection termination was in progress.

- ° Message #005 at 0858: The Site Area Emergency had just been declared. As in message #003, block #8 was reported as "stable." Again, this was not necessarily an accurate description as operators were still conducting walkdowns to make a damage assessment as a result of the severe aftershock which was greater than design basis.
- ° Message #010 at 1127: Although the message provided information that containment integrity had been re-established, block #9 (Emergency Involves:) still indicated a release was occurring with expected duration of six hours. Also, block #13 (Estimate of Projected Offsite Dose) remained unchanged even though the primary release pathway had been blocked.
- ° The omission was the failure to make an emergency notification of the transportation offsite of a contaminated injured victim.

The above observations were identified as an IFI 50-424/89-21-02 and 50-425/89-25-02.

No violations or deviations were identified.

6. Emergency Communications (82301)

This area was observed to assure that provisions existed for prompt communications among principal response organizations and emergency personnel pursuant to 10 CFR 50.47(b)(6), Paragraph IV.E of Appendix E to 10 CFR 50, and specific guidance in Section II.F of NUREG-0654.

The inspector observed communications within and between the licensee's emergency facilities, the licensee and offsite agencies, and the offsite environmental monitoring teams and the EOF. The inspector also observed information flow among the various groups within the licensee's emergency organization. Emergency communications involving notification of the State, local agencies and the NRC of all Emergency classifications discussed above, appeared adequate and consistent with the Radiological Emergency Plan and Implementing Procedures except as noted in Paragraph 5.

No violations or deviations were identified.

7. Accident Assessment (82301)

This area was observed to determine whether 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 an engineering assessment for plant status and an assessment of radiological hazards to both onsite and offsite personnel resulting from the accident. The Dose Assessment Manager assumed the responsibility for offsite dose calculations when the EOF was activated. The inspector noted that the Dose Assessment staff did not refine the offsite dose projections with more realistic release parameters when the information was readily available nor did they track actual radiation exposure to the general public as the accident progressed. This was not identified as an NRC finding since the licensee had self-identified the dose assessment area as a problem when noting the failure of the Dose Assessment staff to aggressively determine the Noble Gas to Iodine ratio and therefore used a conservative default value. The inspector also noted that the field monitoring team, dose, and meteorological data postings in the EOF could be improved.

No violations or deviations were identified.

8. Exercise Critique (82301)

The licensee's critique of the emergency exercise was observed to determine that shortcomings identified as part of the exercise, were brought to the attention of management and documented for corrective action pursuant to 10 CFR 50.47(b)(14), Paragraph IV.F of Appendix E to 10 CFR 50, and specific guidance promulgated in Section II.N of NUREG-0654.

The licensee conducted effective player critiques following exercise termination. On July 27, 1989, just prior to the NRC exit, the Emergency Preparedness Supervisor provided a listing of the graded exercise critique findings to licensee management. Based on the substance of these findings, the inspector identified IFI 50-424/89-21-03 and 50-425/89-25-03 for an inadequate critique. Specifically, the significant NRC exercise findings focused on some of the essentials of emergency preparedness such as the responsibilities for emergency classification and PARs, and the notifications to offsite authorities, whereas the licensee's findings were less significant and failed to critically address player performance.

No violations or deviations were identified.

9. Exit Interview

The inspection scope and findings were summarized on July 27, 1989, 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 from the licensee.

The licensee did not identify as proprietary any of the material provided to or reviewed by the inspector during this inspection.

<u>Item Number</u>	<u>Description and Reference</u>
50-424/89-21-01 50-425/89-25-01	IFI - Exercise Weakness for delayed General Emergency Classification and PARs while Emergency Director was enroute from the TSC to the EOF (Paragraph 3).
50-424/89-21-02 50-425/89-25-02	IFI - Notifications to offsite authorities were not always complete and accurate (Paragraph 5).
50-424/89-21-03 50-425/89-25-03	IFI - Inadequate critique in that licensee exercise staff failed to identify findings basic to an effective emergency preparedness program (Paragraph 8).

Attachment:
Exercise Scope and Objectives
and Scenario Time Line