



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

JUN 27 1989

Report Nos.: 50-325/89-13 and 50-324/89-13

Licensee: Carolina Power and Light Company
 P. O. Box 1551
 Raleigh, NC 27602

Docket Nos.: 50-325 and 50-324

License Nos.: DPR-71 and DPR-62

Facility Name: Brunswick 1 and 2

Inspection Conducted: May 22-24, 1989

Inspector: W. M. Sartor, Jr. June 26, 89
Date Signed

Accompanying Personnel: E. Podolak, NRR, PEPB
 G. Bryan (PNL)

Approved by: W. H. Rankin June 26, '89
Date Signed
 W. H. Rankin, Chief
 Emergency Preparedness Section
 Emergency Preparedness and Radiological
 Protection Branch
 Division of Radiation Safety and Safeguards

SUMMARY

Scope:

This routine, announced inspection involved the observation and evaluation of the annual emergency preparedness exercise and associated critique.

Results:

No violations or deviations were identified. One exercise weakness was identified for failure to have a sufficiently challenging scenario to adequately demonstrate effective emergency response capabilities or which permitted significant improvement in the emergency response organization. Additionally, the licensee identified during the exercise critique a deficiency for failure to make follow-up notification from the Control Room according to procedures which is similar to a problem identified in the October 1988 exercise. The adequacy of corrective action taken to ensure improvement in this area of the emergency preparedness program will be evaluated during future inspections.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *R. Baldwin, Corporate Emergency Preparedness Specialist
- *R. Black, Manager, Emergency Preparedness
- *C. Blackman, Manager, Operations
- *K. Enzor, Director, Regulatory Compliance
- *H. Goodwin, Corporate Emergency Preparedness Specialist
- *J. Harness, Plant General Manager
- *J. Holder, Manager, Outage Management
- *B. Houston, Brunswick Emergency Preparedness Specialist
- *B. McFeathers, Corporate Emergency Preparedness Specialist
- *J. Smith, Director, Administration
- *R. Starkey, Manager, Brunswick Project

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

NRC Resident Inspector

W. Ruland

- *Attended exit interview

2. Exercise Scenario (82302)

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 was discussed with a licensee representative prior to the exercise. The discussion focused on the matrix which indicated pre-staging of the emergency response facilities. The inspector was informed that the matrix was in error and sufficient real time staffing would occur to permit the evaluation of the objective for demonstrating the adequacy of procedures for alerting, notifying, and mobilizing emergency response personnel. Observations noted during the exercise for the staffing of the Technical Support Center and Emergency Response Facility appeared to be real time activation. The exercise as observed, however, identified an exercise weakness. The weakness focused on an off-year exercise that did not proceed to a General Emergency declaration. This is consistent with guidance provided in NRC Information Notice (IN) No. 87-54 (Emergency Response Exercises); however, the Notice discussed the flexibility within

this requirement allowing for the development of scenarios which can improve emergency response capability. The inspector noted at the exit interview that the exercise players were not challenged by the scenario sufficiently to provide for improved emergency response capability. For example, the events were straightforward and did not require interactive play amongst the emergency response organizations to diagnose and mitigate the accident. Also, neither the licensee nor the NRC observation teams were able to identify substantive findings as the scenario did not stress the emergency organization or the Emergency Plan. The inspector noted that, although the scenario events did not support an improved emergency response capability, they did provide for observations that would permit the closure of two NRC open items (see Paragraph 12). The failure to conduct an off-year exercise with a scenario which permitted an improved emergency response capability, as discussed in NRC IN No. 87-54, was identified as an exercise weakness and will be tracked as Inspector Follow-up Item (IFI) 50-325,324/89-13-01.

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 description, 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 Shift Operating Supervisor assumed the duties of Site Emergency Coordinator promptly upon initiation of the simulated emergency and directed the response until relieved by the Plant General Manager. The Plant General Manager assumed the responsibilities of the Site Emergency Coordinator and declared the Technical Support Center (TSC) activated approximately one hour and twenty-five minutes after the decision to activate the TSC. The emergency organization provided for the making of offsite dose projections; however, the scope of this exercise did not include a radiological release exceeding the protective action guidelines (PAGs) and the need to make protective action recommendations (PARs).

No violations or deviations were identified.

4. Emergency Response Support and Resources (82301)

This area was observed to determine whether arrangements for requesting and effectively using assistance resources had been made and that other organizations capable of augmenting the planned response were identified as required by 10 CFR 50.47(b)(3) and Paragraph IV.A. of Appendix E to 10 CFR 50.

The licensee's Emergency Plan and Implementing Procedures provided for the requesting of assistance resources. This exercise provided for the demonstration of the adequacy of the interface between the plant fire brigade and the Southpori Fire Department which assisted the emergency organization with the simulated fire.

No violations or deviations were identified.

5. Emergency Classification System

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.

Plant Emergency Procedure (PEP) 2.01, titled Initial Emergency Actions, provided an Emergency Classification Guide Flowchart and Emergency Action Levels (EALs) classification scheme. The inspector observed that the licensee used the flowchart in the analysis of the emergency situations and properly classified the changing incident conditions in accordance with the EALs.

No violations or deviations were identified.

6. Notification Methods and Procedures (82301)

This area was observed to determine that procedures had been established by the licensee for notification of State and local response organizations, licensee emergency personnel, and that the content of initial and follow-up messages to response organizations had been established; and the 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 the specific criteria in NUREG-0654, Section II.E.

Inspection determined that notification methods and procedures had been established and were available for use in providing information concerning the simulated emergency conditions to Federal and offsite response organizations. With the exception of NRC notifications, offsite notifications were made to a cell manned by the licensee in the Visitor's Center. Notifications appeared to be made as required with the exception of a follow-up notification from the Control Room. The licensee identified this as a deficiency during the licensee's critique of the exercise. The licensee's corrective action to this finding will be reviewed during future inspections since the failure of the Control Room Staff to provide a follow-up notification to the Notification of Unusual Event declaration is inconsistent with the information provided in the licensee's response to a violation identified in Inspection Report No. 50-325, 324/88-37. This concern was discussed with members of your staff (Messrs. K. Enzor, F. Blackman, B. Houston, and R. Pouik) and NRC staff (Messrs. R. Carroll and W. Sartor) on May 25, 1989.

No violations or deviations were identified.

7. Emergency Communications (82301)

This area was observed to assure that provisions existed for prompt communications among the 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.

The communications hardware among the licensee's emergency response facilities and emergency organization appeared adequate. The communications between the licensee's emergency response organization and the State and local governments was not exercised.

No violations or deviations were identified.

8. 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.

The Corporate Media Center provided periodic news releases on the simulated emergency; however, this area was not observed.

No violations or deviations were identified.

9. 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.

No facility or equipment problems were noted by the inspector.

No violations or deviations were identified.

10. 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 engineering accident assessment team functioned effectively. The radiological assessment activities were adequate within the scope of this exercise which resulted in no significant release nor the requirement to make PARs.

No violations or deviations were identified.

11. Protective Responses (82301)

This area was observed to determine that guidelines for protective actions during an 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 inspector verified that the licensee had emergency procedures for formulating PARs for offsite populations within the 10-mile Emergency Planning Zone (EPZ). It was also observed that the licensee conducted an accountability drill to demonstrate protective response for onsite personnel as well as to provide for the evacuation of nonessential personnel.

No violations or deviations were identified.

12. Action on Previous Inspection Findings (92701)

- a. (Closed) IFI 50-325,324/88-37-02. Failure to demonstrate the ability of onsite personnel to effectively utilize the EAL scheme. No problems were noted with the licensee's utilization of the EAL scheme during this exercise.
- b. (Closed) IFI 50-325,324/88-37-07. The licensee's controller/evaluator critique provided to management was not sufficiently critical. The critique provided during this exercise to the licensee's management and staff by the licensee's controller/evaluator team was detailed.

13. Exercise Critique (82301) and Exit Interview

The licensee's critique of the emergency exercise was observed to assure 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.F. and specific criteria in NUREG-0654, Section II.N.

Effective player critiques were held following exercise termination. In addition, the controller/evaluator staff for the exercise prepared a detailed and thorough critique and presented it to the licensee management, exercise controllers and observers, and NRC representatives on May 24, 1989. Licensee management was responsive to the critique items as reflected in a commitment to change the accountability reporting procedure such that no report from an accountability assembly point would no

longer be considered as an all accounted for report.

Item Number

Description and Reference

50-325, 324/89-13-01

Exercise Weakness - Failure to conduct an off-year exercise with a scenario which permitted an improved emergency response capability. (Paragraph 2)